School-Based Behavior Assessment: Considerations with Selecting Tools in RTI

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Purpose

- Review strengths and limitations of different school-based behavior methods within a multi-tiered model of assessment
Why should we care about social behavior outcomes?

Educators indicate spending a disproportionate amount of time responding to significant behavior challenges presented by a small number of students (U.S. Dept. of Ed., 2000)

1 in 5 children has mental health needs yet the majority will not receive needed services (Hoagwood & Erwin, 1997; U.S. Surgeon General, 1999)

School discipline is a top concern by the American public (Rose & Gallup, 2005)
How do we design systems to support behavior success?

Response to Intervention (RTI)

- An assessment and intervention process for systematically monitoring student progress and making data-based decisions about the need for instructional modifications or increasingly intensified services (see www.rti4success.org).
Original logic: Public health & disease prevention (Larson, 1994)

**Tertiary (FEW)**
Reduce complications, intensity, severity of current cases

**Secondary (SOME)**
Reduce *current* cases of problem behavior

**Primary (ALL)**
Reduce *new* cases of problem behavior
Examples of Positive OUTCOMES across Tiers within Domains of Social Behavior

- IEP or other student-specific behavior goal related to acquisition of appropriate social skills
- Student-specific behavior goal related to decrease in problem behavior
- Decreases in number of students referred for an evaluation for behavior related disorders
Great... So why can’t we just implement good practices?

... but then, how will you know what you are doing is working?

- To make effective decisions about which practices are needed and then to evaluate the outcomes of those practices, you need **DATA**!
REVIEW: How can data be used?

Purposes of Assessment
- Screening
- Progress Monitoring
- Diagnosis
- Evaluation

Emphasized by the National Center on Response to Intervention
Examples of school-based DATA sources for social behavior

ALL BELOW plus functional assessment data

ALL BELOW plus…
- Norm-referenced comparison data
- More detailed profiles of students’ strengths/weaknesses
- Formative data sources sensitive to incremental change

EFFICIENT, EXTANT SOURCES such as…
- Total number of office discipline referrals
- Number of students who are suspended or expelled
- Number students referred or found eligible for special education, particularly in the area of emotional disturbance
Sources of School-Based Data on Social Behavior

- Extant data
- Standardized behavior rating scales
- Systematic direct observation
- Direct Behavior Rating

Currently dominate in clinic and research
**Extant Data**

- **Definition:** data sources that already exist within the setting

- **Examples:**
  - Office discipline referrals (ODRs)
  - Attendance and tardy records
  - Suspension/expulsion data
  - Special education data (e.g. referrals for emotional disturbance)
  - Data from existing behavior management plans (e.g. token economy)
FRMS Total Office Discipline Referrals

Sustained Impact

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Total ODRs</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-95</td>
<td>3000</td>
</tr>
<tr>
<td>95-96</td>
<td>1500</td>
</tr>
<tr>
<td>96-97</td>
<td>1000</td>
</tr>
<tr>
<td>97-98</td>
<td>750</td>
</tr>
<tr>
<td>98-99</td>
<td>500</td>
</tr>
<tr>
<td>99-00</td>
<td>250</td>
</tr>
<tr>
<td>00-01</td>
<td>150</td>
</tr>
<tr>
<td>01-02</td>
<td>100</td>
</tr>
<tr>
<td>02-03</td>
<td>75</td>
</tr>
<tr>
<td>03-04</td>
<td>50</td>
</tr>
<tr>
<td>04-05</td>
<td>25</td>
</tr>
<tr>
<td>05-06</td>
<td>15</td>
</tr>
</tbody>
</table>

Pre

Post
Benefits & Limitations of Extant Data

- Complements other sources in providing contextually relevant information
- Source of progress monitoring information
- Less resource-intensive (data readily available!)

- Limited application within prevention
- Tough to establish and maintain consistent/accurate use.
- Unknown psychometric adequacy
- Challenging to create a system for efficient organization and interpretation
Extant data – summary:

- **Screening** – yes, but may be limited in prevention/early intervention roles
- **Progress monitoring** – yes, but creating usable system for interpretation/presentation can be challenging
- **Diagnosis** – maybe, with regard to adding contextual relevance
- **Evaluation** – yes, relevance within the specific setting but limited with regard to norm comparisons
**Definition:**
Tools that require an individual to rate the behavior of another based on past observation of that person’s behaviors (Kratochwill, Sheridan, Carlson, & Lasecki, 1999).

