Examples of Behavior Screeners

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Several behavior screening procedures and tools have been developed for use in schools. The descriptions of the behavior screening procedures described below are intended to be a supplementary resource to the *School-wide Behavior Screening, Topic Brief*. This resource document provides additional more detailed information about six examples of behavior screening procedures which we believe are representative of these types of screening procedures. These are:

- Emotional and Behavioral Screener
- Behavioral and Emotional Screening System
- Strengths and Difficulties Questionnaire
- Social, Academic, and Emotional Behavior Risk Screener
- Student Risk Screening Scale
- Systematic Screening for Behavior Disorders

School personnel can use these descriptions to better understand the content and features of these screening devices, and some of the requirements for their implementation.

While most of these screeners employ a teacher (or guardian) to rate students, some screeners entail having youth identify their own behavioral symptoms. In the Appendix to this document is an example, The Massachusetts Youth Screening Instrument, which is used in juvenile justice populations is to screen for mental health and behavioral concerns.

Emotional and Behavioral Screener

The emotional and behavioral screener (EBS; Cullinan & Epstein, 2013) is a relatively simple and easily administered tool. It involves only two simple forms, a rating form and a decision summary form. The rating form includes 10 items describing specific and observable problems that the rater will score the student on. A unique aspect of this screener is that it requires two school personnel to administer the screener: an examiner (e.g. psychologist, social worker or administrator) and a rater (typically teachers familiar with the students). The examiner's role is to oversee all aspects of administration, including appointing each rater, scoring the forms, and incorporating other information to create a more comprehensive profile for each student. The rater is responsible for responding to each of the items on the rating form for each student and should be acquainted with the student well enough to know how the student generally behaves. Upon completion of the rating form the student will receive a total EBS score, which will either place him/her in the category of "not at risk" or "at risk". Scores required to place students in these categories vary by age and gender, which was determined to be any score that exceeded scores for 80% of students without emotional disturbances.

Behavioral and Emotional Screening System

The BASC-2 Behavioral and Emotional Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007) was developed as a mental health screener for students ages 3-18 (Furlong & O'Brennan, 2010).

While this screener was developed as a part of the Behavioral Assessment System for Children-Second Edition (BASC-2) family of assessment tools, it is not a part of the actual BASC-2 measure (Note: an updated version, BASC-3, has been released; Reynolds & Kamphaus, 2015). The screener is based on ratings along a 4-point continuum (i.e., never, sometimes, often, almost always) and calculates measures from three sources: teacher, parent, and student. The teacher form (intended for both children and adolescents) takes approximately 5 minutes per student to complete, and includes 27 items across four domains: externalizing problems, internalizing problems, school problems, and adaptive skills (Denver, Mays, Kamphaus, & Dowdy, 2012). The parent form includes 30 items intended for children age 3 through 18, which indicates performance in four areas: externalizing behavior, internalizing behavior, adaptive skills, and inattention (Dowdy, Chin, Twyford, & Dever, 2011). The student form includes 30 items across the domains of personal adjustment, inattention/hyperactivity, internalizing, and school problems (Dowdy et al., 2011). This measure takes approximately 15 minutes to complete and includes a Spanish version (Harrell-Williams, Raines, Kamphaus, & Dever, 2015).

A review of the BASC-2 BESS by the Mental Measurements Yearbook found it to be reliable (.71-.97) and valid (.51-.94). Researchers have demonstrated the effectiveness of the BESS rating scale at the high school (Harrell-Williams et al., 2015), middle school (Chin, Dowdy, & Quirk, 2013), elementary school (King, Reschly, & Appleton, 2012), and preschool levels (Dowdy, Chin, & Quirk, 2013). However, it costs $100-150 per class, plus an additional dollar per form purchased thereafter (Lane, Menzies, Oakes, & Kalberg, 2012), and additional scoring software at a price of $589 (Furlong & O'Brennan, 2010). While this test has received promising reviews, it might pose a challenge to locate the funds necessary to support this tool on an ongoing basis in the schools.

