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Journal

Journal of Applied School Psychology, 35(3)

ISSN

1537-7903

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Publication Date

2019-07-03

DOI

10.1080/15377903.2019.1577780

Peer reviewed



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To cite this article: Stephanie A. Moore, Ashley M. Mayworm, Rachel Stein, Jill D. Sharkey & Erin Dowdy (2019) Languishing students: Linking complete mental health screening in schools to Tier 2 intervention, *Journal of Applied School Psychology*, 35:3, 257-289, DOI: [10.1080/15377903.2019.1577780](https://doi.org/10.1080/15377903.2019.1577780)

To link to this article: <https://doi.org/10.1080/15377903.2019.1577780>



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Languishing students: Linking complete mental health screening in schools to Tier 2 intervention

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ABSTRACT

Despite innovations in the screening and early identification of students who may benefit from school mental health services, many schools struggle to link screening to intervention decisions, particularly at the Tier 2 level. Universal complete mental health screening, which measures strengths along with risk factors, is a strength-based approach that enables identification of students who do not report active mental health risk yet have limited psychosocial strengths. These languishing students are ideal candidates for Tier 2 interventions. Using a case study to link screening to intervention, the present article describes a contemporary approach to complete mental health screening, identify candidates for Tier 2 intervention, select appropriate interventions, and monitor student outcomes. Implications and challenges for school psychologists are discussed.



ARTICLE HISTORY

Received 24 March 2018
Revised 21 January 2019
Accepted 30 January 2019

KEYWORDS

Complete mental health; screening; multitiered systems of support; Tier 2 intervention

Over the past decade, the field of school psychology has made great strides in understanding and improving methods for the screening and early identification of students who may benefit from school-based mental health services (Kamphaus, Reynolds, & Dever, 2014). However, there is still a need for additional clarification regarding early identification of student needs (Albers, Glover, & Kratochwill, 2007), including refining our understanding of critical constructs to screen for (Dowdy, Furlong, Eklund, Saeki, & Ritchey, 2010) and how to best link screening data to intervention programming (Volpe, Briesch, & Chafouleas, 2010). With the goal of incrementally understanding how to link screening to intervention, in the present article we describe a contemporary approach to mental health screening, with a specific focus on identifying candidates

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for Tier 2 intervention. In the present article, we aim to highlight the benefit of linking screening data to Tier 2 interventions for students who are at-risk for poor physical health, mental health, and social outcomes (e.g., Westerhof & Keyes, 2010), but who often go unidentified when traditional screening approaches are used (Antaramian, Huebner, Hills, & Valois, 2010; Moore et al., 2015; Suldo & Shaffer, 2008). These students, described as *languishing*, do not report experiencing significant mental health challenges but do concurrently report limited psychosocial strengths and resources to support adaptive coping (e.g., Greenspoon & Saklofske, 2001; Keyes, 2002).

Screening for complete mental health

Historically, mental health screening has focused on assessing for problem behaviors and emotions—that is, symptoms of mental distress, psychopathology, or the risk of developing mental health disorders. However, this deficit-based approach fails to attend to the positive contributions to mental health including subjective well-being and social-emotional strengths (Moore et al., 2015). A more contemporary, strengths-based approach to early identification includes a balance of both distress and strength indicators and is termed *complete mental health screening* (Furlong, Dowdy, Carnazzo, Boverly, & Kim, 2014). This approach is aligned with “dual-factor” (Suldo & Shaffer, 2008) and “two-continua” (Keyes, 2005) models of mental health that conceptualize mental health as encompassing both symptoms of psychological distress and social-emotional strengths, and recognize that the absence of illness does not necessarily indicate wellness. Empirical support for the inclusion of strengths when considering mental health is found in dual-factor studies that identify students with higher levels of strengths to have a variety of more positive life outcomes including higher academic achievement, physical health indicators, student engagement, and social functioning (Antaramian et al., 2010; Suldo & Shaffer, 2008).

Although classification approaches vary widely within the complete mental health screening literature, students are often classified into groups using predetermined values (e.g., raw scores, *T* scores, standard deviations) on both strengths and distress indicators (Kim, Dowdy, Furlong, & You, 2017). For example, to create a dual-factor classification system, students are placed into a group according to the severity of symptoms of distress, and then also grouped based on their reported levels of strengths. Many have elected to form two distress groups (i.e., high or low) and two strengths groups (i.e., high or low; Antaramian et al., 2010; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008). Complete mental health groups are

then formed by crossing distress and strengths group membership. This method provides for four unique groups of students, including groups (a) high in strengths and low in distress (i.e., complete mental health; thriving), (b) low in strengths and high in distress (i.e., highest risk; troubled), (c) high in strengths and high in distress (i.e., counterintuitive, inconsistent group; symptomatic but content), and (d) low in strengths and low in distress (i.e., languishing).

In practice, however, schools' decisions about the desired number of groups are informed by their interest in gathering nuanced information about the mental health functioning of their students and the ability to provide appropriate follow-up intervention. Decisions about the number of groups should be informed by consultation of the measurement literature to inform selection of cut-point(s) used to form groups (e.g., to maximize sensitivity and specificity). However, research supporting the predictive utility of many screening tools (particularly those that measure strengths) is not available, thus, cut-points are often determined logically, yet arbitrarily, and are set via sample-specific norms (i.e., standardized scores), population-based standardized scores (e.g., *T* scores), or raw score criterion for symptom frequency or severity (Kim et al., 2017). The often arbitrary nature by which cut-points are selected enables school stakeholders to strategize with their school-based teams to determine their capacity for follow-up, and to subsequently adjust cut scores and the number of groups formed (Moore et al., 2015). As an illustration, Moore et al. conducted complete mental health screening and formed nine groups using multiple cut-points for their distress and strength measures.

A common concern about universal screening is that assessment will identify a larger number of youths in need of intervention than can feasibly be served by a school's infrastructure (e.g., Dever, Raines, & Barclay, 2012). Although more students may be identified through universal screening than are currently being served, when screening is implemented in conjunction with multitiered supports, the number of students requiring intervention is theoretically expected to decrease over time (Dever et al., 2012; Moore et al., 2015). Vannest (2012) further reassured that identifying risk via universal screening is not the same as identifying a mental health disorder or disability, and that screening results should be verified for their validity through additional data sources (e.g., teacher report, school records, targeted follow-up assessments). Available research suggests that fewer than 5% of students will be identified as having extremely elevated risk for psychological distress (some of whom already receive services), whereas approximately 20% of students would have elevated or extremely elevated levels of risk (Vannest, 2012). The addition of strength-based measures in complete mental health screening also identifies students who are not

experiencing symptoms but who require intervention to support their well-being (Moore et al., 2015).