**Examples:**
- Behavior Assessment System for Children – 2 (BASC-2)
- Achenbach System of Empirically-Based Assessment (e.g. CBCL)
- Conner’s Rating Scales – 3
- Social Skills Rating System (SSRS)
Example BASC-2 Score Profile
Typical Characteristics of Scales

- Ratings follow actual behavior occurrence, and typically involve estimation of behavior over an extended period (e.g., 1 month).
- Scale comprised of a series of items that cluster together under one or more scales.
- Standardized, norm-referenced behavior ratings scales provide a picture of student behavior in comparison to a standard.
  - Comparison across individuals can be useful to understand student behavior in relation to what is typically expected.
  - Comparison within an individual but may be not be as useful.
Benefits & Limitations of Behavior Rating Scales

- May be most helpful in diagnostic assessment.
- Provide a common understanding of the specific behaviors that are indicative of a given cluster term.
- May also be suited for use in screening and evaluative assessment practices.
- May not be sensitive to incremental change.
- May be feasible only for occasional use given time/cost.
- Many clinically-focused (i.e., focus on problem rather than pro-social behavior).
- Do not directly assess behavior –rater bias may be present.
Behavior rating scales – summary:

- *Screening* – yes, but perhaps not in universal assessment
- *Progress monitoring* – not likely
- *Diagnosis* – yes, most common use within clinical settings
- *Evaluation* – maybe, if the period of time is sufficient and constructs measured are relevant
Systematic Direct Observation

- **Definition:**
  data collected by an observer watching an environment/person for some period of time

- **Examples:**
  - Percentage of intervals observed to be actively engaged
  - Frequency of positive peer initiations throughout the day
  - Recording how long it takes to transition in the hallway (duration)
Dawn’s Percentage of Off-Task Behavior in History Class

- Baseline
- Function-Based SM
- Not function-Based SM
- Function-Based SM
- Not function-Based SM
- Function-Based SM

Percentage of Off-Task Behavior

Day
Benefits & Limitations of SDO

- Highly flexible
- Useful in progress monitoring
- Directness
- Standardized procedures
- Minimal cost for materials

- Potential reactivity
- Observer error/drift
- Limited feasibility re: training and intrusiveness
- Difficult to monitor low frequency behaviors
- Generalizability
Systematic Direct Observation – summary:

- Screening – not likely in universal assessment
- Progress monitoring – yes!
- Diagnosis – maybe, particularly if within FBA
- Evaluation – not likely
Direct Behavior Rating

- **Definition:**
  A tool that involves a brief rating of a target behavior following a specified observation period (e.g. class activity)

- **Examples:**
  - Behavior Report Card
  - Home-School Note
  - Daily Progress Report
  - Good Behavior Note
  - Check-In Check-Out Card
Example: DBR-like Tool

Behavior Report Card

| Student: ____________________ | Date: ____________________ |
| Teacher: ____________________ | Classroom: ________________ |

Directions: Review each of the Behavior Report Card items below. For each item, rate the degree to which the student showed the behavior or met the behavior goal.

The student focused his or her attention on teacher instructions, classroom lessons and assigned work.

Circle the degree to which the student met the behavioral goal:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/Seldom</td>
<td>Sometimes</td>
<td>Usually/Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The student sat in class without fidgeting or squirming more than most peers.

Circle the degree to which the student met the behavioral goal:

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

The student remembered academic instructions and directions without needing extra reminders.

Circle the degree to which the student met the behavioral goal:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example: DBR-like Tool

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student __________________________________________</td>
<td>☺</td>
<td>☺</td>
<td>😞</td>
<td></td>
</tr>
<tr>
<td>Student ________________________ __________________</td>
<td>☺</td>
<td>☺</td>
<td>😞</td>
<td></td>
</tr>
<tr>
<td>Student __________________________________________</td>
<td>☺</td>
<td>☺</td>
<td>😞</td>
<td></td>
</tr>
<tr>
<td>Student __________________________________________</td>
<td>☺</td>
<td>☺</td>
<td>😞</td>
<td></td>
</tr>
<tr>
<td>Student __________________________________________</td>
<td>☺</td>
<td>☺</td>
<td>😞</td>
<td></td>
</tr>
</tbody>
</table>
### DBR Form

<table>
<thead>
<tr>
<th>Date</th>
<th>Student</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M T W Th F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation Time</th>
<th>Behavior Descriptions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start:__________</td>
<td>Academically engaged is actively or passively participating in the classroom activity. For example, writing, raising his/her hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.</td>
</tr>
<tr>
<td>End:__________</td>
<td>Disruptive Behavior is student action that interrupts regular school or classroom activity. For example: out of his/her seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.</td>
</tr>
</tbody>
</table>

**Check if no observation today**

(If desired) Optional Behavior is

**Directions:** Place a slash (/) along the line that best reflects (a) % of total time student was academically engaged and (b) % of total time or total # of times student exhibited disruptive behavior during the observation period. If desired, an additional behavior may be included by providing a definition above and then rating on the “optional behavior” line.

