

# Improving Outcomes for Students with Autism and Their Families Through Utilizing Direct Behavior Rating (DBR) to Communicate Student Data Across Settings

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## Abstract

Objective

The quality of cross-systems collaboration has been associated with improvements in parental satisfaction, student outcomes, and family-school partnerships, particularly for students with autism, a population that has an increased need for such efforts. However, there is a lack of cost-effective and efficient tools to facilitate communication across these systems (among home, school, and services provided outside of the school). There is also a need for quick and easy to use student progress monitoring methods to inform decision-making. This study will use Direct Behavior Rating (DBR), a method of behavioral assessment that has been described as offering an efficient, flexible, and defensible option (e.g., Chafouleas, Riley-Tillman, & Christ, 2009), to collect data through a Home-School Log. The log will be used to facilitate communication and data-based decision making among parents and professionals within and outside of school, in order to improve student outcomes for elementary school children with autism. A multiple-baseline design procedure across 3-6 student participants will be used. It is hypothesized that participants will experience improvements in cross-systems communication, data-based decision making, and student outcomes.

#### Background

Public schools are required by federal law to provide children receiving special education services with evidence-based practices and also are required to involve parents in those practices (IDEiA, 2004). Home-School Logs are a type of evidencebased practice that has been used in schools for years to involve parents in their child's education, improve communication between parents and educators, and collect behavioral data (Chafouleas, Riley-Tillman, & Sassu, 2006). Communication between home and school has been associated with improved parent-educator relationships and student outcomes (e.g., Bruder, 1996). Several empirically based research studies have found that interventions involving parents and/or families have shown efficacy in positively impacting children's education (Christenson & Carlson, 2005). Parental satisfaction, particularly for parents of students on the autism spectrum, has been significantly associated with the quality of communication between parents and their child's school (Whitaker, 2007). Furthermore, consistent, two-way messages between home and school can potentially minimize some of the barriers facing students by increasing opportunity for positive communication, promoting consistency of consequences across settings, and encouraging collaborative problem-solving efforts (Esler et al, 2002).

There is also a need for quick, easy student progress monitoring methods to inform decision-making. Direct Behavior Rating (DBR) is a form of behavioral assessment that involves making a brief rating of student behavior following a target activity. DBR has the potential for being a flexible and efficient progress monitoring method (Chafouleas et al., 2009).

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- To provide schools with a home-school log utilizing DBR instrumentation and procedures to facilitate cross-systems communication and data-based decisionmaking for individuals working with elementary students with autism.
- Student outcome data will be monitored in order to evaluate whether use of the log, which is intended to improve the consistency of communication and consequences across settings, also helps to improve student behavior.

## Method

- Design: A multiple baseline procedure across 3-6 student participants with autism, Asperger's syndrome, or PDD-NOS
- Pre-Baseline: Researcher meets with student's team of parents and educators to discuss target behaviors, target activities, and provide procedural training.
   Baseline: Each day they are working with the student, educators will rate the
- Baseline: Each day they are working with the student, educators will rate the percentage of time the student displayed each pre-specified target behavior during various pre-specified activities using a Baseline DBR Form
- Intervention: Educators continue to rate student's behaviors, but do so on the Daily Ratings pages in the Home-School Log binder, providing comments if desired. Parents complete Home Activity that involves a quick activity with the child (e.g., reading, playing game) and writing any questions or comments for educators. Weekly, educators graph students' ratings and evaluate the data.

Figure 1	Daily Ratings					
Boution of	Student ID:	Date:		Day of Week: M	т w	Th F
Fortion of	□ Check if no ratings today → <u>Reason</u> : □ Student was absent □ No School □ Other:					
Daily Ratings 🗄	Ratings PLEASE PRINT					
	Activity					
Page	Rater Initials:P	osition: D	escription:			
	Observation Time:		$\odot$			
	Start:	Academically Engaged		3 4 5 0	5 7 8	, 10
	End:	Non-Disruptive	(x)			
	<ul> <li>Check if no rating today</li> </ul>		0 1 2	3 4 5 6	5 7 8	9 10
	Reason for no rating:	Other Target Behavior				+
	<ul> <li>Unable to observe student sufficiently</li> </ul>		- 0 1 2	3 4 5 6	5 7 8	9 10
	<ul> <li>Unable to rate behavior immediately</li> </ul>	Other Target Behavior				+
	<ul> <li>Other:</li> </ul>		— 0% Never	50% Sometimes		100% Always
	Comments:					
Figure 2.	U PLEAS	E COMPLETE IN	THE MORNIN	IG BEFORE SO	CHOOL	U
Portion of	Check all that apply	: At home my ch	ild (Section	n will be individu	alized for	each child)
Home Activity Page	E         Slept all night         Image: Did not sleep well					
	U Ate all his/her breakfast					
	U Had a good morning Did not have a good morning Was not feeling well					
	U Took his/her medication Did not take his/her medication N/A					
	Other (something is	off, had a change in r	outine/medicatio	in, etc.):		



- It is hypothesized that participants will experience improvements in:
- cross-systems communication
- data-based decision making
  student outcomes

Figure 3. Example of one student's weekly data graph generated by educators

These improvements will be measured summatively and formatively via:

- self-report measures pre and post DBR data obtained through educator-
- completed Daily Ratings pages systematic direct observation data obtained
- by researchers
- permanent products (weekly Student Progress Evaluation forms and graphs)

Figure 4. Example of multiple baseline data graph - DBR and SDO data will be presented in this format

### **Summary and Conclusions**

The proposed Home-School Log may:

- ease collection and communication of data across systems,
- facilitate data-based decision-making,
- improve student outcomes,
- · improve family-school partnership, and
- · improve coordination of interdisciplinary care.

### References

Bruder, M. B. (1996). Interdisciplinary collaboration in service delivery. In R. A. McWilliam (Ed.), Rethinking pull-out services in early intervention (pp. 27-49). Baltimore, MD: Paul H. Brooks Publishing Company. Chafouleas, S.M., Riley-Tillman, T.C., & Christ, I.J. (2009). Direct Behavior Rating: An emerging method for assessing

- social behavior within a tiered intervention system. Assessment for Effective Intervention, 34, 195-200. Chafouleas, S.M., Riley-Tillman, T.C., & Sassu, K.A. (2006), Acceptability and reported use of Daily Behavior Report Cards among teachers. Journal of Positive Behavior Interventions, 8, 174-182.
- Christenson, S.L. & Carlson, C. (2005). Evidence-based parent and family interventions in school psychology: State of scientifically based practice. *School Psychology Quarterly*, 20, 525-528.
- sler, A. N., Godber, Y., & Christenson, S. L. (2002). Best practices in supporting home-school collaboration. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV (vol. 1, vol. 2)*, (pp. 389-411). Washington, DC US: National Association of School Psychologists. A support of the structure of the school psychologists.
- Individuals with Disabilities Education Improvement Act. (2004). 20 USC 1400 et seq. Whitaker, P. (2007). Provision for youngsters with autistic spectrum disorders in mainstream schools: What parents say—and what parents want. British Journal of Special Education, 34, 170-178.