Although concerns about the number of students falling into the highest-risk groups can be addressed, in part, by making informed decisions about the ways in which mental health groups are formed (i.e., adjusting cut-points to be congruent with service-delivery capacity), best-practice recommendations are for school stakeholders to carefully examine their existing intervention resources and capacity before conducting universal screening. Screening should only be conducted when the capacity to intervene is adequate. Smaller-scale screening efforts (e.g., of classrooms or grade levels) are recommended before school-wide screening to ensure staff are equipped to coordinate student follow-up (Moore et al., 2015). When universal screening is conducted with a focus on strengths in addition to distress, schools have the opportunity to not only provide services to students identified as at risk of mental health problems, but also to attend to students who may report low levels of assets despite not currently experiencing symptoms of distress.

Identifying languishing youths

Universal complete mental health screening also allows for the identification of a unique group of students who report low levels of strengths in addition to low levels of distress. This group of students, often termed languishing, or vulnerable, has been consistently identified in dual-factor studies, and are a critical group for targeted prevention and intervention efforts due to their poorer life outcomes when compared with students with complete mental health (Antaramian et al., 2010; Moffa, Dowdy, & Furlong, 2016; Suldo & Shaffer, 2008). For example, when compared with youths with complete mental health indicators (i.e., low distress, high strengths), languishing youths report lower levels of engagement (Antaramian et al., 2010), reduced academic self-concept, fewer beliefs about school's importance for reaching long-term goals, lower levels of general physical health (Suldo & Shaffer, 2008), and lower levels of school belonging (Moffa et al., 2016).

Individuals with languishing mental health can face similar outcomes to youths with high-risk indicators (i.e., troubled group: high distress, low strengths). For example, previous research found that languishing and troubled groups did not significantly differ in their self-reported levels of engagement, environmental educational supports (e.g., family support for learning, teacher-student relationships, peer support for learning; Antaramian et al., 2010), or school belonging (Moffa et al., 2016). Other research has further supported that a languishing mental health status is associated with poor emotional health and “with substantial psychosocial

impairment at levels comparable to an episode of pure depression” (Keyes, 2002, p. 217). Further, because this group of students can be difficult to identify without systematic screening for complete mental health, they are less likely to receive appropriate intervention support (Antaramian et al., 2010). Incorporating measures of well-being into standard screening practices, that is, screening for complete mental health, promotes identification of languishing youths as well as efforts to incorporate wellness-focused interventions into a school’s service delivery framework.

Screening to inform Tier 2 intervention

Screening for complete mental health is aligned with current school-based service delivery models that emphasize universal services, prevention, early intervention, and data-based decision making. Specifically, multitiered systems of support (MTSS) have been recommended as a school-based approach to help all students achieve both academically and behaviorally (Nantais, St. Martin, & Barnes, 2014). Within MTSS frameworks, universal Tier 1 supports are provided to all students, and approximately 80% of the school population is expected to benefit from these universal supports alone. However, approximately 20% of the student population is expected to require, and receive, additional targeted (Tier 2; 15%) and intensive (Tier 3; 5%) interventions (Fletcher & Vaughn, 2009). Effective MTSS frameworks use universal screening data to make decisions regarding what interventions to provide at the universal level, as well as determine which students may benefit from additional Tier 2 or Tier 3 services (von der Embse, Iaccarino, Mankin, Kilgus, & Magen, 2016).

Within a complete mental health screening framework, students who are found to have complete mental health (i.e., thriving) are likely to only need universal Tier 1 support. Whereas students who are identified as having low strengths and high distress (highest-risk group), along with students with low strengths and low distress (languishing group) and high strengths and high distress (inconsistent group), may benefit from or require additional services. Conceptually, students in the highest-risk group likely need individualized Tier 3 services, whereas students who are languishing or inconsistent may benefit from Tier 2 services, due to having a lower level of need. Screening data have found between 5% and 13% of students report both low strengths and low distress (Greenspoon & Saklofske, 2001; Moffa et al., 2016; Venning, Wilson, Kettler, & Elliott, 2013), making this group of languishing students an ideal target for Tier 2 services (Suldo & Shaffer, 2008). Research suggests that more information is available regarding the process of identifying students for Tier 3 intensive supports, based on their high level of need, as compared with information and resources for

identifying students for Tier 2 intervention (Newcomer, Freeman, & Barrett, 2013). Thus, in the present study, we focused on the process of linking universal complete mental health screening to Tier 2 interventions.

Within an MTSS framework, Tier 2 interventions are designed to provide secondary supports to students who did not respond to universal Tier 1 mental and behavioral health approaches, but who are also not currently in need of intensive Tier 3 individualized services (Hawken, Adolphson, MacLeod, & Schumann, 2009). In addition to preventing more severe emotional and behavioral difficulties for youths, effective Tier 1 and Tier 2 interventions also aim to reduce resource (e.g., financial, time) burdens associated with intensive Tier 3 approaches when they are not needed. Typically, these Tier 2 interventions are of low-to-moderate intensity and focus on addressing similar needs across groups of students (i.e., students with similar difficulties receive the same intervention and progress monitoring approach; Anderson & Borgmeier, 2010). Tier 2 interventions commonly include self-monitoring, behavior contracts, mentoring, and small group interventions (i.e., group counseling and social skills groups; Hawken et al., 2009).

Several comprehensive reviews of Tier 2 mental and behavioral health interventions in schools (e.g., Bruhn, Lane, & Hirsch, 2014; Yong & Cheney, 2013) suggest that there are many available and effective evidence-based Tier 2 interventions. These include packaged and manualized interventions, such as Check and Connect (Christenson et al., 2008); Check, Connect, and Expect (Cheney et al., 2009); First Step to Success (Walker et al., 2014); Check-In/Check-Out (Hawken & Horner, 2003); group counseling programs (e.g., Coping Power [Lochman & Wells, 2004], Coping Cat [Kendall & Hedtke, 2006]); and nonpackaged but evidence-based approaches such as daily behavior report cards (Iznardo, Rogers, Volpe, Labelle, & Robaey, 2017), social skills training, and mentoring programs (Hawken et al., 2009). See Bruhn et al. (2014) and Yong and Cheney (2013) for detailed information about evidence-based Tier 2 interventions.

