Adapting the SSBD for Secondary School PBS Interventions: Student and Parent Correlates

Michael J. Richardson, Paul Caldarella, Benjamin J. Young, Ellie L. Young
Why Screen for Behavior Problems?

- One of the most difficult challenges teachers and administrators face is behavior and emotional problems in students.
- However, some problems are difficult to clearly specify.
- Screening allows for a better match of treatment with individual needs.
- Screening allows for prevention and early intervention efforts, which reduce the need for more intensive services.
Early Screening Options

- Student self-report
- Parent report
- Teacher report for all students.
- Teacher report for a subset of nominated students
Strengths of Teacher Nomination

- Non-invasive way to consider all students at the school
- Teacher perspectives are highly relevant for school related problems
- Provides justification for further assessment
What Behaviors?

- Externalizing behaviors frequently cause disruption in the classroom and are relatively easy to detect (e.g., defiance, arguing, bullying, etc.)

- Internalizing behaviors can be more difficult to notice because they are typically non-disruptive (e.g. shyness, anxiety, withdrawing from social situations).
PBS Interventions

- PBS interventions can help develop protective factors for both internalizing and externalizing behaviors (e.g., academic skills, friendship-making skills, self-control strategies).

- These interventions can be of particular importance for students experiencing emotional and behavioral challenges while making the transition from primary to secondary grades.
Screening in Secondary Grades

- Screening and assessment provide the basis for effective PBS interventions; but are largely absent from actual practice, especially in middle schools and junior high schools.
Transition from elementary setting to secondary setting.

- Several significant educational changes
  - Self-contained classrooms (1 teacher) vs. departmentalized classrooms (many teachers)
  - Higher expectations for independent management of emotional, social, and academic issues.
Developmental changes

• Physical development
• Increased social circles
• Move from same-gender friendships to mixed-gender friendships and romantic relationships
• Cognitive development

(Wigfield, Eccles, Maclver, Reuman, & Midgley, 1991)
Does Teacher Nomination Work at the Secondary Level?

- Has been successful at the elementary level (see e.g., SSBD Walker & Severson, 1992).
- However, secondary education presents a very different context.
Research Questions

- How accurate is the SSBD in identifying students entering grades 7-9 at risk for internalizing and externalizing behavior problems?

- To what extent are teacher perceptions shared by students and parents?
Previous Findings

- The SSBD has been found to correlate with other measures, and nominated secondary students significantly differed from the school population (Caldarella, Young, Richardson, Young, & Young, in press).

- Modest correlations between teacher, parent, and student ratings have been reported for other measures (Achenbach, McConaughy, & Howell, 1987).
### Population
(grades 6-8 in three schools)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students</td>
<td>2173</td>
</tr>
<tr>
<td>Male/Female</td>
<td>1087/1086</td>
</tr>
<tr>
<td>Free, Reduced Lunch</td>
<td>30%</td>
</tr>
</tbody>
</table>
Group Sizes for Analyses

- Population (3 schools) = 2173
- Nominated students = 226
- Nominated Internalizing = 109
- Nominated Externalizing = 117
- Students with 2+ nominations = 71
- Students receiving follow-up measures = 66
Population continued

<table>
<thead>
<tr>
<th>Population</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>African-American</td>
<td>.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>89%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8%</td>
</tr>
<tr>
<td>Native American</td>
<td>1%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>.5%</td>
</tr>
</tbody>
</table>
Measures

- Systematic Screening for Behavior Disorders (SSBD-Walker & Severson, 1990)
- Achenbach system (Achenbach & Rescorla, 2001): Parent, teacher and self-report
- Office Disciplinary Referrals (ODR)
- Cumulative GPA
Procedures

- **SSBD Stage One:** Teachers identified and ranked top five students with externalizing and internalizing behaviors.

- Students compared to School-wide averages on ODR and Cumulative GPA.

- **SSBD Stage Two:** Completed for highest ranked students. Teachers completed TRF (Achenbach), and SSRS.

- Parents and students completed CBCL and YSR (Achenbach), and SSRS.
## Rank Ordering on Externalizing Dimension

**Externalizing** refers to all behavior problems that are directed outwardly, by the child, toward the external social environment. Externalizing behavior problems usually involve behavioral excesses, (i.e., too much behavior) and are considered inappropriate by teachers and other school personnel. **Non-examples** of externalizing behavior problems would include all forms of adaptive child behavior that are considered appropriate to the school setting.

