Assessment in Action: Screening Considerations in School Mental Health

Quality and Evidence-Based Practice Strand
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Agenda & Purpose

▪ Discuss the importance of screening

▪ Provide an overview of contemporary screening approaches

▪ Discuss practical and logistical considerations related to screening
Objectives

▪ Participants will be able to identify a minimum of 5 different screening methods

▪ Participants will be able to describe strengths and weaknesses associated with at least 3 different screening methods

▪ Participants will be able to identify factors impacting the number of times screenings should occur
Assessment as Evidence-based Practice

- We need reliable and valid data in order to engage in EBP
- Foundational
- Understanding the strengths and limitations of our assessments is essential
Why do I need the data?

At what level should the problem be solved?
- Primary
- Secondary
- Tertiary

What is the purpose of assessment?
- Screening
- Progress Monitoring
- Diagnostic
- Evaluative
Purpose of Assessment

- **Screening**
  - Who needs help?

- **Diagnosis**
  - Why is the problem occurring?
  - Tied to service delivery (SPED)

- **Progress Monitoring**
  - Is the intervention working?

- **Evaluation**
  - How well are we doing overall?

Emphasized within a Multi-Tiered Service Delivery Framework (RTI)
Screening

- Screening involves the process of narrowing a larger general population down to a smaller population of interest, based on specific characteristics (Merrell, 2008)

Screening informs service delivery at subsequent tiers
Rationale

▪ Surveillance within a prevention-science paradigm
▪ General outcome measures as indicators of status
Why do we need to screen? (Severson et al., 2007)

Referral peak for academic problems = 2nd/3rd grade

Referral peak for behavioral problems = 9th grade

One estimate suggests that 75-80% of children and youth in need of mental health services do not receive them (Kataoka, Zhang, & Wells, 2002)
Benefits of screening

- Long term costs of NOT screening
  - Suspension/expulsion
  - Dropout
  - Poor employment outcomes
    - 44% of those receiving federal disability payments have a serious mental illness
  - Incarceration
    - According to the National Alliance on Mental Illness, 40% of adults with serious mental illness are arrested at some point
- Suicide: 39,000 deaths per year (CDC)
- Time and resources devoted to managing issues (triage)
- Early identification → Early intervention → Improved student outcomes
In the 1950s, about 500,000 people with serious mental illness were treated in publicly funded psychiatric hospitals. Today, with fewer hospital beds and inadequate community services, an estimated 590,000 mentally ill patients a year end up in the country’s de facto mental health institutions: jails and prisons; city streets and homeless shelters; and the morgue, due to suicide.
Screening: Is it happening?

- Mandatory universal screening for behavioral health issues does not currently exist anywhere (Weist et al., 2007)

- Why don’t schools regularly engage in screening? (Severson et al., 2007)
  - See it as someone else’s responsibility
  - Lack of resources
  - Concerns regarding stigmatization
  - Availability of schools to provide follow-up services
Bruhn et al. (2014)

Figure 1. Types of Screening Data Collected
Screening Approaches
Key considerations in school-based screening

- Constructs of interest

  What are we screening for???
  Goal = to identify individual and environmental factors most likely to predict negative outcomes

  Psychopathology
  Goal = to identify symptoms related to particular diagnosis

  Risk and protective factors

  School-based success
  Goal = to identify behaviors most relevant to ability to learn

What are we screening for???
Screening options

- Extant data: Office discipline referrals
- Nomination methods
  - Teacher/Parent nomination
  - Sociometrics
- Norm-referenced ratings
  - BASC-2 BESS
  - DBR-SIS
  - SDQ
  - BIMAS
- Criterion-referenced ratings
  - SSIS Performance Screening Guide
  - Student Risk Screening Scale (SRSS)
- Multiple-gating approaches
  - SSBD

Scope: Universal or Targeted

Respondent: Teacher, Parent, and/or Student
Screening Methods: Extant data & Nomination

- ODRs
  - SWIS
  - Other
- Teacher nomination
- Parent nomination
- Sociometrics
Norm Referenced Rating Scale

- BASC-2 Behavioral and Emotional Screening System (Kamphaus & Reynolds, 2007)
  - Preschool-Grade 12
  - 27 items used to screen for behavioral and emotional problems
  - Completed by teachers, parents, and students (3rd+)
  - $136 for full kit; $28 for package of 25 forms
  - Requires 5-10 minutes per student
  - Online scoring available
  - Intervention recommendations available (from BASC-2 Intervention Guide)
Norm Referenced Rating

- Direct Behavior Rating – Single Item Scales
  - Validated for elementary and middle school use
  - Combines benefits of systematic direct observation with rating scales
  - Available for free online: www.directbehaviorratings.org
  - Teacher observations of student behavior over 5 days (rating 2x per day)
  - Target behaviors: Academically Engaged, Disruptive, Respectful
**DBR-SIS**

**Directions:** Place a mark along the line that best reflects the percentage of total time the student exhibited each target behavior. Note that the percentages do not need to total 100% across behaviors since some behaviors may co-occur.

