Definition, Procedures, & Applications in School-Based Behavior Assessment

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Presentation at APBS



Purpose

◆ Define Direct Behavior Rating (DBR) through review of strengths and limitations of different schoolbased behavior methods within a multi-tiered model of assessment



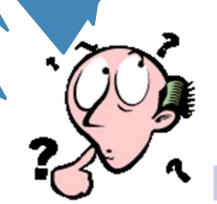
Why should we care about **social behavior** outcomes?

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

School discipline is a top concern by the American public (Rose & Gallup, 2005)

J.S. Surgeon eral, 1999)

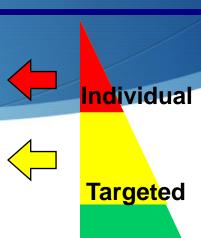




Examples of Positive **OUTCOMES** across Tiers within Domains of Social Behavior

- IEP or other student-specific behavior goal related to acquisition of appropriate social skills
- Student-specific behavior goal related to decrease in problem behavior behavior of student body
- **Decreases** in number of students referred for an evaluation for behavior related disorders







Great... So why can't we just implement good practices?

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 on Social Behavior

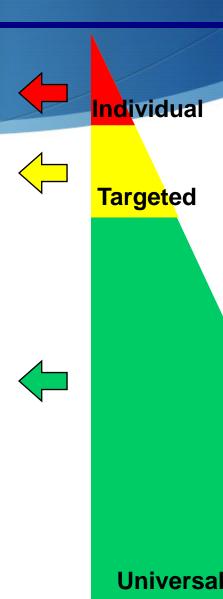
ALL BELOW plus functional assessment data

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



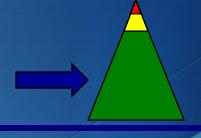
Sources of School-Based Data on Social Behavior

- **♦** Extant data
- Standardized behavior rating scales
- ♦ Systematic direct observation

Currently dominate in clinic and research



Extant Data

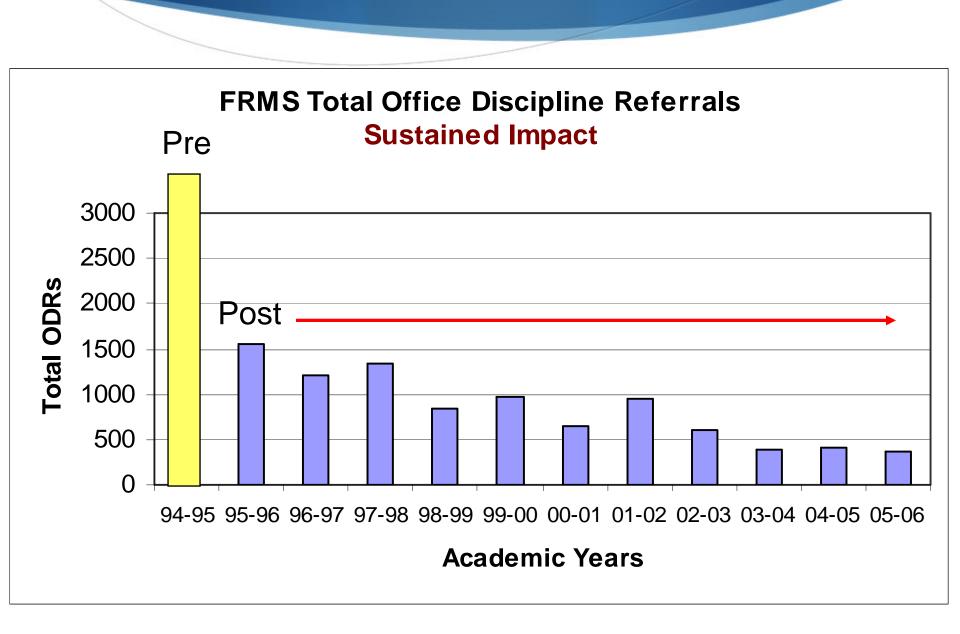


▶ Definition:

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 econom



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

Behavior Rating Scales

♦ 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:

