Perceived Enablers and Barriers Related to Sustainability of School-wide Positive Behavioral Interventions and Supports

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Abstract

The purpose of this study was to identify the most important perceived enablers and barriers regarding sustainability of School-wide Positive Behavioral Interventions and Supports (SWPBIS). School personnel representing 860 schools implementing or preparing to implement SWPBIS completed an open-ended survey of factors regarding its sustainability. Qualitative analyses were used to assess perceptions of the most important factors related to sustainability. Thematic analysis produced 13 themes regarding enablers and/or barriers. The most commonly cited enablers were Staff Buy-in, School Administrator Support, and Consistency. The most commonly cited barriers were Staff Buy-in, Resources: Time, and Resources: Money. Results are discussed in terms of enhancing durability of evidence-based practices in schools.

Keywords: sustainability, implementation science, positive behavioral interventions and supports

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Despite the knowledge base identifying evidence-based practices and policies to support their use, their adoption remains low and implementation in schools is often inconsistent (Burns & Ysseldyke, 2009; Cook & Schirmer, 2006; Cook, Tankersley, & Landrum, 2009; Fixsen, Blase, Metz, & Van Dyke, 2013). Given the importance of implementing evidence-based practices to improve student outcomes, particularly for students with disabilities or who are at increased risk for poor academic and social outcomes, this lack of uptake is of particular concern and continues to merit attention from both practitioners and researchers. In particular, students identified with Emotional/Behavioral Disorders (EBD) often have extensive challenges that can impede academic and social success in school and beyond (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). These poor outcomes for students with EBD draws further attention to the need for effective and sustained implementation of evidence-based practices in schools. The study of practice adoption, implementation, and sustainability is known as implementation science (Forman et al., 2013), and it has been identified by prominent educational researchers as the most important research challenge for the next 25 years (McIntosh, Martinez, Ty, & McClain, 2013). This approach is especially critical for the study of sustainability of school-based interventions, as there are many instances of successful initial implementation that have failed to sustain (Santangelo, 2009; Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006).

There is a small but growing literature base identifying factors that aid in the sustained implementation of evidence-based practices (i.e., enablers) and factors that impede their sustainability (i.e., barriers). The identification of enablers and barriers to sustainability can assist school practitioners and administrators in identifying strategies to use or avoid when planning for

implementation and sustainability. Common enablers and barriers that have been identified in the literature are outlined in the following sections.

Enablers to Adoption, Implementation, and Sustainability of School Practices

School administrator support. It has been widely found that school administrators (e.g., building principals) play an important role in the successful implementation of evidence-based practices in schools (Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Kincaid, Childs, Blase, & Wallace, 2007; Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; McIntosh et al., 2014). Administrators who were most effective in supporting implementation (a) were actively involved in the school's operations and adoption of practices, (b) showed a prominent leadership style, and (c) acted as facilitators in the process (Forman et al., 2009). The importance of school administrators in implementing practices is fairly consistent across studies, as the principal is highly instrumental in recruiting and maintaining broad support for practices (McIntosh et al., 2014). Research indicates that both effective managerial skills and regular voicing of active support for the intervention are crucial to intervention success (Forman et al., 2009).

Staff support. In addition to administrator support, grassroots teacher support (Forman et al., 2009; Langley et al., 2010), or staff buy-in (Sanford DeRousie & Bierman, 2012), has been identified as an enabler to the adoption and implementation of evidence-based practices. Staff buy-in refers to a commitment to the principles behind the philosophy of the intervention, such as explicit instruction, inclusion, or the use of positive school discipline practices. The proportion of teachers who were open both to learning about the practice and to volunteering to train other staff members are associated with successful implementation (Forman et al., 2009). Additionally, teachers who perceived that students benefited from the intervention were more likely to support the implementation and sustainability of that intervention (Andreou, McIntosh, Ross, & Kahn, in press; Baker, Gersten, Dimino, & Griffiths, 2004; Sanford DeRousie & Bierman, 2012).

Training and professional development. Training affects implementation of evidence-based practices in school settings in several ways, depending upon the quality of training provided, the length of time since training occurred, and the continued professional development and technical assistance provided to staff implementing the intervention. Earlier studies have identified training and ongoing professional development as a factor for sustainability (Bradshaw & Pas, 2011; McIntosh, Mercer, et al., 2013). General pre-service training of staff also appears to make a difference. Bradshaw and Pas (2011) noted that the percentage of certified teachers in a school was an enabler for practice implementation.

Consistent approach. Consistency refers to use of a common language and common goals in the school among staff members. Aligning school goals and philosophies with the new intervention is a critical predictor of implementation (Forman et al., 2009; Payne & Eckert, 2010). This activity allows critical members of the support team to identify the fit of a program in the context in which it will be implemented. Similarly, in an effort to scale-up school interventions, Bradshaw and Pas (2011) identified that sharing a common goal was critical for initial implementation.