Strengths and Difficulties Questionnaire

The Strengths and Difficulties questionnaire (SDQ; Goodman, 2001) is empirically tested for students age 3-17 (Ennis et al., 2012) and is one of the few instruments validated K-12 (Goodman, 2001). It is a cost-free tool that can be found in a variety of forms (clinical, research, and teaching) and in several languages (Youth in Mind, 2012; Lane, Menzies, Oakes, & Kalberg, 2012). The questionnaire includes five questions for each of five subscales: conduct problems, emotional symptoms, hyperactivity, peer problems, and pro-social behavior. SDQ has the advantage of seeking more than just the opinion of the teacher, as it is completed by a number of raters: teachers, parents, and students (Lane et al., 2011; Lane, Menzies, Oakes, & Kalberg, 2012). If completed by paper this method requires one page per class, which can become cumbersome. Therefore, raters have the option to complete the screener online.

Regardless of the method, SDQ requires an average of 45 minutes per class to complete (Lane, Menzies, Oakes, & Lambert et al., 2012), which may not be ideal or possible for many school faculty members. In a study by Lane et al. (2011), SDQ was discontinued after one administration due to time constraints. For a more complete analysis of SDQ, please refer to Lane, Menzies, Oakes, and Kalberg (2012).

Social, Academic, and Emotional Behavior Risk Screener

Although this is a relatively new measure, the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS; Kilgus, Chafouleas, Riley-Tillman, & von der Embse, 2014) has demonstrated reliability (Kilgus, Sims, von der Embse, & Riley-Tillman, 2015; Kilgus, Chafouleas & Riley-Tillman, 2013) and concurrent validity with the SRSS (Kiligus et al., 2013) as a screening tool for children and youth K-12. Screening is estimated to take from 1-3 minutes per student based on teacher ratings on 19 likert scale items, which improves the feasibility of this measure for universal screening purposes. This screener has also demonstrated contextual appropriateness, in that it assesses behavior across a variety of domains: social

behavior (e.g., appropriate relationships with peers and adults), academic behavior (e.g., behaviors that promote academic instruction), emotional behavior (e.g., actions that promote or limit one's ability to regulate internal states, adapt to change, and respond to stressful/challenging events), and total behavior (e.g., incorporates all items; Von der Embse, Pendergast, Kilgus, & Eklund, 2016). Screening can be done up to 5 times per year, and can be used for individual, group, or universal purposes. Teacher rating forms and scoring guidelines can be downloaded for free from ebi.missouri.edu. Electronic administration and scoring is also available through Fastbridge.org.

Student Risk Screening Scale

Another effective measure receiving much attention is the Student Risk Screening Scale (SRSS; Drummond, 1994), which identifies students demonstrating antisocial behaviors at the elementary level (Ennis et al., 2012). In its first version, SRSS was as reliable as the systematic screening for behavior disorders (SSBD) screener in identifying students with externalizing behaviors but was not a reliable measure of internalizing behaviors (Lane & Little et al., 2009; Lane et al., 2010). The SRSS requires teachers to rank each student in his/her class on a 4-point scale regarding seven items: a. steals; b. lies, cheats, sneaks; c. behavior problems; d. peer rejection; e. low academic achievement; f. negative attitude; and g. aggressive behavior (Ennis et al., 2012). Based on student's scores, they will be identified as low risk (0-3 points), moderate risk (4-8 points), or high risk (9-21 points; Lane, Menzies, Oakes, & Kalberg, 2012).