**Academically Engaged (AE)**

% of Total Time

0%Never

10%Always

**Respectful (RS)**

0%Never

10%Always

**Disruptive (DB)**

0%Never

10%Always

* Remember that a lower score for “Disruptive” is more desirable.
Using a Composite Score

<table>
<thead>
<tr>
<th>Academic Engagement (0-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE: Actively or passively participating in the classroom activity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respectful (0-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS: Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disruptive Behavior (0-10 – reverse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB: A student action that interrupts regular school or classroom activity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Composite (0-30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: Sum of scores across individual targets of AE, RS, and DB (reverse scored).</td>
</tr>
</tbody>
</table>

Example: Determining the average individual score

<table>
<thead>
<tr>
<th>AE-1</th>
<th>AE-2</th>
<th>AE-3</th>
<th>AE-4</th>
<th>AE-5</th>
<th>AE-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

Average 8
Proposed Cut Scores: DBR-SIS
Johnson et al., in press

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Elementary (1-2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite cut score</td>
<td>26.2</td>
<td>26.4</td>
<td>26.5</td>
</tr>
<tr>
<td>Upper Elementary (4-5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite cut score</td>
<td>27.3</td>
<td>26.8</td>
<td>27.8</td>
</tr>
<tr>
<td>Middle School (7-8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite cut score</td>
<td>27.5</td>
<td>28.2</td>
<td>28.1</td>
</tr>
</tbody>
</table>
Criterion Referenced Rating Scale

- Student Risk Screening Scale (Drummond, 1994)
  - Primarily validated K-6 but evidence to support 7-12
  - 7 indicators of antisocial behavior rated on 4-point scale
  - Completed only by teachers
  - Requires 10-15 minutes per class
  - Available for free online
  - No accompanying intervention materials

- More recent expansion by Lane and colleagues to include internalizing and externalizing scale
**Student Risk Screening Scale**

**Directions:** Each classroom teacher will fill in the names of the students in alphabetical order (use additional sheets of this Scale as needed). Rate all of the students on each behavior using the following scale: 0=Never, 1=Rarely, 2=Occasionally, 3=Frequently. At the bottom of page 2, please summarize the number and percent of students in each risk category.

The total scores range from 0 to 21, forming three risk categories: 
(L) Low Risk (0 to 3)  (M) Moderate Risk (4 to 8)  (H) High Risk (9 to 21)

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Steal</th>
<th>Lie, Cheat, Sneak</th>
<th>Behavior Problem</th>
<th>Peer Rejection</th>
<th>Low Academic Achievement</th>
<th>Negative Attitude</th>
<th>Aggressive Behavior</th>
<th>Total (0-21)</th>
<th>Risk (circle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
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<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
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<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
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<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
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<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
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<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L M H</td>
</tr>
</tbody>
</table>
Criterion Referenced Rating Scale

- SSIS Performance Screening Guide (Elliott & Gresham, 2007)
  - Preschool to Grade 12
  - All students rated on 4 dimensions (Prosocial, Motivation to Learn, Reading Skills, Math Skills)
- Forms available for teachers
- 25-30 minutes typically needed to screen a class
- $46 for package of 10 forms
- Online scoring available
- Links to SSIS Intervention Guide

Strengths

Weaknesses
Systematic Screening for Behavioral Disorders

Teacher screening using rank-order procedures

Teacher rating of critical behavioral problems

Observation of in-class/playground behavior

Pre-referral intervention team

Strengths

Weaknesses
Summary

- Variety of different screening options exists, each with different strengths and weaknesses
- Think about contextual fit, defensibility, & logistics
  - What indicators of student functioning are most meaningful given your population?
  - Strong evidence for reliability and validity of scores?
  - Feasibility? Acceptability?
  - How will these data inform intervention provision?
Screening Considerations
Miller et al., 2015

FALL RISK STATUS BY MEASURE

<table>
<thead>
<tr>
<th>Measure</th>
<th>At-risk</th>
<th>Not at-risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBR-SIS</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>BESS</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>SSiS-Prosocial</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>SSiS-Motivation</td>
<td>35</td>
<td>65</td>
</tr>
<tr>
<td>ODR</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>School Nomination</td>
<td>5</td>
<td>95</td>
</tr>
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</table>

Proportion

0 20 40 60 80 100
Essentials

Ethical considerations (Chafouleas, Kilgus, & Wallach, 2010)

▪ Must establish follow up procedures when children identified at risk
  ▪ Conduct more thorough assessment to verify problem

▪ Intervention/treatment options must be available to address identified concerns

▪ Consider district policies regarding parental consent
  ▪ Active?
  ▪ Passive?
  ▪ None?
How often to screen?

- Differing recommendations, ranging from once per year to three times per year
- Bruhn et al. (2014)
  - 39% once per year
  - 23% twice per year
  - 12% three times per year
  - 26% other
Risk patterns by measure (Miller et al., in preparation)

<table>
<thead>
<tr>
<th>Measure</th>
<th>NO RISK</th>
<th>RISK ONCE</th>
<th>RISK TWICE</th>
<th>ALL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBR-SIS</td>
<td>48%</td>
<td>16%</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>SSIS-PRO</td>
<td>53%</td>
<td>17%</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>SSIS-MOT</td>
<td>53%</td>
<td>14%</td>
<td>12%</td>
<td>21%</td>
</tr>
<tr>
<td>BESS</td>
<td>75%</td>
<td>9%</td>
<td>7%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Which tools are best matched?

Scope

Informant

Frequency

What resources are available?

Time

Cost

Training

Supports
Questions to guide decision making (Lane et al., 2012)

▪ What grade level are you working with?
▪ What types of concerns are you interested in identifying?
▪ Who do you want to do the ratings (e.g., teachers, parents, students)?
▪ What is your budget?
▪ How much time can you devote to screening?
▪ Is paper and pencil OK or do you prefer electronic?
▪ Are you looking for a screener that links to intervention?
▪ What are your school/district’s policies regarding screening?
Questions/Comments?

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