Teaming. Teaming refers to the consistency with which meetings occur, knowledge of the team, and meeting organization. Coffey and Horner (2012) and McIntosh, Mercer, et al. (2013) found that efficient teaming, including regular meetings and meeting efficiency, were among the strongest predictors of sustainability. Previous research suggested that contextual factors such as disorganization can greatly impede adoption PBIS (Bradshaw & Pas, 2011). Therefore, maintaining regular, focused meetings throughout the course of implementation is important.

Barriers to Implementation and Sustainability

The existing literature has also documented a number of major barriers to the effective implementation of evidence-based practices in schools. In many cases, the barriers identified are the same themes as enablers (i.e., the lack of an enabler), although some notable differences are present.

Lack of resources. Resources refer to time, money, and staffing, and can be in relation to a lack of financial resources or staff time to support an intervention. Several previous studies identified a lack of resources (particularly removal of resources after implementation) as one of the most detrimental barriers to sustainability of an intervention (Forman et al., 2009; Kincaid et al., 2007; Massatti, Sweeney, Panzano, & Roth, 2008; McIntosh et al., 2014; Sanford DeRousie & Bierman, 2012; Seffrin, Panzano, & Roth, 2009; Tyre, Feuerborn, & Lilly, 2010).

Lack of parent engagement. Parent engagement is regarded as critical in many school-based interventions, but the degree to which authentic engagement is obtained varies considerably. According to Langley et al. (2010), school personnel report challenges in obtaining the support of parents due to difficulty in making initial contact and engaging parents in the intervention. Further, McIntosh et al. (2014) found that family involvement was perceived as less important to initial implementation but critical to sustainability.

Logistical barriers. Logistical barriers have been referenced as impeding implementation in several different forms, including time, school climate, and data systems. Tyre et al. (2010) noted the ability to track data reliably as a large barrier to implementation. Although school staff were committed to successful implementation, there were no adequate data tracking systems in place (i.e., a system to reliably track office discipline referrals). The nature of school systems themselves was also considered a logistical barrier (Langley et al., 2010), as school personnel have reported challenges in making even basic schedule changes to accommodate implementation.

Competing priorities. Schools are confronted with multiple priorities and tasks, and implementation of a new intervention sometimes competes with already existing requirements in the school setting (Adelman & Taylor, 2003). School personnel are often most concerned with state-wide testing requirements due to academic expectations from school, district, and state administrators (Forman et al., 2009), or they are already confronted with multiple duties that do not include the implementation of a new intervention (Langley et al., 2010; Sanford DeRousie & Bierman, 2012). Current initiatives compete with the demands that a new intervention would necessitate.

Lack of administrator or staff support. Similar to research on the enablers to implementation, lack of administrator and teacher support was identified as problematic for implementation (Kincaid et al., 2007). A lack of teacher buy-in has been noted as a significant barrier, as teachers who are not supportive of the intervention are unlikely to see the benefits of the intervention or practice (Langley et al., 2010), either because of attributing improved student outcomes to unrelated factors or lack of implementation that would allow improved student outcomes (Han & Weiss, 2005). This barrier is compounded by the general difficulty of recruiting staff to assist with initiatives (Seffrin et al., 2009). Additionally, Forman et al. (2009) found that implementation was significantly diminished even when administrators displayed "passive resistance" to the practice. Passive resistance includes stating that one supports the intervention but does not pursue learning about the intervention or implementing its core features.

Enablers and Barriers Regarding School-wide Positive Behavioral Interventions and Supports

Klingner, Boardman, and McMaster (2013) highlighted the importance of researching practices that have successfully been taken to scale (i.e., adopted and implemented widely). One

example of such a practice is school-wide positive behavioral interventions and supports (SWPBIS), because of its large-scale implementation across the nation (in over 20,000 schools in the U.S.; Horner, July, 2014). SWPBIS is a systems level preventive approach to managing school-wide behavior problems (Sugai & Horner, 2009). It is based on a preventive framework that includes the application of behaviorally-based principles to address problem behavior in schools. SWPBIS focuses on creating and sustaining primary, secondary, and tertiary systems of support in a framework for implementation, which supports the adoption and implementation of evidence-based practices. A growing body of research supports the effectiveness of SWPBIS (Horner, Sugai, & Anderson, 2010). SWPBIS has been shown in randomized controlled trials to be effective in reducing student office discipline referrals, suspensions, and bullying, as well as improving academic achievement, emotional regulation, and school safety (Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Waasdorp, & Leaf, 2012; Horner et al., 2009; Waasdorp, Bradshaw, & Leaf, 2012).

McIntosh et al. (2014) assessed school and district personnel's perceived importance of various contextual variables regarding the implementation and sustainability of SWPBIS using the School-Wide Universal Behavior Sustainability Index: Schools Teams (SUBSIST; (McIntosh, Doolittle, Vincent, Horner, & Ervin, 2009). Qualitative analyses were used to assess perceptions of the most and least important variables for both initial implementation and sustainability of SWPBIS. Themes generated from open-ended questions revealed that administrator support, staff buy-in, fidelity of implementation, and use of data were considered to be the most important variables enabling sustainability. Additionally, resources were considered to be the most significant barrier to sustaining SWPBIS.