Although evidence-based Tier 2 interventions exist, schools often have difficulty determining which interventions to implement, prioritizing interventions, and deciding which students best fit the aims and goals of selected interventions (Miller, Cook, & Zhang, 2018). Additionally, despite recommendations to use data to inform the selection of intervention (von der Embse et al., 2016), Bruhn et al.'s (2014) review of Tier 2 interventions found that fewer than half of the 28 included studies used a screening measure (alone or in conjunction with other tools) to identify students for the intervention. Moreover, the most commonly used screening tools were Systematic Screening for Behavioral Disorders (Walker & Severson, 1992) and the Student Risk Screening Scale (Drummond, 1994), both of which

have strong empirical support but are deficit-focused. Thus, none of the studies reviewed by Bruhn et al. used a universal, complete mental health screening approach that measured both strengths and distress to identify students in need of additional services at the Tier 2 level. The present case study will demonstrate how screening data can be used to determine which students are languishing and may benefit from Tier 2 intervention and how to select interventions based on identified student deficits and strengths.

Present article

Despite the importance of implementing effective, evidence-based Tier 2 mental and behavioral health interventions, schools often either are not fully implementing this level of intervention (Lane, Carter, Jenkins, Dwiggin, & Germer, 2015) or have too many different Tier 2 programs in place (average of 14 reported by Hawken et al., 2009), which burdens schools and reduces fidelity of implementation. The process of selecting appropriate Tier 2 interventions and identifying appropriate students for these interventions can be complex, unclear, and deficit focused. Given the utility of complete mental health screening for identifying groups of students who do not report significant distress, but who also report low levels of strengths, the screening to intervention process highlights the benefits of screening to identify and serve youths with languishing mental health. In the present article we provide guidance on four common questions for schools:

1. How do schools implement universal complete mental health screening?
2. How do schools identify students in need of Tier 2 services, particularly those students who would not be identified by traditional deficit-focused screening methods (i.e., languishing students)?
3. How do schools select appropriate Tier 2 intervention based on the needs of students?
4. How do schools evaluate outcomes for students receiving Tier 2 intervention?

As we will describe, the universal screening process is advantageous in its utility to identify and serve students with varying levels of strengths and distress. As with any screening process, assessment data should also be used to inform school-wide programming (i.e., Tier 1 interventions) and interventions for youths reporting significant mental health risk or distress (i.e., Tier 3 interventions), not just Tier 2 support. Readers are referred to Moore et al. (2015) and Vannest (2012) for additional information about

the screening to intervention follow-up at the Tier 1 and Tier 3 levels of student need, as in the present study we focused on Tier 2 support.

Case example

Context and participants

The present project took place within an ongoing partnership between school psychology trainers and researchers at the affiliated university and a local high school. As part of this partnership, school psychology faculty and graduate students worked alongside the partnering high school's administration, staff, student, and family community to implement a variety of projects focused on supporting the needs of enrolled students. These initiatives grew out of relationships established through fieldwork placements. Over time the university school psychologist trainees recognized a consistent need for Tier 2 supports. Subsequently, the university trainers and researchers recommended moving toward a more formal MTSS process (Nantias et al., 2014). The goal was to use data gathered through universal complete mental health screening to inform referrals to Tier 2 and Tier 3 school resources and to guide planning for additional interventions.

The example that follows describes the screening to Tier 2 intervention processes that occurred at a high school in California during the 2015–2016 school year. At the time of screening, a total of 2,181 students were enrolled across Grades 9–12. School-level data indicated that enrolled students were 53.8% Hispanic or Latinx; 39.0% non-Hispanic White; 4.6% Asian, Pacific Islander, or Filipino; 1.5% Black or African American; and 1.1% American Indian or Alaska Native. In addition, 44.1% were classified as socioeconomically disadvantaged (i.e., eligible to receive free or reduced-price lunch) and 14.2% were classified as English learners.

In accordance with best-practice recommendations for conducting universal screening (Desrochers & Houck, 2013), the school's intervention team, including administrators, teachers, and counselors involved with the Student Intervention Committee decided to move forward with a universal screening approach to identify school-wide and individual student needs to inform intervention efforts at each of Tiers 1, 2, and 3. The team expressed interest in identifying students at-risk for, or currently experiencing, social-emotional and behavioral problems in addition to supporting the well-being of students who were not reporting distress. Thus, universal complete mental health screening was selected as the primary approach to data collection that would inform intervention referrals.

Universal complete mental health screening

Key steps for conducting universal complete mental health screening were explicated in Moore et al. (2015) and include determining key participants, selecting screening instruments, seeking parent consent and youth assent, administering the screening instruments, scoring and analyzing the collected data, and following up. In accordance with these recommendations, the members of the school's intervention team met with their university partners before the start of the school year to discuss goals and constructs of interest for the upcoming school-wide assessment. Together, the team determined that the goals of screening were to (a) better understand students' well-being and psychological distress and (b) assist with data-based decision making related to prevention, intervention, and promotion activities for students.

Screening tools

Once the screening goals were established, the team set out to identify appropriate screening instruments (Moore et al., 2015). Because complete mental health screening calls for the assessment of both well-being and distress, schools often need to coadminister at least two measures, with one focusing on each dimension of mental health. In the present case example, the research literature was studied to determine what screening measures exist and their pros and cons (e.g., see Moore et al., 2015); instruments were evaluated based on constructs measured, appropriateness for the school population, cost, administration time, and psychometric properties (e.g., reliability and validity). With these considerations in mind, a list of five different screening instruments was developed by the university/school team, which included the distress-focused measures Behavior Assessment System for Children–Second Edition Behavioral and Emotional Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007; the BASC-3 BESS is now available) and Social Emotional Distress Scale–Secondary (SEDS-S; Dowdy, Furlong, Nylund-Gibson, Moore, & Moffa, 2018) and distress-strength or strength-focused measures Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen 1988), and Social Emotional Health Survey–Secondary (SEHS-S; Furlong, You, Renshaw, Smith, & O'Malley, 2014; You et al., 2014). After reviewing these measures in depth, we eliminated the BESS due to cost, the SDQ due to concerns about its validity for use with Latinx students (Twyford, Buckley, Moffa & Dowdy, 2018), and PANAS due to the fact that it only provides scores for positive and negative affect (which were deemed less useful in determining intervention needs). Ultimately, the SEHS-S was selected as a measure of

strengths and paired with the SEDS-S as a measure of distress. Whereas the SEHS-S and SEDS-S were determined to be the best screeners for the school context, student population, and resources and aims of this particular school, all schools and districts are advised to use a similar problem-solving process to determine what screening tools will best meet the needs of their unique setting and goals.