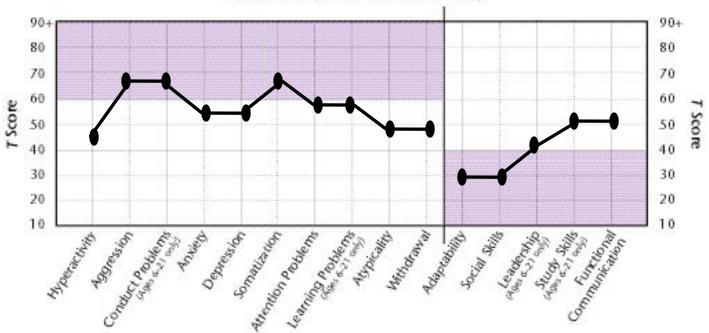
- ▶ Behavior Assessment System for Children 2 (BASC-2)
- ♦ Achenbach System of Emprically-Based Assessment (e.g. CBCL)
- ♦ Conner's Rating Scales 3
- Social Skills Rating System (SSRS)



Example BASC-2 Score Profile

Summary Chart of TRS Scale Scores

Possible Problem Areas (Shaded Areas)



Scales

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 rating 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 may 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.
- Many are clinicallyfocused (i.e., focus on problem rather than prosocial 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
- ♦ Evaluation maybe, if the period of time is sufficient and constructs measured are relevant



Systematic Direct Observation

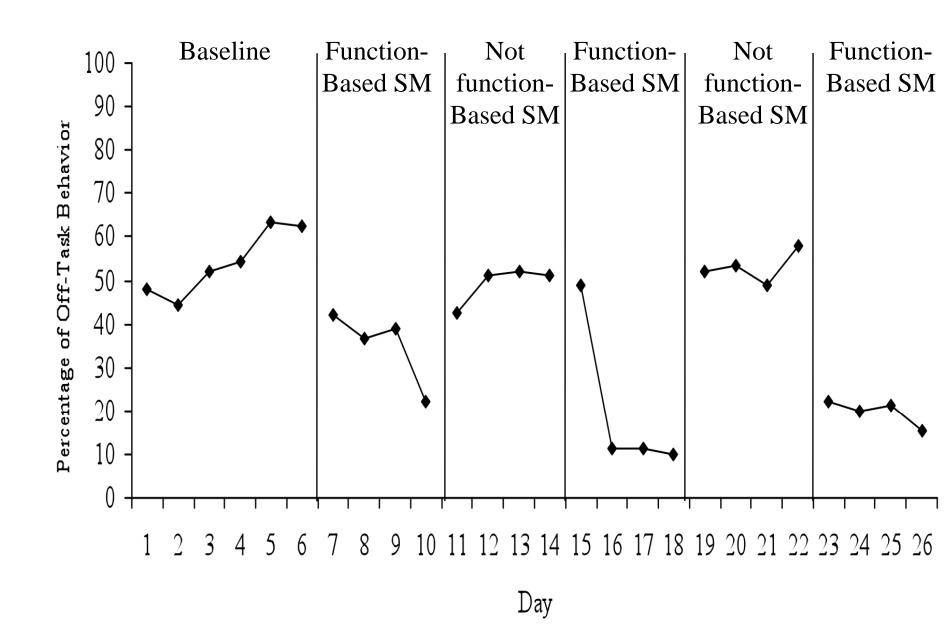
Definition:

Data collected by an observer watching an environment/person for some period of time

♦ Examples:

- Percentage of intervals observed to be off-task
- 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



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!
- **♦** *Evaluation* − not likely



• Definition:

A tool that involves a <u>brief rating</u> of a target behavior following a specified observation period (e.g. class activity)

Systematic Direct Observation

Behavior Rating Scales

Direct Behavior

Rating

(defensible, flexible, efficient, repeatable)

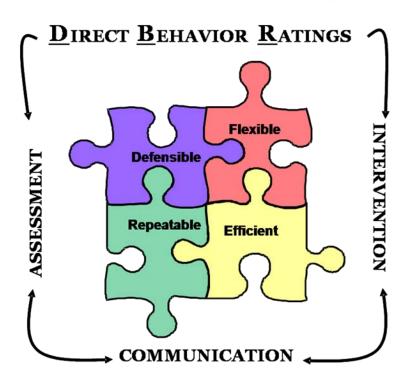


Other Names for the DBR

(Riley-Tillman, Chafouleas, & Briesch, 2007)

