Validation of the SSBD In Secondary Schools: Student And Parent Correlates

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Why Screen for Behavior Problems?

Screening allows for prevention and early intervention efforts, which reduce the need for more intensive services.

One of the most difficult challenges teachers and administrators face is behavior and emotional problems in students.
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).
Early Screening Options

- Student self-report
- Parent report
- Teacher report for all students.
- Teacher report for a subset of nominated students
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
Teacher Nomination at the Secondary Level?

• Successful teacher nominations at the elementary level (see e.g., SSBD-Walker & Severson, 1992).

• Secondary Schools are very different context.

1 Teacher/Classroom vs. Multiple Teachers & Classroom.
25 Students per Teacher vs. 150 Students per Teacher.
Previous Findings
(Screening in Secondary Schools)

• 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).

• Systematic Screening at the Middle School Level: Score Reliability and Validity of the Student Risk Screening Scale (Lane, Parks, Kalberg, and Carter, 2007)
Previous Findings

( Parent & Student vs. Teacher Ratings )

- Modest correlations between teacher, parent, and student ratings have been reported for other at-risk measures (Achenbach, McConaughy, & Howell, 1987).
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?
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>
# Population

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</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>
Ns for analyses

• Population (3 schools) = 2173
• Nominated students = 226
  – Internalizing = 109
  – Externalizing = 117
• Student Invited to Participate = 123
• Students receiving follow-up measures = 66
Measures

- Systematic Screening for Behavior Disorders (SSBD-Walker & Severson, 1992)
- Achenbach system (Achenbach & Rescorla, 2001): Parent, Teacher and Self-report
- Office Disciplinary Referrals (ODR)
- 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 adoptive 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 hypervigilant,
- disturbing others,
- stealing, and
- 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.

### COLUMN ONE
List Externalizers

<table>
<thead>
<tr>
<th>Student Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eric</td>
</tr>
<tr>
<td>Robert</td>
</tr>
<tr>
<td>Johnny</td>
</tr>
<tr>
<td>Travis</td>
</tr>
<tr>
<td>Julie</td>
</tr>
</tbody>
</table>

### COLUMN TWO
Rank Order Externalizers

<table>
<thead>
<tr>
<th>Student Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Eric</td>
</tr>
<tr>
<td>2. Travis</td>
</tr>
<tr>
<td>3. Johnny</td>
</tr>
<tr>
<td>4. Julie</td>
</tr>
</tbody>
</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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## Critical Events Index

<table>
<thead>
<tr>
<th>Date</th>
<th>Teacher</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student**: Eric  
**Sex**: M  
**Grade**: 2nd

Check one: Stage One SSBD Rank:  
- [ ] 1  
- [ ] 2  
- [ ] 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
(ANOVA)
SSBD Stage One
(ANOVA)

Mean Attendance ODR (N = 2174)

- School Avg.
- Internalizing
- Externalizing

- $p < .01$
- $p < .05$
- $ns$
SSBD Stage One
(ANOVA)

Mean GPA ($N = 2174$)

- School Avg.: $p < .001$
- Internalizing: $p < .001$
- Externalizing: ns
## Internal Consistency
### SSBD Stage Two

<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>
<td></td>
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<tr>
<td>Critical Events Internalizing Subscale</td>
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<td>226</td>
<td>5</td>
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<td>(Items 6, 8, 12, 27, 28)</td>
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<tr>
<td>Maladaptive</td>
<td>.90</td>
<td>217</td>
<td>11</td>
</tr>
<tr>
<td>Adaptive</td>
<td>.88</td>
<td>213</td>
<td>12</td>
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</tbody>
</table>
### Cross-Informant Correlations (Between Teachers)

**SSBD Stage Two**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pearson’s r</th>
<th>N Students</th>
<th>N Raters (per student)</th>
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</thead>
<tbody>
<tr>
<td>Critical Events Externalizing Subscale</td>
<td>.60**</td>
<td>71</td>
<td>2</td>
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<td></td>
</tr>
<tr>
<td>Critical Events Internalizing Subscale</td>
<td>.57**</td>
<td>71</td>
<td>2</td>
</tr>
<tr>
<td>(Items 6, 8, 12, 27, 28)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maladaptive</td>
<td>.61**</td>
<td>65</td>
<td>2</td>
</tr>
<tr>
<td>Adaptive</td>
<td>.48**</td>
<td>64</td>
<td>2</td>
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</table>

**p < .01**
## Teacher Correlations

SSBD Stage Two

<table>
<thead>
<tr>
<th>SSBD Stage Two</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>
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<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>
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</tbody>
</table>

\*p < .05, \**p < .01, N(TRF, SSRS) = 59, N(GPA, ODR) = 66
Parent & Student Correlations
SSBD Stage Two

<table>
<thead>
<tr>
<th>SSBD Stage Two</th>
<th>Parent Forms</th>
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<tbody>
<tr>
<td></td>
<td>SSRS Int.</td>
<td>SSRS Ext.</td>
<td>CBCL Int.</td>
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<tr>
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<td>.50**</td>
<td>-.12</td>
<td>.35*</td>
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<tr>
<td>CE Externalizing</td>
<td>.01</td>
<td>.26</td>
<td>-.06</td>
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<tr>
<td>Adaptive</td>
<td>-.08</td>
<td>-.24</td>
<td>-.03</td>
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<tr>
<td>Maladaptive</td>
<td>-.03</td>
<td>.28</td>
<td>-.01</td>
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<table>
<thead>
<tr>
<th></th>
<th>Student Forms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td>YSR Ext.</td>
</tr>
<tr>
<td>CE Internalizing</td>
<td>.29*</td>
<td>-.10</td>
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<tr>
<td>CE Externalizing</td>
<td>.13</td>
<td>.32**</td>
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<tr>
<td>Adaptive</td>
<td>-.17</td>
<td>-.30*</td>
</tr>
<tr>
<td>Maladaptive</td>
<td>.03</td>
<td>.26*</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 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
References