The SEHS-S was selected as a brief, but comprehensive, measure of students' social-emotional strengths. Additionally, the SEHS-S is free to administer, making it accessible to many schools. The SEHS-S is a 36-item self-report questionnaire measuring 12 positive psychological dispositions that contribute to four second-order positive mental health domains and an overall covitality score. Covitality has been defined as the counterpart to comorbidity and is described as the "synergistic effect of positive mental health resulting from the interplay among multiple positive psychological building blocks" (Furlong, You, et al., 2014, p. 1013). The positive psychological building blocks captured within covitality include belief in self (self-efficacy, self-awareness, persistence), belief in others (family coherence, school support, peer support), emotional competence (emotional regulation, empathy, self-control), and engaged living (optimism, gratitude, zest). Responses to the 36 SEHS-S items are reported on either a 4-point Likert-type scale ranging from 1 (*not at all true*) to 4 (*very much true*) or a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*extremely*) (only for the gratitude and zest subscales); higher scores indicate better social-emotional health in each area. An advantage of the SEHS-S for use in universal screening is the ability to identify overall levels of strengths (i.e., covitality) for individual students as well as individual domains for which intervention may be warranted.

The SEDS-S was selected as a measure of psychological distress, which was co-administered with the SEHS-S. Ten SEDS-S items provide information regarding students' feelings and behaviors related primarily to internalizing distress (e.g., anxiety, sadness, stress). Externalizing problems were not queried, as research has found that adolescents are less accurate informants about their own problem behaviors than are teachers and parents (e.g., Smith, Pelham, Gnagy, Molina, & Evans, 2000). A self-report measure of well-being and internalizing concerns was selected, over teacher or parent report, given that adolescents are ideal informants on these topics (Furlong, Dowdy, et al., 2014; Smith, 2007). Moreover, the existing teacher referral system in place was judged to adequately identify students with externalizing problems, including attendance and problematic behavior (e.g., aggression, conduct, substance use).

A review of all of the available screening instruments is beyond the scope of the present article; readers are referred to Jenkins et al. (2014); Levitt, Saka, Romanelli, and Hoagwood (2007); and Severson, Walker, Hope-

Doolittle, Kratochwill, and Gresham (2007) for a review of problem-focused instruments and Moore et al. (2015) for a brief review of instruments assessing for well-being. A summary of the specific screeners reviewed in these articles is provided in [Table 1](#).

Consent process

In the summer preceding the academic year in which screening took place, school staff sent home parent consent forms in students' annual enrollment packets. The empirical literature examining active (i.e., requiring a signed, affirmative "yes" for a student to participate) versus passive (i.e., nonresponse indicates consent) parental consent offers advantages and disadvantages for each approach. For example, although active consent attends more closely to the family-school relationship (Levitt et al., 2007) the use of active consent may also lead to bias in the screening sample. That is, research has found that active consent may be biased against students who may benefit most from screening efforts, such that active consent results in disproportionate selection of nonminority culture participants, girls, individuals with superior academic achievement, youths from two-parent households, and youths involved in extracurricular activities (Anderman et al., 1995; Unger et al., 2004). Therefore, in alignment with district protocols and goals to acquire information on the largest percentage of the school population which included approximately 45% of students experiencing socioeconomic disadvantage and 60% from non-White racial backgrounds, the team proceeded with a passive consent process. Enrollment packets included a form describing the scope of the survey and asked parents to return a signed consent form if they did not want their child to participate in the screening. Student assent was also sought before administration of the survey, by asking students to mark either, "No, I decline to take the survey" or "Yes, I agree to take the survey." Of the 2,181 students enrolled, 56 parents declined consent and an additional 55 students declined assent. Accounting for additional students who were chronically absent during the screening period or who disenrolled yielded a total of 1,811 students (83% of total school enrollment) who completed the screening survey.

Screening implementation

Consultation with teachers and administrators is critical to develop an efficient and effective protocol for implementing the surveys. First, it is important to minimize the impact of survey completion on instructional time (Dever et al., 2012); this school selected the second period of the school day, within the first three weeks of school, to be the ideal period for

Table 1. Summary of published articles that review school mental health screening measures.

Article	Measures Reviewed	Screening attributes discussed
Jenkins et al. (2014)	<ol style="list-style-type: none"> 1. Behavioral and Emotional Screening System (Kamphaus & Reynolds, 2007) 2. Behavior Intervention Monitoring Assessment System (McDougal et al., 2011) 3. Strengths and Difficulties Questionnaire (Goodman, 1997) 4. Systematic Screening for Behavior Disorders (Walker & Severson, 1992) 5. Social Skills Improvement System Performance Screening Guide (Elliott & Gresham, 2008) 	<ul style="list-style-type: none"> • Age/grade range • Types of forms • Number of items/administration time • Areas assessed • Type of score (e.g., T score, percentiles) • Cost • Scoring method (i.e., hand, online) • Standardization sample • Response scale • Reliability and validity
Levitt, Saka, Romanelli, and Hoagwood (2007)	<p><i>Broad</i></p> <ol style="list-style-type: none"> 1. Pediatric Symptom Checklist (Jellinek et al. 1986) 2. Strengths and Difficulties Questionnaire (Goodman, 1997) <p><i>Specialized</i></p> <ol style="list-style-type: none"> 1. Child Behavior Checklist (Achenbach, 1991) 2. Behavior Assessment System for Children (Reynolds & Kamphaus, 1998) 3. Diagnostic Predictive Scales (Lucas et al., 2001) 4. Voice Diagnostic Interview Schedule for Children (Shaffer et al., 2000) 5. Systematic Screening for Behavior Disorders (Walker & Severson, 1990) <p><i>Targeted</i></p> <ol style="list-style-type: none"> 1. Conners Parent and Teacher Rating Scales (Conners, 1990) or Conners Rating Scales-Revised (Conners et al., 1998a, 1998b) 2. Swanson Nolan and Pelham checklist (Swanson, 1992) 3. Vanderbilt ADHD Diagnostic Teacher and Parent Rating Scales (Wolraich et al., 1998) 4. Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999) 5. Multidimensional Anxiety Scale for Children (March, 1997) 6. State-Trait Anxiety Inventory for Children (Spielberger, 1973) 7. Beck Anxiety Inventory (Beck & Steer, 1993) 8. Child PTSD Reaction Index (Frederick et al., 1992) 9. Reynolds Adolescent Depression Scale (Reynolds, 1987, 2002) 10. Children's Depression Inventory (Kovacs, 1992) 11. Center for Epidemiologic Studies Depression Scale (Radloff, 1977) 12. Columbia DISC Depression Scale (Lucas, 2004; Shaffer et al. 2000) 13. Beck Depression Inventory-II (Beck et al., 1996) 14. Columbia Health/Suicide Screen (Shaffer et al., 2004) 15. Alcohol Use Disorders Identification Test (Saunders et al., 1993) 	<ul style="list-style-type: none"> • Conditions of focus • Informants • Age range • Administration time • Reliability/validity

(continued)

Table 1. Continued.