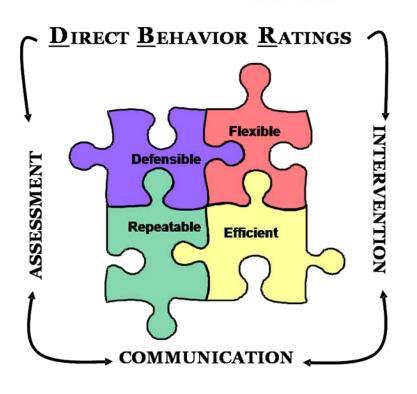
- Daily Behavior Report Card (DBRC)
- ♦ Home-School Note
- Behavior Report Card
- Daily Progress Report
- ♦ Good Behavior Note
- Check-In Check-Out Card
- Performance-based behavioral recording
- Also
 - Self Management/Monitoring Card
 - Point Card
 - Teacher Rating Form





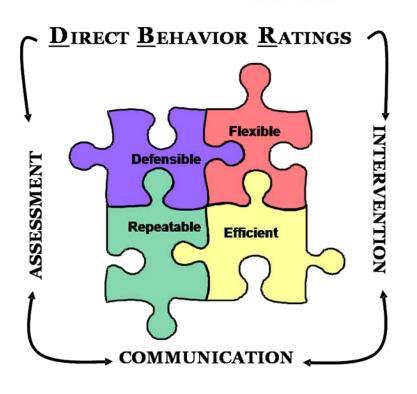
Direct

- Establishes that the observation and rating occur at the time and place that behavior occurs.
- **♦** This minimizes
 - inference &
 - retrospective judgments



Behavior

- The target of assessment must be accessible for observation and evaluation by the intended rater.
- ◆ The preference is to observe behavior within the naturalistic setting.
- ♦ Contents/modalities for behavioral assessment are motor, physiological, and cognitive (Cone, 1978).



Rating

- Quantify a person's perception or attitude toward something.
- ◆ DBR can be compared to any of a variety of other problem solving and behavioral assessments
 - SDO
 - Interviews
 - Behavioral rating scales

Example: DBR-like Tool



On-Line Behavior Report Card Generator A service of www.interventioncentral.org

Delegation Demand Occur

	В	enavior Re	port Card		
	Student:	D	ate:		
	Teacher:	c	lassroom:		
	eview each of the Behavior F lavior or met the behavior go		w. For each item, rate th	ne degree to which the student	
The student fo	cused his or her attention	on teacher instruction	ns, classroom lesson	s and assigned work.	
	he degree to which the student met23 4		89 Usually/Always		
The student sa	t in class without fidgeting	g or squirming more t	han most peers.		
Circle ti 1 Never/S	he degree to which the student met23 4 Seldom So	the behavioral goal: 56 7 ometimes	89 Usually/Always		
The student re	membered academic instr	uctions and direction	s without needing ext	ra reminders.	
1	he degree to which the student met23 4 Seldom	56	89 Usually/Always		

Example: DBR-like Tool

						Monday	Tuesday	Wednesday	Thursday	Friday
Student	<u></u>	(specify behavior here)	⊗	_	,					
Student		(specify behavior here)								
	<u></u>		8							
Student										
		(specify behavior here)								
	\odot	:	8							
Student										
		(specify behavior here)								
	<u></u>	<u>:</u>	8							
i										

Example: Standard Form for Single-item DBR scales

DBR Form

Date:	Student:	Activity Description:			
M T W Th F	Rater:				
Observation Time:	Behavior Descriptions:				
Start:	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.				
☐ Check if no observation today	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. (If desired) Optional Behavior is				

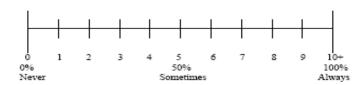
Directions: Place a slash (/) along the line that best reflects (a) % of total time student was academically engaged and (b) % of total time or total # of times student exhibited disruptive behavior during the observation period. If desired, an additional behavior may be included by providing a definition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

