



Teachers' Use of Evidence-based Classroom Management Strategies

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INTRODUCTION

Classroom Management

Many teachers report that managing student misbehavior is a challenge they are not readily prepared for (Nagro et al., 2019; Reinke et al., 2011) and therefore would benefit from additional training in behavior management (Kwok, 2017). With the increased demand for teachers to meet all students' needs in the general education setting, it is critical that their request for additional training be met. To do this, it is first important to understand which evidence-based (EB) practices teachers use in the absence of training or consultation. Second, it is important for consultants to have the necessary tools to provide meaningful recommendations to teachers related to their classroom management practices. By accurately assessing current practices and comparing them to EB recommendations, consultants can provide teachers feedback to guide appropriate professional development and training.

The Five Critical Features

To assist educators in identifying EB management strategies, Simonsen and colleagues (2008) conducted an extensive review and identified 20 EB, general classroom management practices, which they categorized into five *critical features*, which included: (a) maximize structure; (b) post, teach, review, monitor, and reinforce expectations; (c) actively engage students in observable ways; (d) use a continuum of strategies for responding to appropriate behaviors; and (e) use a continuum of strategies to respond to inappropriate behaviors. It is unclear which of these practices teachers commonly use in the absence of consultation. Knowing which EB practices teachers commonly use is likely to inform universal Tier 1 training and professional development.

Classroom Management Measures

There are few tools that are used to observe classroom management with the specific purpose of guiding class-wide management recommendations. The Brief Classroom Interaction Observation – Revised (Reinke et al., 2015) was created to support, monitor, and evaluate classroom management strategies. This measure is used as a tool for tier 3 intervention but is not geared toward assessing the five critical features of effective classroom management broadly. Sanetti and colleagues (2018) developed an observation tool to study classroom management, but this measure was not intended to be used to assist with intervention planning. Creating a measure that specifically assesses the five critical features and EB strategies is likely to be useful to a) inform system-wide professional development training (Tier 1) and b) inform classroom-based training or intervention recommendations (Tier 2 or 3) when consulting with a teacher.

PURPOSE OF THE STUDY

The purpose of this study is to pilot a standardized classroom observation tool to assess teachers' use of 20 evidence-based classroom management practices and to determine consultants' acceptability of the tool.

Research Questions:

1. Which evidence-based classroom management practices do teachers use?
2. Do consultants find the observation tool socially valid (useful) in guiding intervention recommendations?

METHOD

Participants and Setting

- A total of 39 observations: 13 live observations and 26 reported observations. Of the 39 observations, 8 were with reliability observers (21%). See demographics Table.
- Across 4 states: Illinois, Indiana, Nevada, Wisconsin.
- All observations took place in general education classrooms
- Observers were invited to participate if they a) were a practicing school psychologist or other educational professional whose job responsibilities included teacher consultation (i.e., collecting observational data).

METHOD (Continued)

Materials/ Measures

Demographics Questionnaire: Included 8 questions (sex, age, race, job title, experience, state of employment, description of the community, pre-service behavior management course).

Five in 20 Observation Tool: Listed five critical features and associated EB classroom strategies. The observer identifies whether each of the EB strategies is observed. If the observer indicated "yes," they also rate the quality (e.g., 1 = inconsistent with strategy description to 5 = consistent with strategy description). A total strategy score is obtained by summing the number of "yes" endorsements. A total quality score is obtained by summing the 1-5 strategy ratings.

Behavior Intervention Rating Scale (BIRS): The BIRS is a 24-item measure used to assess the acceptability of behavior interventions (Elliott & Treuting, 1991) and has demonstrated high validity and reliability (i.e., .97, .92, and .87, respectively; Elliott & Treuting, 1991). Elliott & Treuting, 1991) indicated that the BIRS wording is written broadly so that it can be used with different interventions. For this project, the BIRS wording was adapted to assess the acceptability of the observation tool (rather than an intervention). Fifteen questions were retained from the original 24 and observers rated each item using a Likert-style format. A total BIRS score is obtained by summing the 15 items (higher scores=higher acceptability).

Additional Training: Observers a) indicated if the teacher would benefit from additional training; and if so b) what specific critical features/strategies they would recommend.

Procedures

1. IRB: Institutional Review Board approval was secured.
2. RECRUITMENT: a) advertised on the ISPA listserve, b) advertised on the EIU SP Facebook page, c) emailing EIU SP alumni, d) encouraging EIU SP alumni to advertise to other SPs who may be interested in participating.
3. TWO OPTIONS: Due to the COVID-19 pandemic (and consequent remote schooling), interested participants were provided a choice of completing a live observation or a "reported" observation (i.e., reporting on an observation previously completed).
 - Live observers - approached a teacher and asked if they wanted to participate with them. Of the 13 observations, 5 (38%) had reliability observers.
 - Reported observers – were asked to think about an observation close in memory (completed that school year) and complete the form thinking of that observation. Researchers emailed informed consent to the observer who collected and returned consent for themselves and the participating teacher. Of the 26 observations, 3 (12%) had reliability observers.
 - Reliability – observers were given the option to have a second observer collect reliability data.
4. RESEARCH MATERIALS: were emailed to observers (e.g., informed consent, Five in 20 form, BIRS) and emailed back when completed. Observers, teachers, and reliability observers each received \$15 gift cards after materials were received. All forms had IDs (no identifying information).