Article	Measures Reviewed	Screening attributes discussed
	16. CRAFFT (Knight et al., 1999)	
	17. Personal Experience Screening Questionnaire (Winters, 1991)	
Severson, Walker, Hope-Doolittle, Kratochwill, and Gresham (2007)	1. Systematic Screening for Behavior Disorders SBD (Walker & Severson, 1990)	<ul style="list-style-type: none"> • Purpose/informant • Sample and psychometrics • Syndromes • Positive findings • Drawbacks • Combinations of tests • Special populations
	2. School Social Behavior Scale (Merrell, 1993)	
	3. Revised Behavior Problem Checklist (Quay & Peterson, 1983)	
	4. Eyberg Child Behavior Inventory (Eyberg & Ross, 1978; Eyberg & Pincus, 1999)	
	5. Student Risk Screening Scale (Drummond, 1993)	
	6. Conner's Rating Scales Revised (Conners, 1990)	
Moore et al. (2015)	1. Multidimensional Students' Life Satisfaction Scale (Huebner, 1994)	<ul style="list-style-type: none"> • Age/grade • Number of items/administration time • Constructs assessed • Reliability/validity • Where measure can be located
	2. Students' Life Satisfaction Scale (Huebner, 1991)	
	3. Positive and Negative Affect Scale for Children (Laurent et al., 1999)	
	4. Social Emotional Health Survey-Secondary (Furlong, You, et al., 2014)	

survey completion due to the extra time allotted to this class period. The school staff also elected to implement electronic administration of the complete mental health screening survey given previous experiences and difficulties in processing data collected via paper and pencil. Prior experiences surveying the school via paper-and-pencil administration did allow for the entire student body to be surveyed at one time; however, the process of entering data was too cumbersome and time consuming for school staff (i.e., data processing took more than two months despite hiring additional staff to aid with data entry). A school administrator scheduled online administration to take place over a period of approximately 10 school days, with second-period teachers rotating their classes through computer labs or using tablets or laptops brought to their classrooms to complete the survey. Teachers were provided with the master screening schedule and reminded on the day before their scheduled screening day about survey procedures and their scheduled screening time. Within the 2-hr period, three classrooms were able to complete the survey in each location. Teachers were also provided with screening administration scripts describing the goals of the survey and the importance of the survey in meeting students' needs and in working to improve their school experience.

The university partners were responsible for processing collected screening data and providing information back to the high school partners

regarding intervention planning. Best-practice recommendations are to quickly and efficiently organize screening data to inform follow-up efforts with students. School psychologists and school officials are compelled to evaluate their capabilities of following up with students identified as in need of early intervention or treatment before conducting universal screening (Cook, Volpe, & Livanis, 2010; Moore et al., 2015).

Identification of target groups and students

In previous dual-factor or dual-continua screening, *T* scores or logical cut-points have been used when determining criteria for “high” versus “low” scores. For example, Suldo and Shaffer (2008) first classified students according to the presence of internalizing and externalizing distress, with students with *T* scores above 60 on subscales of either internalizing or externalizing distress classified into a high-distress group. This group consisted of approximately 30% of their sample. Given the absence of norming information for the majority of well-being measures, Suldo and Shaffer classified students falling above the 30th percentile in overall well-being into a high well-being group.

In accordance with previous dual-factor research, in the present case example students were classified into triage groups based on the intersection of their strength (SEHS-S) and distress (SEDS-S) scores. Although previous dual-factor research has yielded four mental health groups, the participating school was concerned that the number of students identified to be in need of services might be too broad to appropriately meet student needs. Therefore, in recognition that the number of groups formed is somewhat arbitrary, a total of nine groups were formed to ensure that the number of students in the highest-risk groups would be appropriate and manageable for the student support team providing Tier 3 services (Moore et al., 2015). While it is important for schools to consider their capacity to address the needs of students identified as having the highest level of need via screening, it must be remembered that any student reporting significant symptoms of distress should be followed up with immediately to ensure their safety and well-being. Appropriate follow-up for youths identified as having the highest risk may include referral to Student Support Team, referral to school counseling or mental health staff for additional assessment via specialized or targeted measures (i.e., second-gate assessments; Dowdy, Dever, Raines, & Moffa, 2016; Levitt et al. 2007), referral to community mental health supports, or development of an individualized treatment plan (e.g., referred for a comprehensive evaluation and development of an Individualized Education Program with mental health services and goals delineated). Moore et al. provided an example of follow-up

procedures for youths identified as having high risk. Before screening, school staff should be prepared to meet this need.

In the present example, the following classification criteria were used to form mental health groups. Research on the SEHS-S and SEDS-S has not yet provided norming information; therefore, a standardized z -score for each student's overall score on each measure was computed. Previous research has shown that the total covitality score on the SEHS-S is approximately normally distributed (Furlong, Dowdy, & Nylund-Gibson, 2018); therefore, standard deviations were used to evenly distribute students with above and below average strengths. Students were categorized as having low strengths ($z \leq -1$; ≤ 1 SD), low-average strengths ($-1 < z < 0$; 1 SD to 0 SD), high-average strengths ($0 < z < 1$; 0 SD to 1 SD), or high strengths ($z \geq 1$; ≥ 1 SD). Drawing on criteria used when forming distress groups based upon norm-referenced measures (e.g., measures using standardized T scores) in which students are classified as having normal, elevated, or very elevated behavioral and emotional risk, students' overall SEDS-S z -scores were used to form three distress groups: average distress ($z \leq 1$; ≤ 1 SD), above average distress ($1 < z < 2$; 1 SD to 2 SD), and high distress ($z \geq 2$; ≥ 2 SD). Using these criteria, students were placed into one of nine groups: troubled ($n = 82$; 4.5%), moderate risk ($n = 51$, 2.8%), lower risk ($n = 77$; 4.3%), languishing ($n = 183$; 10.1%), getting by ($n = 460$; 25.4%), moderate thriving ($n = 594$; 32.7%), complete mental health ($n = 282$; 15.8%), and two symptomatic but content groups ($n_1 = 60$; $n_2 = 22$; 4.5%; see Table 2).

Given the administration's interest in promoting student engagement, the relatively large number of students identified as languishing (10.1% of those surveyed), and recommendations to be conscientious of the number of students who can feasibly be served with existing school resources (Cook et al., 2010; Moore et al., 2015), school staff elected to take additional steps to inform intervention referrals from survey data. Of most concern, students in the troubled and moderate-risk groups were referred to the counseling staff for additional assessment and potential referral to Tier 3 interventions. This additional in-depth assessment was conducted to make sure screening did not inappropriately screen high-risk students into the moderate-risk group. Given their above average internalizing distress, students in the lower-risk and symptomatic but content groups were referred to the school counseling team for participation in Tier 2 group interventions aimed at reducing symptoms of anxiety and depression and supporting continued use of effective coping skills and existing strengths. Students in the getting by, moderate thriving, and complete mental health groups were served through school-wide programming. Results at the school-level were shared with teachers and school staff and used to guide professional

Table 2. Dual-factor mental health triage groups.