One limitation of this study is the sample of schools. Schools in this study had been implementing SWPBIS for an average of 5 years (with 9% implementing for 0 to 1 years, 36%

implementing for 2 to 4 years, and 55% implementing for 5 or more years), and fidelity data from this sample indicated that most of the schools were effectively sustaining SWPBIS at the time of the survey (McIntosh, Mercer, et al., 2013). Research indicates that schools that have been implementing SWPBIS for this length of time are extremely likely to sustain implementation, as schools are at greatest risk of abandoning SWPBIS within the first two years of implementation (Nese et al., 2015). Thus, although the perspectives of school team members and administrators from these schools are important, including a broader range of schools in the sample, especially more schools at the initial stages of implementation, could indicate a more generalizable set of perceived enablers and barriers to the sustainability of SWPBIS that would be most helpful for practitioners and policymakers. In addition, examining perceived enablers and barriers at the outset of implementation (during the initial planning period), may shed light on enhancing support in the "fragile period" in which effort is expended but without the reinforcement of improved student outcomes (Andreou et al., in press).

Purpose

Although the literature to date has yielded valuable information regarding contextual variables that function as enablers and barriers to the effective implementation of evidence-based practices in schools (such as SWPBIS), additional research examining features that contribute specifically to sustainability is warranted. By first identifying what school personnel perceive as enablers and barriers to the sustainability of SWPBIS, future research can then experimentally evaluate the effects of interventions to alter these variables. This line of research could result in information that can be used to provide empirically-based recommendations to schools regarding ways they can improve the sustainability of SWPBIS and, potentially, other school-based interventions. The purpose of this study was to replicate and extend the results of McIntosh and colleagues (2014) with a larger, more diverse sample. The following research questions were

addressed: (1) What are perceived as the most important enablers for sustaining SWPBIS? (2) What are perceived as the most significant barriers to sustaining SWPBIS?

Method

Participants and Settings

Participants were 860 educators with knowledge of the SWPBIS systems in their particular schools. The majority (61%) of participants identified themselves as a school PBIS team leader/facilitator/internal coach, followed by school administrator (24%), school PBIS team member (9%), or district/external coach (5%). The 860 schools were from 14 U.S. states and all 4 U.S. Census regions. School demographic data from the National Center for Education Statistics (NCES) were available for 99% (n = 850) of the schools. The majority of schools were elementary schools (68%), 20% were middle schools, and 12% were high schools. In terms of urbanicity, 33% were suburban, 28% were urban, 25% were rural, and 14% were located in towns. The mean percent of students receiving free or reduced priced meals was 50%. Regarding the length of SWPBIS implementation, 25% of schools were in year 0 or 1 of implementation, 48% of schools were implementing between 2 and 4 years, and 28% had been implementing for 5 or more years.

Measure

Participants completed the *School-wide Universal Behavior Sustainability Index: School Teams* (SUBSIST; McIntosh, et al., 2009), a research-validated measure assessing the presence of variables related to implementation and sustainability of universal behavior support interventions (McIntosh et al., 2011). The SUBSIST also includes two open ended questions: (1) “What is the most important factor for sustaining SWPBIS?” and (2) “What is the most significant barrier to sustaining SWPBIS?” These two questions were the focus of the present analyses.

Procedure

Participants completed the SUBSIST during the first year of a longitudinal study of implementation and sustainability of school-based interventions. The authors recruited participants through state SWPBIS coordinators in states with strong state networks (e.g., ongoing communication with participating schools, regular submission of implementation data to the National Center on PBIS). State coordinators were asked to announce the study at training and coaching events and forward an invitation to participate to school and district personnel that might be interested in participating. Schools just beginning implementation of SWPBIS or those at increased risk for abandonment were specifically recruited for participation, through announcements at initial team trainings or coach trainings, respectively. Participation occurred through completing the survey online through a provided weblink. If multiple personnel from the same school responded, the participant with the most complete responses to the survey (i.e., the survey with the fewest unanswered questions) was included for that school.

Design and Analyses

A qualitative, phenomenological approach allowed respondents to share briefly their lived experiences regarding systems change and sustainability as it related to SWPBIS. The open-ended questions allowed for responses that were not constrained by items on the measure derived from previous research (Baron, 2008). Through an open coding process (Patton, 2002), responses were coded into themes representing facilitators or barriers to sustainability. In this inductive process, the authors reviewed participant responses and looked for patterns in the data. Once patterns were identified, the first author drafted definitions of potential themes and continually revised these definitions while sorting through the data. This iterative process continued until all participant responses were coded with one theme. Of the 93% of respondents who answered at least one of the two open ended questions (92% answered both), 1,256

facilitator units and 1,029 barrier units were identified and coded into 13 themes. Themes were included in the findings if they were represented by at least 3% of units (Patton, 2002). The fourth author then independently coded a randomly selected 20% of responses to ensure reliability of coding. The point-by-point inter-coder agreement was 83% for number of units per response. Inter-coder agreement for coding of themes was 82%, which was later raised through a consensus meeting to an agreement of 98%.