Academically Engaged



Disruptive Behavior

Circle Type of Rating: % of Total Time or # of Times



Optional Behavior

Circle Type of Rating: % of Total Time or # of Times

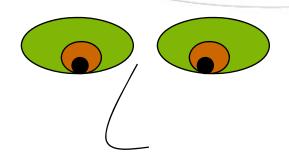


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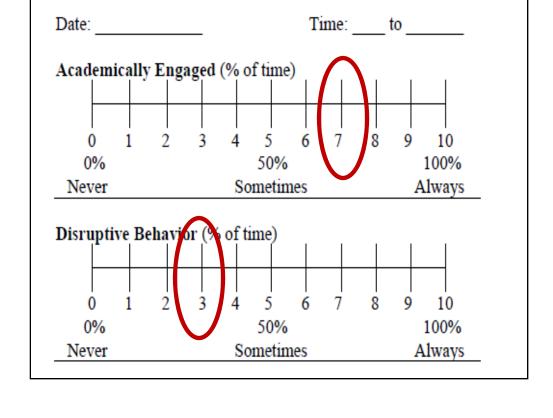
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DBR Key Features



Observe then Record



How do I create a DBR form?

- 1) Define the target behavior.
- 2) Select the type of rating scale and rating frequency.
 - ✓ e.g., % of total time target behavior is observed daily during large group Math instruction
- 3) Design the DBR.
- 4) For intervention purposes, determine if consequence will be used, and if so, define the criteria.
- 5) Generate a list of potential consequences.
- 6) Determine the responsibilities of all parties involved.

How do I use the DBR form?

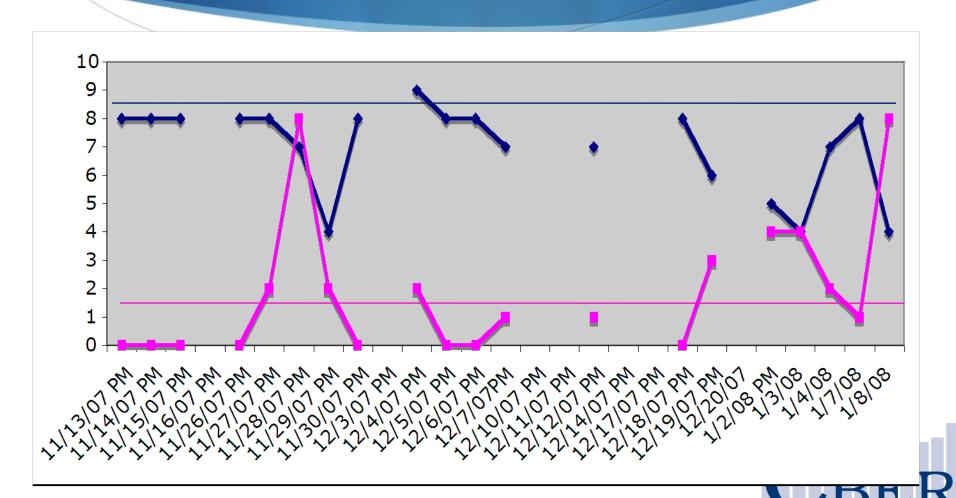
- 1) Complete top portion of the form
 - ✓ Student's name, Date, Rating period(s)
 - Review behavior definitions and rating directions
- 2) Have the form ready for completion following each preidentified activity period
 - ✓ e.g., Reading block, Independent seat work
- 3) Immediately following the activity 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)



Project VIABLE:

Validation of Instruments for Assessing Behavior Longitudinally and Efficiently

Purpose:

To develop and evaluate DBR as a General Outcome Measure (GOM) for Behavior

Sandra M. Chafouleas, Ph.D.

T. Chris Riley-Tillman, Ph.D.

Theodore J. Christ, Ph.D.