Because internalizing behaviors are as important as externalizing behaviors and even harder to detect (Bradshaw, Buckley, and Lalongo, 2008), Lane and colleagues have engaged in a programmatic line of research around validating a version of the SRSS that will detect both externalizing and internalizing behaviors (i.e., SRSS-IE). Reliability and validity of the original version was compared with the strengths and difficulties questionnaire (SDQ; described below), which has been validated at the elementary, middle, and high school levels (Lane, Oakes, et al., 2012). This version of the SRSS-IE included five items related to internalizing behaviors: 1) emotionally flat, 2) shy, withdrawn, 3) sad, depressed, 4) anxious, and 5) lonely, in addition to the original seven measures of externalized behavior (steals; lies, cheats, sneaks; behavior problems; peer rejection; low academic achievement; negative attitude; and aggressive behavior), yielding 12 total outcomes. This version of the SRSS-IE with 12 outcomes has been validated for the elementary level (Lane, Oakes et al., 2012; Lane, Menzies et al., 2012), but had to be adjusted slightly for the middle and high school levels. At the middle and high school level, an additional outcome of peer rejection was added to the internalizing symptoms based on results of a factor analysis (Lane et al., 2016).

This instrument is available to schools free of charge, and takes only 10-15 minutes to complete per class (Harrison et al., 2013; Lane, Menzies, Oakes, & Kalberg, 2012). To date, there has been substantial evidence to support a the use of SRSS at the elementary (Lane Menzies, et al., 2012; Lane, Oakes, et al., 2012; Lane et al., 2015), middle (Lane, Oakes, Carter, Lambert, & Jenkins, 2013), and secondary levels (Lane, Oakes, Cantwell, Menzies, et al., 2016; Lane, Oakes, Cantwell, Schatschneider et al., 2016). For more information on SRSS and how to implement it, refer to the book by Lane, Menzies, Oakes, and Kalberg (2012).

Systematic Screening for Behavior Disorders

Systematic Screening for Behavioral Disorders (SSBD) is the gold standard in behavior screening (Lane, Kalberg, Lambert, Crnobori, & Bruhn, 2010; Lane, Menzies, Oakes, & Lambert et al., 2012) and has received a positive review from the Mental Measurements Yearbook due to a clear and thorough instruction manual and sufficient measures of reliability for externalizers (.76) and internalizers (.74), with

higher levels test-retest reliability for adaptive (.88) and maladaptive (.83) behaviors. However, measures of validity are less convincing, ranging from .32 (critical events index) to .70 (maladaptive rating scale). Criticisms that the review had of SSBD are the time it takes for teachers to complete each stage of the screening process, a limited standardization sample, and the low to moderate validity measures (Kelley, 1998).

This multiple-gating screening procedure requires teachers to first classify students based on whether they have externalizing or internalizing behaviors (or both). Then the teacher then rank orders students on those types of behaviors from most to least using the operational definition provided. In the next step, a psychologist or administrator examines the top three students on each domain of behavior. Those students are analyzed using the critical events index (CEI) and the combined frequency index (CFI) to identify high-intensity, low frequency (e.g. steals, sets fires, vomits after eating) and low-intensity, high-frequency (e.g. manipulates classmates, pouts/sulks, is excessively demanding) behaviors, respectively (Lane et al., 2010; Lane, Menzies, Oakes, & Kalberg, 2012). Those students are then observed by an outside observer.

Validation of this procedure at the high school level failed to yield significant results in identifying both students who were comorbid with both internalizing and externalizing behaviors. The conclusion was that more research is needed to produce a time-efficient measure of comorbid behavior issues at the high school level (Kalberg, Lane, Driscoll & Wehby, 2011). However, systematic screening for behavior disorders (SSBD) has been validated at the elementary (Lane et al., 2010) and middle school levels (Richardson et al., 2009) for identifying students at risk for externalizing or internalizing behaviors. Limitations of SSBD include the inability to identify comorbid behaviors and that only the six most severe students are allowed through the second phase (Lane et al., 2010). For more information on SSBD, refer to Lane, Menzies, Oakes, and Kalberg (2012).