Findings

The analysis yielded 13 themes from responses to the two open-ended questions. These themes and their corresponding definitions are presented in Table 1. The number of coded responses by theme for the question, "What is the most important factor for sustaining SWPBIS?" is presented in Figure 1. The number of coded responses by theme for the question, "What is the most significant barrier to sustaining SWPBIS?" is presented in Figure 2. Findings and the most common themes are described by question in the following sections.

Enablers

Staff Buy-in. The most frequent theme representing factors important to the sustainability of SWPBIS was Staff Buy-in (n = 214). Staff Buy-in describes the commitment of teachers and staff in supporting PBIS implementation. Because this theme does not include buy-in from school administrators or other stakeholders (i.e., families, the community), this theme represents the notion of grassroots support for the approach. For example, one respondent replied, "I think that the most important factor for sustaining PBIS is to have teacher and staff buy-in for the initiative." Another responded, "Teacher buy-in has kept the program running well." A lack of buy-in was also the most commonly identified barrier to SWPBIS, indicating the critical function of broad-based support to the sustainability of SWPBIS.

School Administrator Support. The second most frequent theme, School Administrator Support (*n* = 197), represents active support of building-level administration, such as principals or vice principals. This theme specifically describes support from school (not district) administrators. Respondents described how important principal support was as a facilitator to sustainability. For example, one respondent wrote, "Administrative support is the most crucial part if PBIS will be effective. Without it, no matter how hard the team will try to change things, it will not work." Another responded, "All schools need an administrator who eats and breathes PBIS in order for all staff to feel connected to it." Similarly, "You need a strong principal to present it and believe in it and then show the staff why it is so important and beneficial to the students, teachers and community. Without a strong leader and staff buy in the program will fall apart."

Consistency. Consistency (*n* = 118) refers to a common approach among staff, school personnel, or school teams. The theme describes consistency pertaining to plan implementation, common language, or working toward a common goal. Respondents appeared to value consistency and identify it as needed for sustainability. One respondent wrote, "The teachers love the consistency of message across all grade levels." Another responded, "The focus and vocabulary of PBIS is used consistently by all staff and with all students." Another indicated, "consistency across all grade levels that is given by teachers, administrators, and support staff. The same message and strategies need to be consistently demonstrated in order to promote growth and sustainability."

Additional enablers. There were 8 remaining themes representing enablers to sustaining SWPBIS. These themes were Training (*n* =116), Teaming (*n* = 96), Effectiveness (*n* = 83), PBIS Philosophy (*n* = 81), Data (*n* = 61), Fidelity of Implementation (*n* = 48), Resources: Time (*n* = 38), and Resources: Money (*n* = 38).

Barriers

Staff Buy-in. As with enablers, the most frequent barrier theme was Staff Buy-in (*n* = 163). When describing Staff Buy-in as a barrier to sustainability, one respondent indicated, "The biggest barrier for our school has been getting staff to buy in initially. I think once they have gotten on board, they are willing. It is the initial step." Another responded, "It is difficult to get staff to buy-in. Getting the common language of PBIS is difficult for staff. It is difficult to change viewpoints towards proactive and preventative approaches rather than punitive, as what most teachers in our school are used to doing." Another indicated, "Teacher buy-in has been a challenge. Being a turn-around school has placed a lot of pressures on our teachers. A lot of teachers feel like PBIS is 'just another thing' they have to do that won't have a significant enough positive outcome to be worth their time. We're trying to combat that at our weekly PD [professional development] sessions."

Resources: Time. The second most frequent barrier theme was Resources: Time (*n* = 160). Time refers to the resources needed to carry out activities related to SWPBIS in terms of individuals' time needed for planning or implementation. Respondents described the significant time commitment needed to conduct multiple activities related to SWPBIS (e.g., planning, meeting, data review, completing fidelity measures). To illustrate, one respondent described, "Time! More time is needed to be able to meet as a team, share data with staff, do problem-solving, train new staff, train para-educators, conduct fidelity and other implementation measures." Another replied, "Time for preparation…all student time is teaching/instructional time, therefore, teachers have very limited planning/prep time. As far as time for prep with SW-PBIS…preparation of lesson …preparation of materials/photos for display in hallways…having enough time…seems to be the most significant barrier."

Resources: Money. Resources: Money (*n* = 115) describes monetary resources needed to implement SWPBIS. Many responses for this theme were simply one-word responses, such as "funding" or "money." Others were more detailed, such as "Funding for the school-wide initiative is difficult to come across. The state gives us less than $200 a year to help us implement the school-wide program. Our school administration funds the rest of the rewards, incentives, and materials necessary to keep our program operational." Another respondent wrote, "currently, we do not have a budget for PBIS." Similarly, "the cost of implementing PBIS is a definite barrier. PBIS does not have a required budget. While our team has made every effort to keep costs to a bare minimum, it is impossible to run this program on no cost at all."