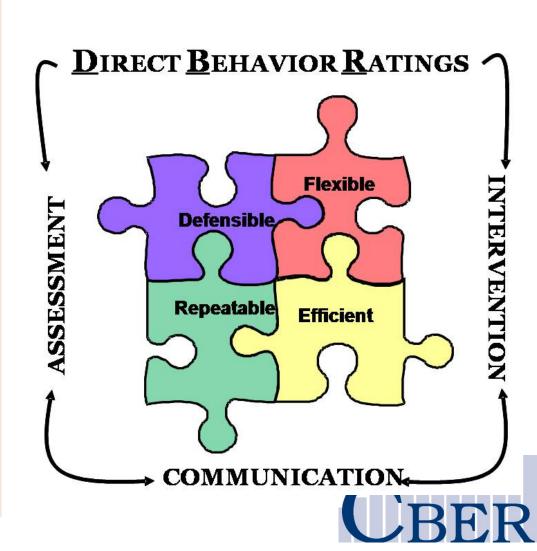


Research was supported in part by a grant from the **Institute for Education Sciences**, U.S. Department of Education (R324B060014).

DBR Research Directions

Past:

Establish recommended instrumentation and procedures



Example: Standard Form for Single-item DBR scales

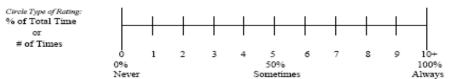
DBR Form

Date:	Student:	Activity Description:
M T W Th F	Rater:	
Observation Time:	Behavior Descriptions:	
Start:	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.	
Check if no observation today	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. (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.

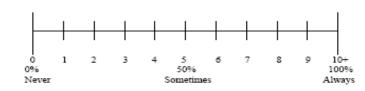
Academically Engaged % of Total Time 0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always

Disruptive Behavior



Optional Behavior

Circle Type of Rating: % of Total Time or # of Times



Download:

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Which "GOM" behaviors are we investigating?

Academic Engagement Actively or passively participating in the classroom activity.

Compliance

To initiate/complete a response to an adult request in a timely and socially acceptable manner.

Disruptive Behavior A student action that interrupts regular school or classroom activity.

DBR Research Directions

Past:

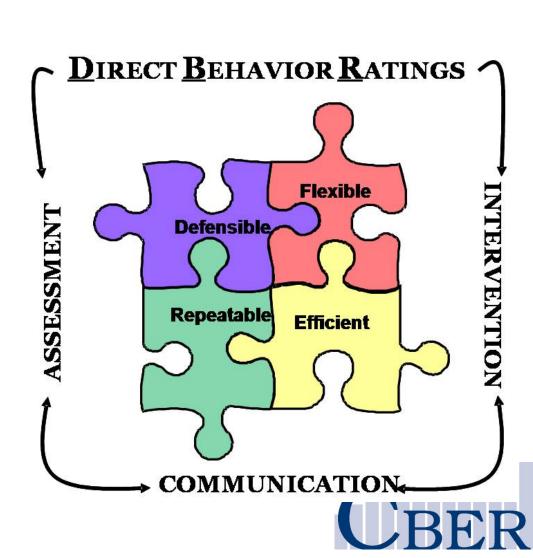
Establish recommended instrumentation and procedures

Present:

- Establish "training"
- Build web-based application
- Continue technical adequacy

Future:

- Investigate application in screening
- Examine utility in schools and beyond...
- Return to the assessmentintervention link



- ♦ What do Daily Behavior Report Cards (DBRCs) measure? An initial comparison of DBRCs with direct observation for off-task behavior
 - ♦ (Chafouleas, McDougal, Riley-Tillman, Panahon, & Hilt, 2005)
 - ◆ <u>Conclusion</u>: a <u>moderate association</u> between teacher perceptions of behavior as measured by DBRC ratings and direct observation conducted by an external observer.

- ♦ An analysis of the similarity of Direct Behavior Ratings and Systematic Direct Observation for off-task and disruptive behaviors
 - ◆ (Riley-Tillman, Chafouleas, Sassu, Chanese, & Glazer, 2008)
 - <u>Conclusion</u>: **replicated moderate association** between teacher perceptions of behavior as measured by DBRC ratings and direct observation conducted by an external observer.

- **♦** The consistency of Daily Behavior Report Cards in monitoring interventions
 - ♦ (Chafouleas, Riley-Tillman, Sassu, LaFrance, & Patwa, **2007**)

- ♠ Acceptability and reported use of Daily Behavior Report Cards among teachers
 - ♦ (Chafouleas, Riley-Tillman, & Sassu, 2006)
 - Conclusion: provide support to previous claims that the DBRC is both a used and accepted tool in practice

Who already uses Daily Behavior Report Cards (DBRC)?