**Examples include:**
- displaying aggression toward objects or persons,
- arguing,
- forcing the submission of others,
- defying the teacher,
- being out of seat,
- not complying with teacher instructions or directives,
- having tantrums,
- being hyperactive,
- disturbing others,
- stealing,
- not following teacher or school imposed rules.

**Non-Examples include:**
- cooperating, sharing,
- working on assigned tasks,
- making assistance needs known in an appropriate manner,
- listening to the teacher,
- interacting in an appropriate manner with peers,
- following directions,
- attending to task, and
- complying with teacher requests.

<table>
<thead>
<tr>
<th>COLUMN ONE</th>
<th>Column Two</th>
<th>Rank Order Externalizers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List Externalizers</strong></td>
<td><strong>Student Name</strong></td>
<td><strong>Externalizing</strong></td>
</tr>
<tr>
<td>Student Name</td>
<td></td>
<td>Most</td>
</tr>
<tr>
<td>Eric</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Robert</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Johnny</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Travis</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Julie</td>
<td></td>
<td>5</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Most Externalizing Behavior</th>
<th>Least Externalizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most</td>
<td>Least</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank Order Externalizers</th>
<th>Student Name</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eric</td>
<td>Most</td>
</tr>
<tr>
<td>2</td>
<td>Travis</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Johnny</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Julie</td>
<td>4</td>
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<td>5</td>
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<tr>
<td>10</td>
<td></td>
<td>10</td>
</tr>
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</table>

**Instructions:**
1. Review the definition of externalizing behavior and then review a list of all students in your class.
2. In Column One, enter the names of the ten students who characteristic behavior patterns most closely match the externalizing behavioral definition.
3. In Column Two, rank order the students listed in Column One according to the degree or extent to which each exhibits externalizing behavior to the greatest degree is ranked first and so on until all 10 students are rank ordered.

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SSBD
Stage Two

SYSTEMATIC SCREENING FOR BEHAVIOR DISORDERS (SSBD)

SSBD Stage Two Rating for Externalizing Students

Critical Events Index

Date __________ Teacher __________ School __________
Student __________ Teacher __________ Sex __________ Grade __________

Check one: Stage One SSBD Rank: □ 1 □ 2 or □ 3

INSTRUCTIONS: Check each behavior from the list below that you are aware the student has exhibited during this school year.

1. Steals.
2. Sets fires.
3. Vomits after eating.
4. Has tantrums.
5. Physically assaults an adult.
6. Exhibits painful shyness.
7. Exhibits large weight loss or gain over past three months. (Significant weight fluctuation would be in excess of 20% change in body weight.)
8. Exhibits sad affect, depression and feelings of worthlessness to such an extent as to interfere with normal peer and classroom activities.
9. Is physically aggressive with other students or adults (hits, bites, chokes, or throws things).
10. Damages others’ property (academic materials, damages personal possessions).
11. Demonstrates obsessive-compulsive behaviors. (Student can’t get his/her mind off certain thoughts or obsessions.)
12. Reports having nightmares or significant sleep disturbances.

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Analyses

- SSBD Stage One
  - Concurrent validity assessed using ODR and GPA

- SSBD Stage Two
  - Internal consistency and inter-rater (teacher) reliability assessed.
  - Convergent and discriminant validity
    - Assessed using TRF (Achenbach), SSRS, ODR and GPA
    - Assessed using CBCL, YSR (Achenbach) and SSRS.
SSBD Stage One
ODR – Disorderly Conduct

Mean Disorderly Conduct ODR
(N = 2174)

- $p < .001$
- $p = .05$
- 90% 5% 5%

School average = 0, Internalizing = 1, Externalizing = 2
SSBD Stage One
GPA

Mean GPA

School average = 0, Internalizing = 1, Externalizing = 2
### SSBD Stage Two Internal Consistency

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach’s Alpha</th>
<th>N Students</th>
<th>N Items</th>
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<tbody>
<tr>
<td>Critical Events Externalizing Subscale</td>
<td>.73</td>
<td>226</td>
<td>13</td>
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<tr>
<td>(Items 1, 2, 4, 9, 10, 13, 14, 15, 16, 20, 21, 25, 26)</td>
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<td></td>
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<tr>
<td>Critical Events Internalizing Subscale</td>
<td>.54</td>
<td>226</td>
<td>5</td>
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<tr>
<td>(Items 6, 8, 12, 27, 28)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maladaptive</td>
<td>.90</td>
<td>217</td>
<td>11</td>
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<tr>
<td>Adaptive</td>
<td>.88</td>
<td>213</td>
<td>12</td>
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</table>
SSBD Stage Two
Inter-Rater (Teacher) Reliability