Additional barriers. There are seven additional themes that represented barriers to sustaining SWPBIS. These themes are Consistency (*n* = 66), Integrating other Initiatives (*n* = 57), Training (*n* = 57), Fidelity of Implementation (*n* = 51), Student Buy-in (*n* = 50), PBIS Philosophy (*n* = 43), and School Administrator Support (*n* = 42).

Discussion

The purpose of this study was to identify what school and district personnel perceive as the most significant enablers and barriers to the sustainability of SWPBIS. To this end, educators from 860 schools completed the *School-wide Universal Behavior Sustainability Index: School Teams* (SUBSIST; McIntosh et al., 2009). Through an open coding process (Patton, 2002), participant responses to questions regarding facilitators and barriers to sustainability were coded into 13 themes. Results from the analysis indicated the most frequently identified enablers to the sustainability of PBIS were Staff Buy-in (*n* = 214), School Administrator Support (*n* = 197), and Consistency (*n* = 118). The most frequently identified barriers to sustaining SWPBIS were Staff Buy-in (*n* = 163), Resources: Time (*n* = 160), and Resources: Money (*n* = 115). Comparing these findings to those of McIntosh et al. (2014) illuminates differences that could be due to the

current sample being relatively earlier in the SWPBIS implementation process. Although the nature of these qualitative studies preclude group comparisons, the difference in years implementing SWPBIS between the samples (e.g., 25% of the sample in year 0 or 1, compared to 9% of the previous sample), may highlight differences in the relative importance of themes that contribute to sustainability, based on stage of SWPBIS implementation.

Importance of Staff Buy-in

The present study is consistent with previous research indicating the importance of staff buy-in to the implementation and sustainability of evidence-based practices in schools (Forman et al., 2009; Langley et al., 2010). In the present study, Staff Buy-in was the most frequently identified enabler as well as the most frequently identified barrier to the sustainability of SWPBIS. Stated differently, participants indicated that staff buy-in was one of the most important factors contributing to SWPBIS sustainability, and when staff buy-in was lacking, its absence was a significant barrier.

These results differ from McIntosh et al. (2014), where Staff Buy-in was the second most frequently identified enabler and the fourth most frequently identified barrier. Because the majority (73%) of schools in the current study had been implementing SWPBIS for 4 years or less, compared to McIntosh et al. (2014) where this group was smaller (45%), it is possible that schools that have not been implementing SWPBIS long are more preoccupied with gaining staff support. It has been suggested that school personnel may need to experience the positive outcomes of the practice to become more supportive (Andreou et al., in press). In other words, school staff are more likely to support a practice (e.g., SWPBIS) once they have experienced naturally occurring reinforcement for its use (e.g., decrease in student problem behavior and increase in appropriate behavior). In the present study, many schools had not yet begun implementation. Therefore, staff support might be minimal and perceived as a factor that would

aid in sustained implementation (an enabler) because it is currently impeding implementation (a barrier). Staff experience level is another possible explanation for why staff-buy was identified as an enabler and barrier for schools in the early stages of implementation. Baker et al. (2004) noted the profound differences in opinions in implementation among staff members who were new and those who were more experienced with the intervention. More experienced staff relayed more positive perspectives, and those who were new were more exposed to logistical training concerned about basic operations of the intervention, which resulted in negative opinions of the intervention.

Importance of School Administrator Support

In the present study, School Administrator Support was second most frequently identified enabler, which aligns with previous research emphasizing the importance of administrator support in the implementation and sustainability of interventions in education (Andreou et al., in press; Forman et al., 2009; Kincaid et al., 2007; Langley et al., 2010). This theme was the most cited theme in the previous study (McIntosh et al., 2014), indicating its importance throughout implementation, from initial implementation to sustainability. Even among schools with strong SWPBIS systems and adequate district and state support, the lack of school administrator support is a strong predictor of abandonment (Nese et al., 2015).

Resources

In previous research, a lack of resources has been identified as a significant barrier to implementation (see Forman et al., 2009; Kincaid et al., 2007; Massatti et al., 2008; McIntosh et al., 2014; Sanford DeRousie & Bierman, 2012; Seffrin et al., 2009; Tyre et al., 2010). Similar findings were observed in the present study, where resources, more specifically Resources: Time and Resources: Money, were among the most frequently identified barriers (second and third respectively). The present study differs from previous research in that a general *resources* theme

was separated to specify resource type (money or time). Although both themes were reported at similar frequencies, more respondents noted the importance of time. These findings may be particular to SWPBIS, as materials for implementation are generally freely available online, and thus money is less of a barrier than for a program that requires purchasing manuals or implementation materials. Nevertheless, many individuals noted the lack of money for implementation. Previous research indicates that newer implementers more often focus on logistical barriers (e.g., lack of actual cash from the district), whereas more experienced implementers focus on advanced barriers that refer to procedural and conceptual details of implementation (e.g., finding time to schedule meetings or teaching; Baker et al., 2004). As such, the identification of money as a barrier in the present study may be the result of the sample including newer implementers, rather than a lack of money actually impeding sustainability. However, because money was identified as one of the top barriers, it warrants recognition as a potential problem impeding the sustained implementation of SWPBIS. Because SWPBIS can often be implemented with little to no additional money after training (e.g., use of free materials, focus on free reinforcers; Blonigen et al., 2008), money may be less of a barrier to creative staff, and this aspect of SWPBIS may make it more sustainable.