#### Academically Engaged

<table>
<thead>
<tr>
<th>% of Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>0% Never</td>
</tr>
</tbody>
</table>

#### Disruptive Behavior

<table>
<thead>
<tr>
<th>% of Total Time or # of Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>0% Never</td>
</tr>
</tbody>
</table>

#### Optional Behavior

<table>
<thead>
<tr>
<th>% of Total Time or # of Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>0% Never</td>
</tr>
</tbody>
</table>

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**Download:**

[www.directbehaviorratings.com](http://www.directbehaviorratings.com)
## What kinds of behaviors should be rated?

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Engagement</strong></td>
<td>Actively or passively participating in the classroom activity.</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>To initiate/complete a response to an adult request in a timely and socially acceptable manner.</td>
</tr>
<tr>
<td><strong>Disruptive Behavior</strong></td>
<td>A student action that interrupts regular school or classroom activity.</td>
</tr>
</tbody>
</table>
How do I use the DBR form?

1) Complete top portion of the form
   ✓ Student’s name, Date, Rating period(s)
   ✓ Review behavior definitions and rating directions

2) Have the form ready for completion following each pre-identified activity period
   ✓ e.g., Reading block, independent seat work

3) Immediately following the activity period, complete the ratings
   ✓ Do not complete the rating if you aren’t confident you directly observed the student for a sufficient amount of time
When rating, remember...

- Ratings should correspond to the proportion of time that you actually observed the student display the target behavior.
  - Complete immediately following the activity period.
  - Do not complete if you did not observe for a sufficient amount of time.

- When rating, each behavior should be considered independently of the other targets. That is, total ratings across behaviors do not have to equal 100%.
  - For example, a student may be engaged 50% of the time, and disruptive 20%. A student may also be engaged for 100% of the time, and disruptive for 10%.
Example DBR Data Profile

DBR Afternoon (11/13 to 1/8)
DBR Research Directions

Past:
• Establish recommended instrumentation and procedures

Present:
• Establish “training”
• Build web-based application
• Continue technical adequacy

Future:
• Investigate application in screening
• Examine utility in schools and beyond...
• Return to the assessment-intervention link
Benefits & Limitations of DBR

- Highly flexible
- Useful in progress monitoring
- Directness
- Potential for standardized procedures
- Minimal cost for materials

- Generalizability
- Rater bias is likely present
- Training requirements unknown
- Limited psychometric knowledge beyond DBR-SIS
Direct Behavior Rating – summary:

- Screening - maybe
- Progress monitoring - yes
- Diagnosis – maybe, particularly if within FBA
- Evaluation – not likely
REVIEW: Methods of Social Behavior Assessment

- Extant data
- Standardized behavior rating scales
- Systematic direct observation
- Direct Behavior Rating

WHICH TO USE? Consider…

Psychometric adequacy
Usability
Contextual relevance
Why do I need data?

At what level should the problem be solved? (Primary, Secondary, Tertiary)

What is the purpose of assessment? (Screening, Progress Monitoring, Evaluation, Diagnosis)

Which data do I need?

Which tools are best matched to assess the behavior of interest? *Contextual relevance*

What decisions will be made using these data? *Psychometric Adequacy*

What resources are available to collect data? *Usability*

Which tools can answer these questions?

Adapted from Chafouleas, Riley-Tillman, & Sugai, 2007
SUMMARY: Behavior Assessment Methods within RTI

ALL BELOW, with emphasis on functional assessment data

EXTANT DATA
BEHAVIOR RATING SCALES
SYSTEMATIC DIRECT OBSERVATION
DIRECT BEHAVIOR RATING

EXTANT DATA
BEHAVIOR RATING SCALES developed for universal screening
DIRECT BEHAVIOR RATING
Conclusion: Assessment Challenges in Domains of Social Behavior

- How do we develop school “buy-in” and capacity regarding roles in prevention related to social behavior and mental health?
  - How do we facilitate capacity for schools to include universal screening?

- How can schools integrate a common logic and language within the domains of social behavior?

- How do we forge new directions in the development and evaluate of assessments that are technically adequate, contextually relevant, and usable in schools?
Further information:

Note. This presentation can be downloaded from www.directbehaviorratings.com