

# Utility of the Direct Behavior Rating – Behavior Assessment School Information System (DBR-BASIS)



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## Abstract

Direct Behavior Rating (DBR) is an efficient and technically sound behavioral assessment method that involves making a brief rating of a target behavior immediately following a pre-specified observation period (Chafouleas, Riley-Tillman, & Christ, 2009). Although extant psychometric research has demonstrated construct validity for the use of Direct Behavior Rating Single-Item Scales (DBR-SIS), consequential validity (i.e., relevance, implications, and usability) has not been evaluated to date. In response, the Direct Behavior Rating – Behavior Assessment Student Information System (DBR-BASIS), a web-based system for entering, analyzing, and visualizing DBR data, was created. A trial of the system was initiated with teachers, school psychologists, and educational professionals who were encouraged to use the system in whatever manner they chose. Data was collected pertaining to their system usage and perceptions. Respondents to the user survey (n = 8) and user data from DBR-BASIS (n = 11) indicated that participants used DBR-BASIS with varying levels of preparation and intent, but generally found it to be useful for making data-based decisions regarding student behavior.

## Method

**Participants.** Enrollment was open to any individual employed in a school setting who had an interest in using the system in order for researchers to receive the widest possible sampling of feedback. Eleven individuals utilized DBR-BASIS during the course of the study, with 8 of 11 responding to the survey (and seven to the demographics portion). Of these seven, three identified themselves as school psychologists, three as special education teachers, and one as a general education teacher. All seven reported that they were White, non-Hispanic females.

**Design.** The study follows the design outlined by Irvin and colleagues (2006) with regard to the collection of office discipline referral data through a web-based application referred to as the School-Wide Information System (SWIS; www.swis.org). Thus, this study employs a single-group, nonexperimental design. Although lacking in methodological rigor, the proposed design is considered to be appropriate given the preliminary stages of consequential validity research.

**Procedures.** This study's procedures were constructed to emulate real-world use of the system as faithfully as possible. Participants who enrolled in the study were encouraged to pursue training in DBR-BASIS by (a) completing an online DBR training module, wherein participants rate vignettes of student behavior, receive performance feedback, and practice rating to mastery; and (b) viewing web-based training videos instructing participants on how to use the DBR-BASIS system. After training, participants were asked to use the system however they would during their normal educational practice. Enrollment in the study continued until March 2011, to ensure that each participant would use the system for at least three months before providing feedback in June.

**Measures.** In June 2011, three email-based survey participation requests were sent to participants who had used the system to rate behavior, each accompanied by a reminder to back up any data that the participant had loaded into the system before the system was closed for participation in the beginning of July.

## Screenshots and Figures



Figure 1. Screenshot of DBR-BASIS chart generation screen.

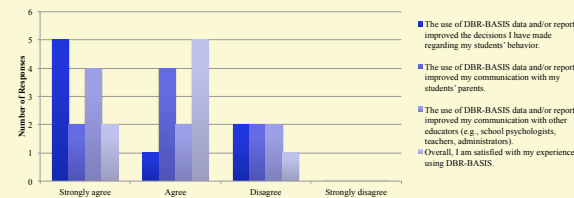


Figure 2. Chart of number of responses to items gauging utility of DBR-BASIS in educational settings.

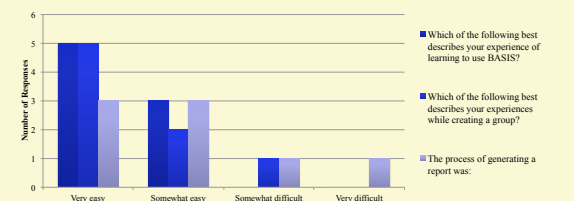


Figure 3. Chart of number of responses to items gauging difficulty of using DBR-BASIS.

## Tables and Figures

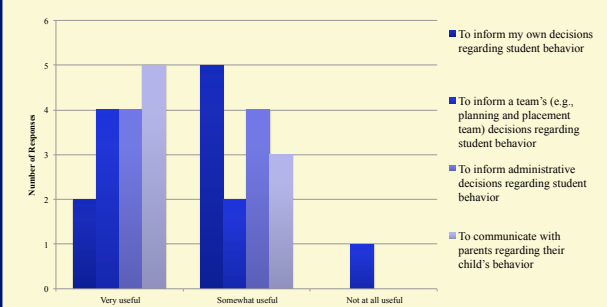


Figure 4. Chart of number of responses to "Please indicate how useful DBR-BASIS data, charts, or reports were for each of the following assessment purposes."

Table 1. Number of charts and reports generated and number of ratings completed and deleted by each participant.

Participant	Charts Generated				Reports Generated		Ratings		
	Student Over Time	Student vs. Group	Student across behavior	Group Averages	Group Over Time	Group Report	Individual Report	Completed	Deleted
1	6	1	1	0	1	2	2	56	26
2	4	1	3	1	2	0	0	8	0
3	6	0	2	1	7	7	0	249	95
4	0	0	0	0	3	0	0	124	4
5	3	0	7	1	2	0	0	194	5
6	1	1	6	2	0	0	0	100	15
7	0	0	1	0	0	0	0	165	5
8	0	0	0	1	0	0	0	180	7
9	2	0	2	1	0	0	2	217	10
10	0	0	1	2	6	0	0	25	0
11	0	0	0	0	0	0	0	21	1
Mean	2	0.27	2.09	0.82	1.91	0.73	0.36	121.73	15.27

## Conclusion and Limitations

The results of this single-group, nonexperimental study suggest that individuals who utilize DBR-BASIS in an educational setting generally find it to be (a) easy to learn, (b) easy to use, both individually and when compared to other student data systems, (c) non-time-intensive, and (d) useful in making decisions often asked of educational professionals within data-based decision making models.

The low participation rate observed during this study is likely a function of educators' busy work schedules, as evidenced by survey data collected from individuals who declined to participate in the study, as well as a lack of incentive to utilize the application outside of a systems-level assessment framework. Future research should consider the use of DBR-BASIS at a systems level.

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