(Chafouleas, Riley-Tillman, & Sassu, 2006)

Teacher Survey about DBRC:

- Purpose
 - 60% use to **change student behavior** (Intervention)
 - 32% use to **monitor** (Assessment)
 - **♦** 32% use "routinely" for **classroom management** (Intervention)
- Types of Behaviors
 - 81% to identify positive behaviors
 - 77% to identify negative behaviors
- For Whom?
 - **♦** 86% use with **individual students**
 - ▶ 19% with whole class
 - 9% with small groups

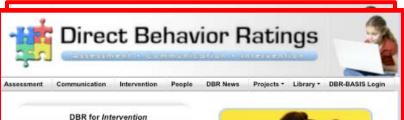


Direct Behavior Ratings

Assessment • Communication • Intervention

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An intervention is a planned set of activities designed to improve desired behavior. A substantial body of research exists to demonstrate the effectiveness of interventions that include DBR as one component.

How can I use a DBR for intervention?

In addition to use in communication and assessment as an important part of providing comprehensive behavior supports, DBR is frequently used as one part of an intervention package, such as in an incentive program or self-management.

- · Incentive programs (point cards) establish behavior contracts and systematic feedback between the child and adult. The frequent feedback provided by DBR, combined with short term goals and incentives, function to promote positive behavior and reduce undesirable behavior
- · Self management components are often used as part of a behavior intervention given the opportunity to teach children skills needed to independently monitor and evaluate behavior. In self-monitoring, children use DBR to rate their own behavior, perhaps at the same time the adults rates the same behavior.

Who can use a DBR for intervention?

DBR should be used by parents, teachers, children, administrators, and intervention teams to facilitate interventions designed to improve behavior. It is likely that many intervention applications will be paired with effective assessment and communication components using DBR.



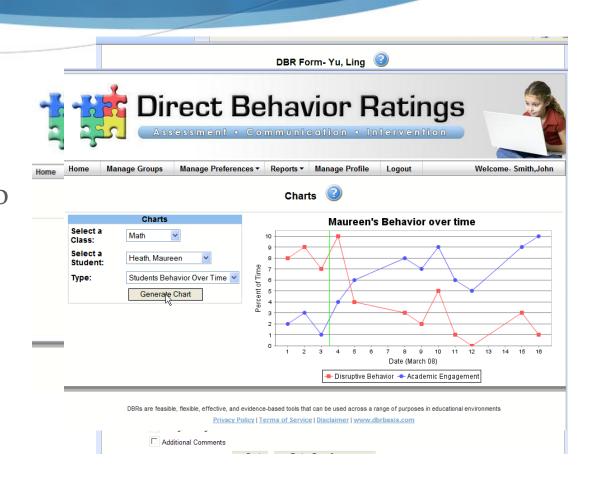
Additional Resources

- . PowerPoint: DBR for Intervention
- DBR Standard Form
- DBR Standard Form Instructions
- DBR Intervention Protocols:
 - O Incentive program
- Self Management
- . Other Besigness

Current - Future Directions

◆ DBR – BASIS

A web-based application will serve to increase utility of the DBR in behavioral assessment given ease of data entry, analysis, and presentation.



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 What is the purpose of problem be solved? assessment? (Primary, Secondary, Tertiary) (Screening, Progress Monitoring, Evaluation, Diagnosis) Which data do I need? Which tools are best What decisions will be What resources are matched to assess the available to collect made using these data? behavior of interest? data? *Psychometric* Contextual relevance *Usability* Adequacy Which tools can answer these questions?

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



Individual



Targeted



Universal

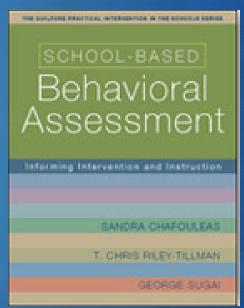
For Additional Information...

Contact:

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Further information:

Chafouleas, S.M., Riley-Tillman, T.C., & Sugai, G. (2007). School-Based Behavioral Assessment: Informing Instruction and Intervention. New York: Guilford.



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