Discussion of Examples

Lane and colleagues (2010) suggest systematic screening for behavior disorders (SSBD) to identify externalizing and internalizing behaviors. This tool is seen as the gold standard in behavioral screening, but is financially straining and time consuming. The student risk screening scale internalizing and externalizing (SRSS-IE) and SSBD are equally effective for identifying externalizing behaviors, however, SRSS-IE is recommended for schools with limited resources. SRSS-IE has also been validated for identifying internalizing behaviors with accuracy, and can be administered rather quickly. Much like the SRSS-IE, the SAEBRS is available for free and can be administered on a wide scale rather quickly. Additionally, all tools discussed above have been validated for grades K-12, making them ideal options at any grade level contingent upon school time and monetary resources. It is important to note that there are other measures that can be employed to determine the mental health of students that were not discussed above. One example is the Reynolds Screening for Depression and Suicide, which can be administered to an entire school population at once with additional stages for those scoring above clinical cutoffs in stages one and two (Doll et al., 2012). Unfortunately, many screening tools used for clinical purposes (e.g., Reynolds Screening for Depression and Suicide, BASC-3, etc.) are not free and require a large amount of time expended to interviews and therapy for those identified as at-risk in either category, which must be considered prior to implementing such screeners (Doll et al., 2012).

Conclusion

Regardless of which screening tool they choose, schools and school systems are urged to implement behavior screening procedures. While the task of universal screening can appear daunting, it is clear

that research supports the use of employing behavior screening in schools and the positive outcomes it can produce assisting students, saving resources, and better learning outcomes. School personnel are urged to examine the research and practical considerations for administering behavioral and emotional screeners since they vary in cost, administration time, and psychometric data. Careful selection an appropriate screener that suits the needs of key stakeholders (e.g., administrators, parents, and teachers) and students is crucial. These tools assist in focusing tiered behavior supports and interventions to high risk students in order to prevent or ameliorate behavior and mental health problems. Proper screening procedures, delivery of appropriate interventions to identified students, as well as progress monitoring and follow-up, must be completed in order to effect positive outcomes for the students and the schools.

Related Briefs

For more information about behavior screening see the Topic Brief on School-wide Behavior Screening (http://k12engagement.unl.edu). Behavior screening in schools is also addressed in the Strategy Brief Positive Behavior Interventions and Supports. See also a related Topic Brief on Dropout Screening and Early Warning.

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Appendix

**Related Resources on Behavior and Mental Health Screening
in the Juvenile Justice System**

As in education, the Office of Juvenile Justice and Delinquency Prevention is interested in identifying and serving children and youth who are in juvenile justice settings who may also have behavioral or mental health disorders. The resources below explain a behavior screening tool developed for those settings.

Office of Juvenile Justice and Delinquency Prevention

Assessing both the risk of reoffending and intervention needs of youth is considered best practice within certain settings of juvenile justice. A recent report on Risk/Needs Assessments for Youths discusses both static and dynamic factors which can be used to predict the likelihood of youth reoffending. This document is available at: www.ojjdp.gov/mpg/litreviews/RiskandNeeds.pdf.

National Youth Screening & Assessment Project (NYSAP)

The National Youth Screening & Assessment Project (NYSAP) is a technical assistance and research center, dedicated to helping juvenile justice programs identify youths' needs for behavioral health intervention and risk management. Located at the University of Massachusetts Medical School, it is supported in part by the John D. and Catherine T. MacArthur Foundation. More information is available at: http://nysap.us/Index.html; http://nysap.us/MHScreening.html.

Massachusetts Youth Screening Instrument - Second Version (MAYSI-2)

The MAYSI-2 was developed by during the 1990s with assistance from the William T. Grant Foundation. The MAYSI-2 is a paper-and-pencil self-report inventory of 52 questions designed to assist juvenile justice facilities in identifying youths 12 to 17 years old who may have special mental health needs. Youths circle YES or NO concerning whether each item has been true for them "within the past few months." Youths read the items themselves (5th grade reading level) and circle the answers. Administration takes about 10 to 15 minutes and scoring requires approximately 3 minutes. The MAYSI-2 is available in both English and Spanish as well as in software form. The MAYSI-2 software, called MAYSIWARE (2006) and MAYSIWARE 4.0 (2011, for Vista/7 versions of Windows).These materials are available for purchase from Professional Resource Press at: http://www.prpress.com/MAYSI-2-2006-Massachusetts-Youth-Screening-Instrument-Users-Manual-Technical-Report_p_170.html.

Building & Sustaining
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