Advances in Measurement in School-Wide Positive Behavioral Interventions and Supports

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Abstract
In recent years, there has been an increased research focus on developing tools to support the design, installation, and evaluation of tiered systems of support. In this special issue, we focus on research validating freely available tools to (a) measure fidelity of implementation of school-wide positive behavioral interventions and supports (SWPBIS), (b) assess staff commitment to implement SWPBIS, (c) inform development of teaching matrices, (d) examine issues of sustainability, and (e) assess school climate.

Keywords
quantitative analyses, PBIS, school-wide positive behavioral interventions and supports

Early in its development, research in school-wide positive behavioral interventions and supports (SWPBIS) focused on case studies and quasi-experimental research documenting its promise for improving student outcomes (e.g., Chapman & Hofweber, 2000; Colvin, Kameenui, & Sugai, 1993; Nelson, 1996). Once this promise was established, researchers moved to more rigorous effectiveness research, including experimental single case studies and randomized controlled trials (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Metzler, Biglan, Rusby, & Sprague, 2001). To date, the research base on SWPBIS is robust enough to call it an evidence-based practice for reducing unwanted behavior and increasing prosocial behavior (Flay et al., 2005).

With its establishment as an evidence-based practice, researchers have increasingly turned toward sophisticated measurement of other elements of SWPBIS. Such research requires an expanded set of tools beyond direct observation of student and teacher behavior and indirect records reviews. This special issue describes rigorous research developing or refining tools for SWPBIS implementation and research. Specifically, we feature articles introducing a range of freely available tools developed to (a) measure fidelity of implementation of SWPBIS, (b) assess staff commitment to implement SWPBIS, (c) inform development of teaching matrices, (d) examine issues of sustainability, and (e) assess school climate.

Fidelity of Implementation
One key tool for measurement is assessment of fidelity of implementation of SWPBIS. Because the effects of SWPBIS are directly related to its implementation (Childs, Kincaid, George, & Gage, 2016; Flannery, Fenning, Kato, & McIntosh, 2014), it is critical to both measure fidelity of implementation and use tools with documented effectiveness. The first study in the issue (Pas et al., 2018) examines specific criteria for adequate SWPBIS implementation using the School-Wide Evaluation Tool. Capitalizing on data from multiple randomized controlled trials, Pas and colleagues (2018) examined the relation of fidelity of implementation to student outcomes and found evidence for different cut points depending on school level.

The next two studies (Massar et al., 2018; Rasplica et al., 2018) describe assessment of fidelity of implementation tools. Massar and colleagues reported positive results of a factor analysis of the school-wide PBIS Tiered Fidelity Inventory (Algozzine et al., 2014), the first validated measure of all three tiers of SWPBIS. Although there is ample evidence of concurrent validity of SWPBIS fidelity of implementation tools (Mercer, McIntosh, & Hoselton, 2017), Rasplica and colleagues examined how these tools are related over the first few years of implementation, finding that the measures are strongly related at initial as well as sustained implementation.

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Commitment to SWPBIS

Critical to strong fidelity of implementation is the extent to which staff are committed to implementing it. Two articles in this issue present validation research on tools for assessing social validity of SWPBIS. Feuerborn and colleagues (2018) and Filter and colleagues (2018) shared research in a series of studies of two tools to assess commitment and identify areas to address during the adoption or initial implementation process to improve commitment to the process.

Implementation Tools

Once committed, SWPBIS is often implemented by school teams attending a training and making key decisions regarding SWPBIS systems, such as development of school-wide expectations and teaching matrices. However, school teams can benefit from tools to engage the whole staff in developing a positive, productive school culture. Lane and colleagues (2018) shared validation research on a tool the School-Wide Expectations Survey for Specific Settings for developing matrices using a data-informed approach that provides the team with input from all faculty and staff priorities, using a process beyond a team’s opinion for constructing this teaching matrix.

Sustainability

Of note, SWPBIS will have lasting effects only to the extent to which implementation is sustained over time. Kittelman and colleagues (2018) reported results from further validation of a measure of sustainability of evidence-based behavior support practices in schools, the School-Wide Universal Behavior Sustainability Inventory—School Teams (SUBSIST; McIntosh, Doolittle, Vincent, Horner, & Ervin, 2009). Results showed stability of the measure over 3 years, which provides researchers with confidence in future implementation science work.

School Climate

Finally, research on the effectiveness in SWPBIS is expanding beyond measuring effects on problem behavior, use of exclusionary discipline, and prosocial behavior. A key student outcome is school climate, subjective perceptions of elements of the school environment, including safety, belonging, and positivity. School climate is difficult to measure directly, and thus it is important to have validated indirect survey tools. La Salle and colleagues (2018) have conducted a study to validate the factor structure of the Georgia Brief School Climate Inventory and assess its validity for secondary students based on sexual orientation. Their findings corroborate existing evidence that students who are lesbian, gay, or bisexual perceive their school climate less favorably than heterosexual students, indicating both an important need for intervention and a method of measuring progress toward equitable outcomes.

We offer this special issue of Remedial and Special Education to assist educational leaders as they continue to prioritize a systems-level approach for preventing learning and behavioral challenges as well as responding effectively and efficiently when such challenges do arise. We are hopeful these tools will be useful as the practitioner and research communities engage in rigorous, respectful, responsible inquiry to advance the technology of designing, installing, and evaluating tiered systems of support (Lane, 2017).

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