Data Analysis & Results

R1: Which evidence-based classroom management practices do teachers use? The Five in 20 observation was individually scored to obtain a total strategy score and a total quality score. Cohen's kappa coefficient will be used to calculate reliability between each observer and reliability-observer's total strategy score and quality ratings.

Table 2.

Observation Type	1. Maximizing Structure		2. Establishing and Teaching Expectations		3. Engaging Students in An Observable Way		4. Recognizing Appropriate Behavior		5. Responding to Inappropriate Behavior	
	% Strategies Endorsed	Quality Rating	% Strategies Endorsed	Quality Rating	% Strategies Endorsed	Quality Rating	% Strategies Endorsed	Quality Rating	% Strategies Endorsed	Quality Rating
Total	86.5	4.4	85.8	4.0	58.9	4.1	48.7	4.1	51.7	4.0
Live	86.5	4.7	84.6	3.2	66.6	4.3	24.9	4.5	44.4	4.4
Reported	86.5	4.3	88.4	3.9	50.9	3.9	49.9	4.1	64.1	3.9

- **RELIABILITY AMONG OBSERVERS:** Reliability observations for both live and observed observations ranged from moderate to substantial agreement using Cohen's Kappa. Strategy Scores had higher agreement (ranging from 0.496 – 0.658) than Quality Ratings (ranging from 0.424 – 0.445). *Moderate agreement = 0.41 – 0.60 and Substantial agreement = 0.61 – 0.80.

R2: Do school psychologists find the Five in 20 observation an acceptable and meaningful tool that has the potential to guide classroom management recommendations. The BIRS was individually scored and averaged across observers and the last question was analyzed descriptively.

Table 3.

Observation Type	Average BIRS Score (75 Total Possible)	Range	Chronbach's Alpha
Total	65.54	56-75	0.89
Live	67.15	56-75	0.93
Reported	64.73	57-74	0.88

Anecdotal Comments about the Five in 20 Tool:

- I really like this tool! I think it provides very clear definitions for each area observed as well as for praise/reprimand, which helps the feedback given to a teacher more objective.
- I would like to use this tool for future consultations with teachers!
- I loved the operational definitions for each of the strategies.
- This tool is user friendly and would be helpful in consulting regarding classroom mgmt.

Discussion

- Based on the current data, teachers were observed to use a larger percentage of EB strategies from two of the critical features 1) maximizing structure and 2) establishing and teaching expectations than the remaining three features.
- A high percentage of strategies from critical feature 1 and 2 were used across both live and reported observations.
- Critical feature 4) identifying student appropriate behavior was the least observed (especially among live observations – 24.9%).
- When EB strategies were observed, they were rated of high quality (mostly 4+ ratings).
- BIRS findings suggest observers found the Five in 20 tool acceptable and meaningful, with slightly more acceptable ratings from observers who used the tool live.
- The BIRS had strong internal-reliability

Table 1. Demographics

Types of Observers & Reliability Observers	N	Sex		Race	Av. Age (range)	Av. Years Experience (range)	Community			Training in direct observation			PBIS School				State				% of observations from different school/grade level		
		M	F				White	Urban	Suburban	Rural	Yes	No	N/A	IL	IN	NV	WI	Elementary	Middle School	High School			
Total Observers	39	7 (18%)	32 (82%)	100%	33.9 (24-61)	8.3 (0-37)	10 (26%)	13 (33%)	16 (41%)	34	4	1	19 (49%)	32 (82%)	2 (5%)	4 (10%)	1 (3%)	32 (82%)	3 (8%)	1 (3%)			
School Psychologist	36	7	29		33.9 (24-61)	8.14 (0-37)	9	12	15	32	3	1	18	30	2	3	1	28 (78%)	4 (11%)	1 (3%)			
SpEd Teacher	0	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
Social Worker	1	–	1		48	22	1	–	–	–	1	–	1	1	–	–	–	1 (100%)	–	–			
Other	2	–	2		27 (26-28)	5 (3-7)	–	1	1	2	–	–	–	1	–	1	–	2 (100%)	–	–			
Total Reliability Observers	8	3	5	100%	40.5 (24-50)	15.25 (0-28)	2 (25%)	2 (25%)	4 (50%)	4	2	2	3	7	1	–	–	7 (88%)	0	0			
School Psychologist	2	–	2		37 (24-50)	11.5 (0-23)	–	–	2	2	–	–	1	2	–	–	–	2 (100%)	–	–			
SpEd	1	1	–		36	14	1	–	–	–	–	1	1	1	–	–	–	–	1 (100%)	–			
Social Worker	2	1	1		34.5 (29-40)	14	–	1	1	1	1	–	1	2	–	–	–	2 (100%)	–	–			
Other	3	1	2		48.3 (45-50)	19 (9-28)	1	1	1	1	1	1	0	2	1	–	–	3 (100%)	–	–			