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Average ICC</th>
<th>N Students</th>
<th>N Raters (per student)</th>
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<tbody>
<tr>
<td>Critical Events Externalizing Subscale (Items 1, 2, 4, 9, 10, 13, 14, 15, 16, 20, 21, 25, 26)</td>
<td>.73</td>
<td>71</td>
<td>2</td>
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<tr>
<td>Critical Events Internalizing Subscale (Items 6, 8, 12, 27, 28)</td>
<td>.73</td>
<td>71</td>
<td>2</td>
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<tr>
<td>Maladaptive</td>
<td>.76</td>
<td>65</td>
<td>2</td>
</tr>
<tr>
<td>Adaptive</td>
<td>.64</td>
<td>64</td>
<td>2</td>
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</table>
### SSBD Stage Two

**Teacher Correlations**

<table>
<thead>
<tr>
<th></th>
<th>TRF Int.</th>
<th>TRF Ext.</th>
<th>SSRS Int.</th>
<th>SSRS Ext.</th>
<th>GPA</th>
<th>ODR Dis.</th>
<th>ODR Att.</th>
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<tbody>
<tr>
<td>CE Internalizing</td>
<td>.38**</td>
<td>-.11</td>
<td>.44**</td>
<td>-.17</td>
<td>.17</td>
<td>-.36**</td>
<td>.05</td>
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<tr>
<td>CE Externalizing</td>
<td>.10</td>
<td>.41**</td>
<td>-.07</td>
<td>.43**</td>
<td>-.30*</td>
<td>.31*</td>
<td>-.11</td>
</tr>
<tr>
<td>Adaptive</td>
<td>-.28*</td>
<td>-.37**</td>
<td>-.16</td>
<td>-.33*</td>
<td>.39**</td>
<td>-.38**</td>
<td>-.12</td>
</tr>
<tr>
<td>Maladaptive</td>
<td>.03</td>
<td>.21</td>
<td>-.12</td>
<td>.25</td>
<td>-.20</td>
<td>.28*</td>
<td>-.10</td>
</tr>
</tbody>
</table>

* *p < .05, **p < .01, N(TRF, SSRS) = 59, N(GPA, ODR) = 66*
### SSBD Stage Two

Parent & Student Correlations

<table>
<thead>
<tr>
<th></th>
<th>CBCL Int.</th>
<th>CBCL Ext.</th>
<th>YSR Int.</th>
<th>YSR Ext.</th>
<th>SSRS Int.</th>
<th>SSRS Ext.</th>
<th>SSRS SS.</th>
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<tbody>
<tr>
<td>CE Internalizing</td>
<td>.35*</td>
<td>.06</td>
<td>.29*</td>
<td>-.10</td>
<td>.50**</td>
<td>-.12</td>
<td>.06</td>
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<tr>
<td>CE Externalizing</td>
<td>-.06</td>
<td>.21</td>
<td>.13</td>
<td>.32**</td>
<td>.01</td>
<td>.26</td>
<td>-.09</td>
</tr>
<tr>
<td>Adaptive</td>
<td>-.03</td>
<td>-.25</td>
<td>-.17</td>
<td>-.30*</td>
<td>-.08</td>
<td>-.24</td>
<td>.21</td>
</tr>
<tr>
<td>Maladaptive</td>
<td>-.01</td>
<td>.22</td>
<td>.03</td>
<td>.26*</td>
<td>-.03</td>
<td>.28</td>
<td>-.12</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, N(CBCL) = 41, N(SSRS) = 40, N(YSR, SSRS SS) = 64*
Summary of Data

- SSBD Stage One
  - Identified students differed from Non-identified students on ODR and GPA

- SSBD Stage Two
  - Reliability estimates were adequate
  - Significant correlations were found with other measures, including parent and student ratings.
Implications

- Even with limited contact with students, secondary teachers were able to provide verifiable information regarding problem behaviors using the SSBD. This was also true for internalizing behaviors which are typically harder to identify.

- More support for the validity of using the SSBD in secondary schools.
Limitations

- For Stage Two, the sample of students was relatively small.
- Sample lacked geographic diversity.
- Relatively low number of minority students.
- Did not include high school students.
- No item analysis was conducted.
BYU – Positive Behavior Support Initiative
http://education.byu.edu/pbsi/

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