	Average distress	Above-average distress	High Distress
Low strengths	4. Languishing 183 ^a	2. Moderate risk 51 ^a	1. Troubled 82 ^a
Low average strengths	5. Getting by 460	3. Lower risk 77 ^a	
High average strengths	6. Moderate thriving 594	9. Symptomatic but content 60	8. Symptomatic but content 22
High strengths	7. Complete mental health 282		

Note. Cells are numbered in order of need for follow-up.

^aHighest priority for intervention.

development topics, social-emotional learning curricula for the classroom, and school-wide assemblies and mental health promotion efforts.

Students classified in the languishing group were the target of potential strengths-focused Tier 2 interventions for the 2015–2016 academic year. In the present case study's sample, students who screened into the languishing group were represented across grades levels (Grade 9 = 29.5%, Grade 10 = 32.3%, Grade 11 = 22.4%, Grade 12 = 15.8%). A majority identified as male (56.3%) and markedly more identified as Latinx (66.1%) than White (19.7%) or another race or ethnicity (13.6%). Examining trends across the nine groups, relatively more girls were in groups characteristic of higher risk (e.g., 78.0% of troubled, 72.5% of moderate risk, 66.2% of lower risk, compared with 50.7% in complete mental health and 50.2% in moderate thriving). The languishing group (66.1% Latinx, 19.7% White) had a higher proportion of Latinx students than did the complete mental health group (33% Latinx, 51.1% White), whereas proportions in the moderate thriving group were more equal (40.1% Latinx, 43.6% White).

Selection of appropriate tier II interventions

By definition, languishing students report low levels of psychosocial strengths or well-being and average levels of emotional and behavioral risk or distress. Thus, Tier 2 interventions most appropriate for languishing students include those programs aimed at improving their strengths and well-being (Suldo & Shaffer, 2008). Choosing an appropriate Tier 2 intervention is a complicated task that requires educators and administrators to consider a number of factors. First, schools need to determine what type of behavior(s) or problem(s) are the focus of the intervention. Ideally this is guided by screening data as well as information from school-based stakeholders (e.g., students, teachers, parents, administrators) and school data (e.g., attendance, suspensions, grades). The present school used screening data, school data, and stakeholder information to identify the areas of most need for their Languishing students being targeted for Tier 2 supports. Specifically, the school had an interest in increasing student engagement and school climate through Tier 2 intervention, with the goal of building

on students' strengths. Therefore, the screening survey included a measure of students' feelings of connection with their school (e.g., affective engagement). The School Connectedness Scale consists of five questions asking students about their feelings of connection toward school (e.g., "I feel like I am a part of this school"; Anderman, 2002; McNeely, Nonnemaker, & Blum, 2002). Analysis of data revealed that about half of the students in the Languishing group reported school connectedness scores below the average for the school ($n = 91$). Additionally, per counselor feedback, many of these 91 students also had attendance issues and/or were failing one or more classes. Taken together, this information and the school's broader interests in enhancing student engagement and school climate were used to inform selection of a Tier 2 intervention for this group of students.

Once schools have determined the focus and goals of their intervention, then they need to determine what evidence-based interventions target these identified goals and whether they are appropriate for the age and characteristics of their student population. There is no standard process for making these decisions, as every school has different student populations and identified needs. Newcomer et al. (2013) suggested that schools create a matrix of existing interventions in their schools and the specific functions of behavior and student needs targeted by each intervention. This matrix can then be used to match identified student needs with specific Tier 2 supports. If the school does not yet have appropriate interventions in place to meet identified student needs, then officials will need to review the literature on Tier 2 evidence-based interventions and determine which align with their intervention goals. Table 3 provides a summary of selected evidence-based Tier 2 interventions for use in high schools, as well as the specific student outcomes that are targeted. For further reading, additional comprehensive reviews and guides that delineate the process of selecting and implementing evidence-based mental and behavioral health interventions in schools and other community-based settings are available through the National Resource Center for Mental Health Promotion and Youth Violence Prevention (n.d.) and Project PRIME (n.d.).

Finally, schools have to consider implementation feasibility (e.g., cost, personnel) when selecting appropriate interventions. An intervention will not be successful if the school does not have the money to purchase the intervention or have personnel trained, is lacking the needed personnel to implement the intervention, and/or does not have staff buy-in necessary to sustain the program. Therefore, schools should carefully consider the costs, training requirements, fit with existing school structures and programs, and uniqueness of the intervention in addressing something that is not currently being addressed through already existing programs or interventions.

Table 3. Summary of selected evidence-based Tier 2 interventions for high school students.

Intervention	Age/grade range	Format	Target areas addressed	References
Aggression replacement training	12–17 years old	Small group	<ul style="list-style-type: none"> • Prosocial skills • Anger management • Moral reasoning 	Glick & Gibbs (2011)
Behavior contracts	Grades K–12	Individual	<ul style="list-style-type: none"> • Behavioral issues • Individualized to student needs 	Bowman-Perrott, Burke, de Marin, Zhang, & Davis (2015)
Building decision skills	Middle and high school	Small group or classroom	<ul style="list-style-type: none"> • Ethics • Character education • Problem solving 	Leming (2001)
Check and Connect	Grades K–12	Individual	<ul style="list-style-type: none"> • Adult mentorship/relationship • Student engagement • School dropout/attendance • Academic achievement • Behavioral issues • Persistence 	Sinclair et al. (1998)
Check-In/Check-Out	Grades K–12	Individual	<ul style="list-style-type: none"> • Adult mentorship/relationship • Behavioral accountability • School engagement • Academic achievement • Individualized to student needs 	Cheney et al. (2009); March & Horner (2002); Hawken, MacLeod, & Rawlings (2007)
Cognitive Behavioral Interventions for Trauma in Schools	Grades 5–12	Small group, individual, and parent groups	<ul style="list-style-type: none"> • Trauma symptoms • Social problem solving • Relaxation and stress management • Parent education 	Jaycox (2004)
Function-based behavior support plans	Grades K–12	Individual	<ul style="list-style-type: none"> • Behavioral issues • Individualized to student needs 	McIntosh, Brown, & Borgmeier (2008); Newcomer & Lewis (2004); Umbreit (1995)
Girls circle	9–18 years old	Small group	<ul style="list-style-type: none"> • Resiliency/protective factors • Self-esteem • Positive interpersonal connection • Diversity • Mother-daughter relationship 	Gies et al. (2015)