Limitations

Although results of this study provide valuable information regarding factors that may affect SWPBIS sustainability, some limitations are recognized. First, responses obtained from the sample in the present study may not be generalizable to the larger population of school personnel who are implementing SWPBIS, and the lack of data regarding response rate makes it difficult to assess bias in responding. In the present study, 860 school personnel responded to questions regarding enablers and barriers to SWPBIS sustainability. This sample is relatively small when compared to the large number of schools implementing SWPBIS across the globe. In

addition, respondents from schools preparing to implement SWPBIS may have reported perceived future enablers and barriers that might vary after they implement with students. Moreover, the present findings are also limited to the sustainability of SWPBIS in particular. Although these findings are consistent with previous studies examining the implementation of other school-based interventions (Langley et al., 2010), the generalizability of the study findings to understanding sustainability as a phenomenon itself is limited. Finally, the qualitative nature of this study presents some limitations in that participant responses are prone to bias (e.g., imperfect recall, idiosyncratic perceptions). Results of this study should guide future experimental research to determine whether the factors identified by the participants are indeed enablers and barriers to SWPBIS sustainability.

Implications for Practice

The available research suggests that improving staff buy-in and support may improve the sustainability of SWPBIS, and specific activities to improve staff buy-in have been proposed in the literature (Feuerborn, Wallace, & Tyre, 2013). When addressing staff buy-in, it may be helpful to differentiate between strategies that may be more useful prior to implementation versus during implementation. Prior to implementation, when schools are determining whether to adopt the new practice (e.g., SWPBIS), it may be beneficial to include staff meaningfully in discussions regarding whether to select the practice. Previous research has suggested that assessing staff concerns before implementation and tailoring the practice to their needs may enhance buy-in during the fragile initial implementation period (Hall & Hord, 2006). The *Self-Assessment and Program Review for Programs for Positive Behavior Interventions and Supports* (SAPR-PBIS; Walker & Cheney, 2012) is one tool that can be used to assess staff apprehensions about PBIS and implement and develop a more tailored implementation approach.

When initially implementing SWPBIS, activities to improve staff buy-in may be of particular importance for staff who are new to SWPBIS and who are expending effort in building the infrastructure for SWPBIS implementation but are not yet seeing results. For these staff, logic suggests that their implementation behavior will not sustain unless they experience reinforcement (i.e., improved student behavior) to maintain that behavior. In addition, new staff may be less likely to verbally indicate their support and commitment for a practice, given that they have not yet observed positive effects as a result of its implementation. Further, previous research has suggested that new teachers in particular may be less likely to implement additional practices, because of the standard responsibilities and duties to which they are becoming accustomed as a new teacher (Baker et al., 2004). To improve the eventual buy-in and support of new staff, the school or district team might use reinforcement systems for staff implementation behavior during the early stages of implementation, such as public acknowledgement or draws (e.g., coverage of class or supervision duties, coffee cards). These reinforcement systems could aid in reinforcing and maintaining staff implementation behavior until naturally occurring reinforcers (i.e., improved student outcomes) are present. Efforts could also be put forth toward identifying ways to improve the saliency of early outcomes for SWPBIS implementation (e.g., graphs showing level of implementation and student outcomes by month). This way, the consequences (i.e., reinforcers) for implementation become more clear to staff, and their implementation behavior will likely maintain until more pronounced and readily observable reinforcers are present. Additionally, it would be prudent to conduct follow-up coaching and support to ensure staff are implementing SWPBIS with high treatment fidelity. If staff are not implementing SWPBIS with fidelity, it is unlikely they will experience reinforcing consequences (e.g., student success) as a result of SWPBIS implementation.

Finally, improving administrator support appears to be a worthwhile focus to improving the sustainability of SWPBIS. Some recent articles provide guidance on cultivating support from school administrators (McIntosh, Kelm, & Canizal Delabra, 2015; Strickland-Cohen, McIntosh, & Horner, 2014). School administrator support is related partly to individual administrators and the degree to which they support SWPBIS but also district support, as support from the district level can affect school administrator support indirectly. By institutionalizing the practice into hiring processes (e.g., placing SWPBIS into job descriptions and hiring preferences for school principals) and providing training to new school administrators, district teams can enhance building-level administrator support dramatically (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

Future Research

Results of this study provide valuable information that can guide future research on SWPBIS sustainability. Perhaps most importantly, the factors identified as enablers and barriers to sustainability in the current study should be experimentally evaluated to determine if they do indeed affect the sustainability of SWPBIS. For example, in the present study, Staff Buy-in was the most frequently identified enabler when present as well as one of the most significant barriers when absent. Future research could examine the effects of varying activities to improve staff buy-in and examine whether improvement contributes to the sustained implementation of SWPBIS. Similar lines of research could examine the effects of other enablers and barriers on SWPBIS sustainability. These factors include school administrator support, consistency of implementation, staff training, and resource allocation as it relates to funding and time.

