

Involvement and Participation of Students with Severe Disabilities in SWPBIS

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### Abstract

With more schools implementing Schoolwide Positive Behavioral Interventions and Supports (SWPBIS) and achieving valued student outcomes associated with these efforts, the inclusion of students with extensive and pervasive support needs (i.e., 'severe' disabilities) in this tiered system must be considered. These students remain programmatically and physically separated from general education instruction and activities. Given that SWPBIS is implemented in general education settings and it is designed to support all students, the purpose of this study was to investigate SWPBIS coaches' perceptions of the involvement of students with extensive support needs in SWPBIS processes and procedures within one state. Findings suggest the coaches believe that students with extensive support needs are physically and programmatically separated from tier one SWPBIS instruction and activities, with few general educators expressing participation in facilitating their involvement. Implications and recommendations for these findings are provided.

Keywords: Schoolwide Positive Behavior Interventions and Supports; Severe Disabilities;

Inclusion

Schoolwide Positive Behavioral Interventions and Supports (SWPBIS) is an inclusive, cumulative, multi-tiered model of providing supports to all students for preventing and reducing the instances of problem behaviors in schools by teaching students positive, prosocial behavioral skills and expectations (Sugai, Simonsen, Bradshaw, Horner, & Lewis, 2014). SWPBIS is articulated as consisting of three tiers. Tier one applies to all students and staff, with a focus on prevention and providing interventions and supports; tier two applies to a targeted group whose behaviors were not responsive to tier one supports; and tier three applies to a small group of students who were unresponsive to tiers one and two (Sugai et al., 2014). This tiered system of supports is grounded in a prevention framework with the intention that “all members of a community should be exposed to the best universal intervention to affect the incidence and prevalence of serious problem behavior” (Sugai & Horner, 2010, p. 65). This multi-tiered approach to preventing and reducing problem behaviors has been met with substantial success. For example, SWPBIS implementation has been associated with improved academic skills, attendance, social behavior, and appropriate behavior for students in general (Freeman et al., 2015). The universal supports provided within SWPBIS have been documented as being beneficial for students at-risk or at high risk for aggressive behavior, difficulty concentrating, and emotional regulation (Bradshaw, Waasdorp, & Leaf, 2015). To date, over 23,000 schools implement SWPBIS (OSEP Technical Assistance Center on Effective School-Wide Interventions, 2017). However, the extent to which personnel in these schools implement components of SWPBIS across all tiers with fidelity, for all students, including students with disabilities, is uncertain (Hawken & O’Neill, 2006).

Consequently, while SWPBIS is intended to apply to “all students, staff, and settings” (Sugai & Horner, 2010, p. 67), its application to students with extensive and pervasive support

needs (ESN), defined as the 1-2% of students who take the alternate assessment and have support needs across life domains (Kennedy, 2004; i.e., intellectual disability, multiple disabilities), remains unclear. The lack of clarity regarding the application of SWPBIS to students with ESN in research and practice may be due, in part, to the separation of students with ESN both physically and programmatically from general education classrooms (Landers, Courtade, & Ryndak, 2012; Morningstar, Kurth, & Johnson, 2017). Importantly, schools implementing SWPBIS often continue to place students with ESN in separate classrooms (Freeman et al., 2006). Given that all students, including students with ESN, should be educated in the least restrictive environment (IDEA, 2004), this is an important area of focus to ensure the necessary supports, including universal SWPBIS supports, are in place for students with ESN to experience success in these settings. Teachers of students with ESN in separate classrooms experience similar separation; yet, the success of SWPBIS depends on all school staff teaching, evaluating, and revising SWPBIS instruction and procedures (Lane, Oakes, Cantwell, & Royer, 2016).

In addition to students with ESN being placed in separate classrooms, there are other factors that may contribute to the lack of clarity regarding their involvement in SWPBIS. For example, a recent analysis of SWPBIS evaluation tools revealed numerous exceptions to the provision of supports and instruction to all students and staff (Kurth, Zagona, Hagiwara, & Enyarat, 2017). Instead, the most commonly used schoolwide evaluation tools provide many opportunities to omit learners with ESN and their teachers. However, the study was limited to an assessment of the evaluation tools, and did not describe the extent to which these exceptions were enacted.