Mindfulness-based interventions	Grades K–12	Small group or classroom	<ul style="list-style-type: none"> • Mindfulness • Relaxation • Stress management • Attention and concentration • Emotional coping skills 	Zenner et al. (2014)
Self-monitoring	Grades K–12	Individual	<ul style="list-style-type: none"> • Self-control/self-regulation • Self-efficacy • Behavioral and academic accountability • Individualized to student needs 	Pinkelman & Horner (2017)
The C.A.T. Project (modified version of Coping Cat for older children)	14–17 years old	Small group	<ul style="list-style-type: none"> • Emotional adjustment • Anxiety management • Cognitive and emotional coping skills 	Kendall, Choudhury, Hudson, & Webb (2002)

In the case example described here, the school identified mentorship programs broadly, as evidence-based interventions that could address the languishing students' needs for enhancing strengths, increasing engagement with school, and improving school connection. The school learned that its university partners had developed Check, Connect, and Respect (CCR) as an adaptation and extension of Check and Connect (Christenson et al., 2008). The U.S. Department of Education's What Works Clearinghouse has found Check & Connect to be efficacious, with positive effects on school dropout (staying in school). Moreover, CCR was developed to not only address risks, but also build the psychological strengths identified students were missing. Thus, mentors also provided lessons on strength building, such as ways to increase hope, gratitude, and connections with peers. The school-university partnership would allow the school to implement the intervention at little to no cost, with volunteers from the university undergraduate and graduate program in psychology serving as the CCR mentors. Ultimately, CCR was selected by school staff for students in the languishing group who also self-reported below-average school connection.

Students identified as potentially benefitting from CCR were contacted by CCR mentors, with the support of the school's counseling team and students' teachers. Mentors met individually with identified youths to provide information about the program and to obtain youth assent to participate. When youths were unsure about whether they wanted to participate, mentors answered any remaining questions and scheduled a follow-up meeting with the student to further discuss the program and their interest in participating. Students who did not assent did not participate in CCR and were provided with information about additional school and community resources to support wellness. A parental notification form was sent home with assenting students to inform parents of their child's participation in the CCR program and included instructions about who to contact if they did not wish for their child to participate in the intervention.

Students in the languishing group who did not meet criteria to participate in CCR, due to their higher self-reported school connectedness scores, were placed on a waiting list to participate in the CCR intervention during the second half of the school year, given space allotments and their relatively lower need given their self-reported connections to their peers and larger school community. These students were also served by school-wide programming.

Progress monitoring and evaluation

It is critical to evaluate student outcomes related to selected Tier 2 interventions (Hixson, Christ, & Bruni, 2014). Student outcome data are

essential to ensure that follow up is appropriately meeting student needs, at either the group or individual levels. For instance, outcome data may demonstrate that the intervention is not targeting the area of foci as anticipated or that an individual student requires additional support. Through evaluating outcome data, schools can make decisions about continuing, modifying, or ending an intervention program, either for individual students or within the school system as a whole.

For the case study being described, to evaluate the impact of CCR as delivered in this setting, and to provide services to as many identified students as possible, a descriptive pretest-posttest nonexperimental design was implemented. The SEHS-S and SEDS-S screening data were used as pretest data, as students began the CCR intervention shortly after screening took place and were aligned with the schools' intended goals of monitoring both strength and distress indicators. These measures were then re-administered to individual students as they exited CCR (posttest data). In addition, school-provided attendance data and grades were analyzed to evaluate change for participating students before and after completing CCR. At exit, participating students were also asked to complete the Mentor-Student Relationship Survey, a modified version of the Monitor-Student Relationship Survey developed for Check and Connect (Anderson, Christenson, Sinclair, & Lehr 2004), which asks students to rate how connected and understood they feel with their mentor.

It is also important to monitor the fidelity of implementation of selected interventions, as an evidence-based intervention is only likely to be successful if it is implemented as designed. There are a number of methods for fidelity monitoring, which vary in intensity and rigor. These include, from least to most rigorous, implementer self-report (verbally or in written format to supervisor), self-report fidelity rating scales or checklists completed after each session (or on a specific interval), and observation by a trained observer (audio, video or in vivo, on a specific interval; Breitenstein et al., 2010). In the present example, fidelity of implementation of the intervention was monitored through mentor notes and supervision. Supervision was provided by university faculty and advanced graduate students trained in CCR implementation. Mentors completed notes, in which they indicated via a checklist which aspects of the intervention were delivered, as well as qualitative information, after each CCR session. They also met weekly in group supervision to discuss their implementation of CCR and receive feedback on next steps and areas for improvement. Individual supervision was also provided, as needed, for mentors requiring additional support or facing particularly challenging student situations. In the present example, fidelity data were not analyzed systematically, but it is a recommended best practice that schools systematically monitor fidelity of implementation of school-based

mental and behavioral health interventions and provide support to increase fidelity if poor implementation fidelity is identified (Hixson et al., 2014). Schools may also benefit from using the RE-AIM Checklist, which is a checklist that supports schools in the process of systematically integrating and sustaining Tier 2 social-behavioral interventions (see Cheney & Yong, 2014).

Discussion

As illustrated by the literature and the case example highlighted in the present article, universal complete mental health screening is an important step toward successfully identifying Tier 2 intervention needs and assigning appropriate students to support. When schools are able to screen students for both strengths and distress indicators they obtain a more nuanced understanding of student needs, which aids in moving to intervention efforts. Although moving from universal complete mental health screening to Tier 2 intervention requires forethought to implement and evaluate, as the present article shows, the potential of connecting underidentified vulnerable youths, such as those who are languishing, to appropriate Tier 2 intervention is promising.

Schools are often hesitant to engage in universal screening, due to wanting to ensure that appropriate follow up is available for students in need of support. While schools are often prepared to support students with high levels of need, it can be more challenging to group and provide intervention for students in Tier 2. In particular, numerous evidence-based interventions have been developed to address specific mental and behavioral health issues (e.g., anxiety, depression, trauma, conduct problems), which has led to a clearer understanding of how to support students with these symptom presentations. What is less clear is how to support other vulnerable populations who do not yet demonstrate psychological distress but are nonetheless vulnerable and at-risk for experiencing poor outcomes. As the present article demonstrates, school-wide complete mental health screening data can be used to identify evidence-based interventions that are aligned with the information gathered from screening data. This allows schools to better meet the needs of students whose lack of well-being may otherwise go un- or underidentified.