Although not one of the most frequently identified enablers or barriers, Training was the fifth most frequently cited theme in terms of total responses (see Table 1). As such, staff training might be an important variable to consider for the sustained implementation of SWPBIS.

Research indicates that effective staff training includes didactic instruction regarding the theoretical foundations of the practice, modeling, practice, performance feedback, coaching, and follow-up support (Fixsen et al., 2005; Joyce & Showers, 2002). Although the research is clear that these components of staff training are important, the specific activities involved in each of the components, and how they affect sustainability, have yet to be defined. With an improved understanding of sustainability, schools can be better informed on how to increase the sustained use of effective practices resulting in improved outcomes for students who are at an increased risk for poor academic and social outcomes, such as those identified with EBD.

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Table 1

Themes Generated from Open-Ended Responses and Corresponding Definitions

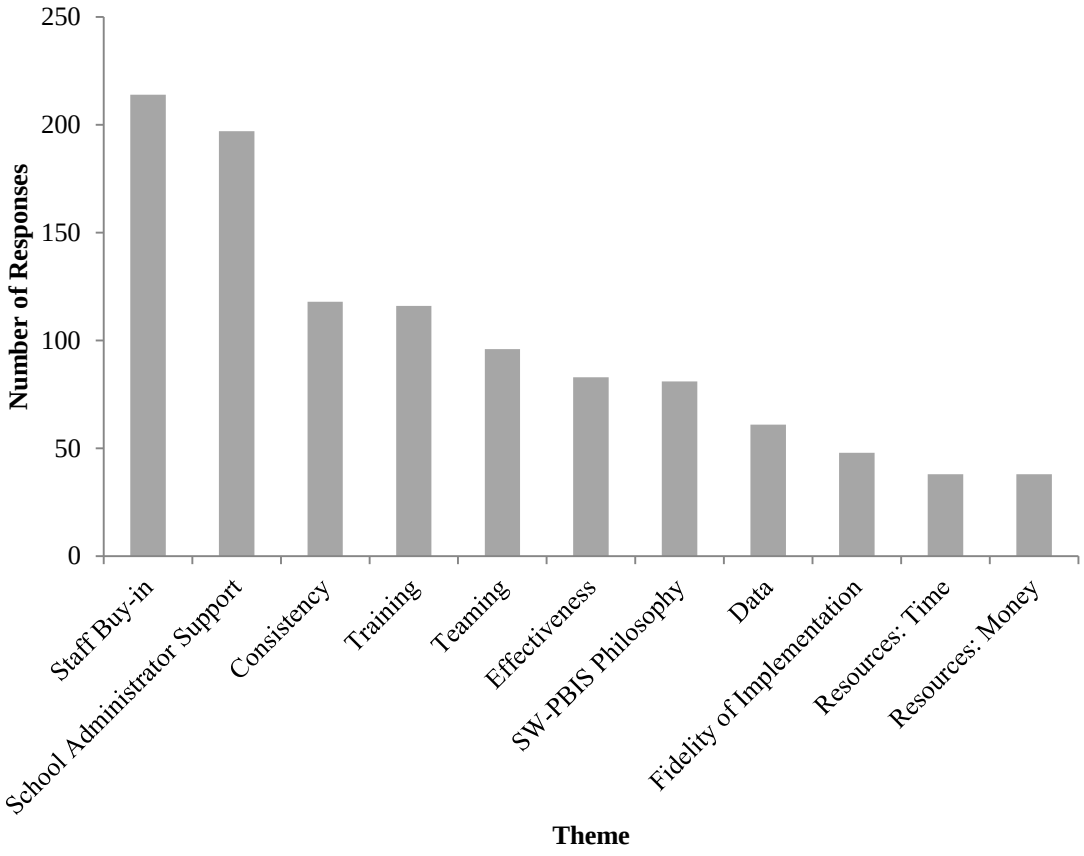
Theme	Definition
Staff Buy-in (*n* = 377)	Staff buy-in or continued commitment to PBIS, including staff enthusiasm and encouragement.
School Administrator Support (*n* = 239)	Support from building-level administration or a leader in the building (could be a PBIS team member). General references to support or leadership or someone to "keep everything going."
Resources: Time (*n* = 198)	Time needed to complete activities related to PBIS.
Consistency (*n* = 184)	Consistency among staff or the school team regarding PBIS implementation, common language, or working toward a common goal. Consistency of implementation across time.
Training (*n* = 173)	Staff training, professional development, coaching, or continuing education regarding PBIS.
Resources: Money (*n* = 153)	Money needed to complete activities related to PBIS.
Teaming (*n* = 126)	Effectiveness of teaming, team leadership, meetings, activities during meetings, or frequency and consistency with which meetings occur. Representativeness of team members.
PBIS Philosophy (*n* = 124)	Agreement with behavior analytic principles of PBIS, including using a positive/non-punitive approach, creating a safe and positive school climate or culture, placing a focus on prevention, or teaching skills explicitly to students.
Effectiveness (*n* = 100)	Seeing results or the effectiveness of PBIS (e.g., effects on teacher-student relationships, school climate, problem behavior, academic performance). Staff recognition, or celebrations to acknowledge success.
Fidelity of Implementation (*n* = 99)	Implementing critical features of PBIS with fidelity. Activities needed to sustain PBIS effectively.
Data (*n* = 90)	Collection, analysis, or use of implementation or outcomes data, including sharing data within and outside the school.
Student Buy-in (*n* = 73)	Student involvement and buy-in to PBIS practices. Student interest in incentives.
Integrating Other Initiatives (*n* = 65)	Extent to which PBIS is integrated with other initiatives (e.g., response to intervention, other evidence-based practices). Presence of competing initiatives that leave staff feeling overwhelmed.

Note. *n* = the number of codes generated from all open-ended questions. The full codebook is available from the first author.

Figures

Figure 1

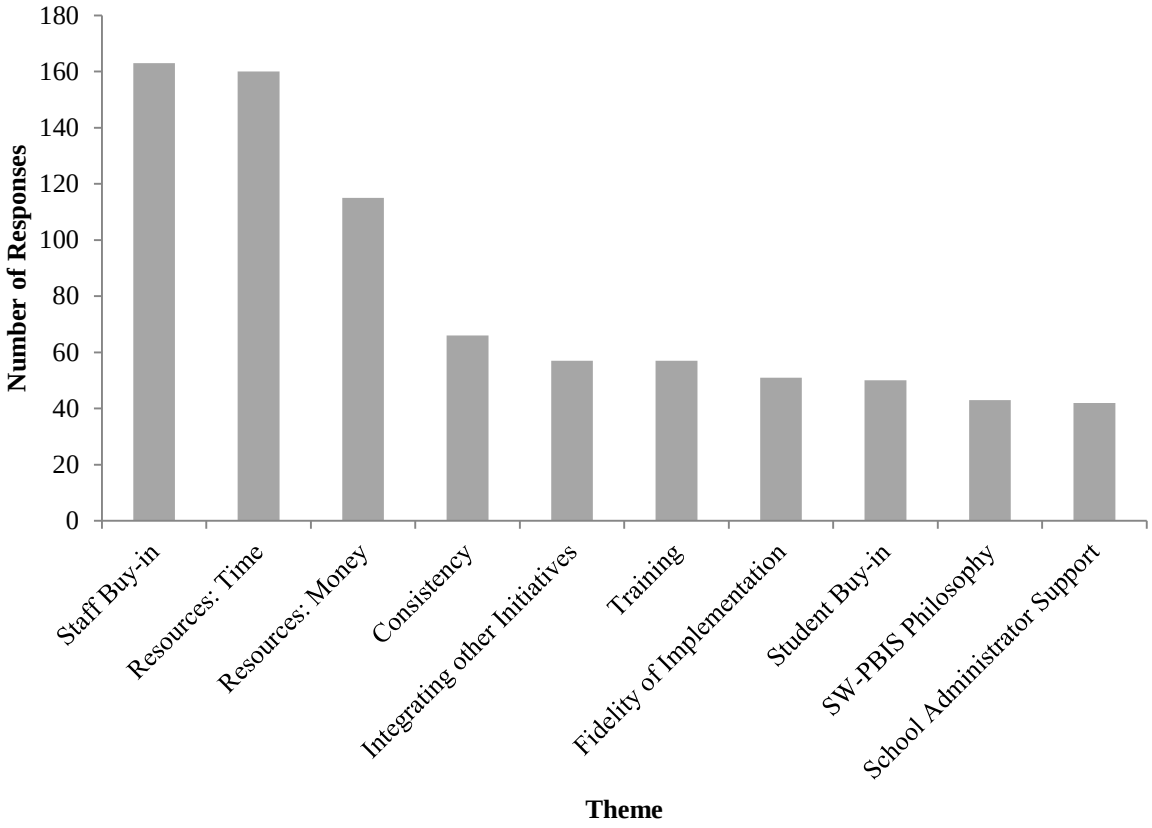
Number of Coded Responses by Theme for the Question: "What Is the Most Important Factor for Sustaining SWPBIS?"



Note. Only themes represented by at least 3% of units are included.

Figure 2

Number of Coded Responses by Theme for the Question: "What Is the Most Significant Barrier to Sustaining SWPBIS?"



Note. Only themes represented by at least 3% of units are included.