The selection of specific Tier 2 interventions is a challenging part of connecting screening to intervention. When selecting Tier 2 interventions, school professionals should consider developing a menu of services that address various needs. For example, students who need to work on self-efficacy and self-awareness might be a good fit for CCR. Whereas students who need to work on emotional regulation, empathy, or self-control might benefit from a different Tier 2 intervention. Although it might be tempting, and overwhelming, to develop Tier 2 supports to meet the specific needs of

every student, it is likely that implementing a limited number of high-quality interventions can address the psychological supports of a student body. For example, Lenzi et al. (2015) provided empirical support for a configuration protective model, which states that an adequate balance of strengths across domains is a protective factor against a variety of behavioral and emotional challenges. Thus, a configuration of supports need not address every domain, but rather an adequate variety of skills across multiple domains (Lenzi et al., 2015).

Schools' intervention efforts are often hampered by pragmatic considerations. It is critically important that any intervention be acceptable to the consumers, which in the schools means that it is acceptable to administrators, teachers, students, and their families; aligned with school schedules; addresses significant concerns; and resource efficient (Sharkey, Dougherty, Felix, & Dowdy, 2019). The most important key to success with this project included administrative support and staff enthusiasm for the project, which is supported in the broader literature (Castillo & Curtis, 2014). When schools do not have strong Tier 2 supports, there is often pressure on Tier 3 supports such as special education and individual school-based counseling to take on students who could benefit from less resource intensive programs. In our case, administrators were excited about better meeting the needs of students with less costly interventions; teachers were enthusiastic because they felt this project would meet a need of their students who struggled but did not qualify for more intensive support. In schools where support for complete mental health screening and Tier 2 support has not been garnered, school psychologists may want to engage in consultation with the school or district and implement needs assessment to gather the input of school stakeholders (Sharkey et al., 2019).

Implementation considerations

Although the present study was based on a university-school partnership, it is recognized that some might be concerned about implementing Tier 2 interventions without support from a university. Fortunately, there are a number of examples from the literature that provide viable options, including school mentorship programs implemented by professionals hired by, or already working in the schools (e.g., Goulet, Archambault, Janosz, & Christenson, 2018). In addition, the following recommendations are provided to aid in the future implementation of CCR and other Tier 2 interventions. First, practitioners are encouraged to think broadly about who can serve as school-based mentors. This may include using both school-based staff (e.g., school social workers, special education teachers, school psychologists, school counselors) and outreach to local community

organizations to identify potential volunteers, paraprofessionals, or other low-cost but impactful personnel to support successful implementation. Second, in selecting interventions, schools will maximize success and sustainability by drawing upon existing school resources. Check and Connect, the original model for CCR, was designed with existing staff serving as mentors and has been successfully implemented in schools (see Hartwig & Maynard, 2015). Ultimately, when practitioners are considering implementing a Tier 2 intervention in their own context, it is advisable to start small and then scale up (Goulet et al., 2018), ensuring that the program is viable before trying to increase the size of their reach.

Challenges and limitations

Overall, there are many challenges and limitations to implementing complete mental health screening to inform Tier 2 intervention. Obtaining consent from parents or caregivers in a timely manner was difficult and resulted in only 62% of targeted students participating in the evaluation of the implemented intervention. School psychologists should anticipate difficulty obtaining consent with any student, and particularly with the languishing group targeted for Tier 2 supports. Thus, protocols for gaining consent should be put in place with creative mechanisms set ahead of time. A protocol might include mailing consents directly to parents with a self-addressed stamped envelope, asking students to hand deliver and return consent forms with an incentive such as a “no homework pass,” inviting parents to meetings at school with a teacher to explain the program and importance of evaluation, or visiting parents at home. The protocol should be laid out ahead of time with a detailed process for the steps to take to obtain consent for all identified students.

Teacher and staff buy-in is another area of difficulty that is often encountered when schools engage in universal screening and corresponding interventions. Although administrators often have good intentions with bringing these efforts to their faculty, individual teachers may not share the same vision. This can pose added difficulties in allowing students to leave class for screening and intervention activities, gathering teacher input, and encouraging teachers to actively support the intervention process. In the case example presented, teacher participation varied, depending on the individual teacher. School psychologists who want to improve upon teacher participation rates can develop protocols for obtaining teacher data such as frequent reminders, multiple modes of survey delivery (e.g., paper and a web survey link that can be used on any electronic device), and incentives such as recognition at staff meetings or gift cards.

A limitation to the present case study was the limited information available to describe characteristics of languishing students that may be of particular interest to schools. Information regarding the academic characteristics (e.g., academic performance, attendance, discipline referrals) of screened youths were not available for this study. Previous research with middle school students found that languishing youths, when compared with youths with complete mental health, scored lower on standardized reading assessments and had more absences, but did not significantly differ with respect to overall grade point average or standardized math scores (Suldo & Shaffer, 2008). Antaramian et al. (2010) similarly found languishing youths to have significantly lower grade point averages compared with their complete mental health peers, but found no differences across groups with respect to standardized test scores in reading, math, or science. Although research with middle school students is able to provide some information about trends in academic outcomes for students in Languishing groups, additional research is needed to explore academic profiles of languishing adolescents to further elucidate distinguishing characteristics of languishing students, and to inform selection of interventions that can bolster these students' educational and social-emotional outcomes.

An additional limitation of this case study was the lack of attention to demographic differences in the identified groups. The mental health group descriptive data highlighted racial ethnic disproportionalities in complete mental health status of the students. Specifically, the languishing group (66.1% Latinx, 19.7% White) had a much higher proportion of Latinx students than the complete mental health group (33% Latinx, 51.1% White). Interestingly, the moderate thriving group included more equal proportions of Latinx (40.1%) and White (43.6%) students. Given that past studies have identified languishing students as experiencing lower levels of engagement (Antaramian et al., 2010), reduced academic self-concept (Suldo & Shaffer, 2008), and lower levels of school belonging (Moffa et al., 2016), schools may need to particularly focus on these factors for historically marginalized populations. Including examination of racial and ethnic disparities within universal screening efforts can help identify specific subgroups within schools that need better services at all levels.

Future recommendations

Solutions to these challenges will come as more research rigorously tests implementation of universal complete mental health screening to Tier 2 intervention. Thus, it is important that implementation trials are published and disseminated so applied psychologists can learn from and improve on existing practice. Future researchers should implement quasi-experimental

designs to further understand how schools can successfully implement universal screening leading to intervention. Additionally, research should continue to address pragmatic concerns (e.g., teacher buy-in, time, personnel resources, intervention cost) to allow schools to more readily engage in tiered work to support all students. The continued collaboration of schools and researchers to do this important work will ultimately lead to enhanced evidence-based guidelines for effective implementation of complete mental health screening and MTSS for mental and behavioral health.

Acknowledgement

The authors would like to thank the high school with whom they partnered for their continued support and dedication to student wellness.

Funding

The preparation of this article was supported in part by the National Institute of Mental Health (#T32MH109436-02). The opinions expressed are those of the authors and do not represent views of the National Institutes of Health.

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