A third reason for the uncertainty regarding the inclusion of students with ESN in SWPBIS instruction may be related to the continuum of tiers themselves. Many assume tertiary

interventions, which are by definition intensive and individualized, will be delivered in separate special education classrooms (Brown & Michaels, 2006). Consequently, teachers in those settings may handle behavior support needs independently of SWPBIS efforts, and thus refute the need for students to participate in SWPBIS efforts (Hawken & O'Neill, 2006). Accordingly, the tertiary supports provided in special education settings will not be cumulative of, or linked to, universal and secondary interventions (Carr, 2006), particularly if teachers and students are not part of SWPBIS instruction and activities. Given that the original intention of the tiered system of support was to provide prevention strategies for all students, in which “all students are exposed [to interventions] in the same way” (Walker et al., 1996, p. 201), further examination of the extent to which students with ESN are included across the continuum of tiers is necessary.

Finally, SWPBIS instruction and materials may be visually inaccessible or may include vocabulary that students with ESN have not yet learned, posing an additional challenge to the inclusion of students with ESN in SWPBIS instruction and activities. Many students with ESN have complex communication needs, necessitating communication supports so students can demonstrate their understanding of SWPBIS procedures and expectations (e.g., Hawken & O'Neill, 2006). Further, many students with ESN require curricular modifications to ensure content is taught in a manner to address their cognitive, academic, and physical support needs (Wehmeyer, 2006). At this time, there is no evidence in the extant literature, nor in SWPBIS manuals or procedures, that these supports are readily available to students with ESN. And because of their physical and programmatic separation from ongoing school activities and the general education classroom, the meaningfulness and accessibility of tier one SWPBIS instruction is uncertain for this group of students.

Further complicating our understanding of the inclusion of students with ESN in SWPBIS, remarkably little research has documented the extent to which this population of students and teachers participate in, or benefit from, all three tiers of SWPBIS. In fact, there are only two identified peer-reviewed, empirical studies describing the inclusion of students with ESN in SWPBIS. The first is a national survey of state SWPBIS coordinators (Landers et al., 2012). In this survey, Landers and colleagues found students with ESN were included in SWPBIS instruction, with state coordinators further reporting their trainings would not meet the needs of learners with ESN. At the time of this national survey, 9,000 schools implemented SWPBIS. As this number has more than doubled since then, and the study was limited to state coordinators who may not directly implement SWPBIS services in schools, further research describing the participation of students with ESN in SWPBIS across all tiers of instruction is needed, including descriptions of how these students and teachers participate in SWPBIS.

The only other peer-reviewed study describing the participation of students with ESN in SWPBIS comes from a survey of alternative school administrators in the state of Michigan (Schnelling & Harris, 2016). These alternative schools exclusively served students with ESN, and therefore are not representative of most U.S. schools. Nevertheless, these schools were only somewhat successful in implementing SWPBIS for students with ESN. Specifically, these schools implemented some aspects with fidelity (e.g., having procedures in place to address dangerous situations), but many other areas (e.g., defining problem behaviors and consequences of engaging in such behaviors) were implemented with much lower fidelity.

Limited research describes if students with ESN are regular participants in SWPBIS, and if so, how their participation is made accessible and meaningful. A special issue of *Research and Practice for Persons with Severe Disabilities* in 2006 was dedicated to this topic; yet, over a

decade later, limited empirical research has occurred. The limited research in these domains must also be viewed in the context of the factors that may complicate the inclusion of students with ESN in SWPBIS, particularly the effects of their systematic and routine physical and programmatic exclusion from general education instruction and activities. The purpose of this study is to survey school SWPBIS coaches in a single state to describe their perceptions of the inclusion of students with ESN in SWPBIS instruction and activities. Specifically, the following questions are addressed: (1) To what extent do respondents perceive students with ESN are involved in the key elements of tier one SWPBIS at their school (e.g., reward assemblies, reward tickets, behavior plans)? (2) To what extent do respondents believe school personnel are involved in facilitating/ supporting students with ESN to be involved in key elements of tier one SWPBIS? (e.g., giving rewards, teaching expectations, managing discipline); (3) Do respondents believe there are differences in the extent to which different school personnel teach and include students with ESN the elements of tier one SWPBIS?; and (4) Do respondents perceive differences in students' participation in all tiers of SWPBIS instruction and activities for students with ESN on the basis of their placement in general education or special education classrooms?

## **Method**

### **Survey Development**

To obtain information from the widest number of participants in this exploratory study, a survey was administered to SWPBIS coaches within a single state. Survey items were developed based on a recent review the literature on the availability of SWPBIS for students with ESN, existing survey research findings, and an analysis of items in the three most commonly used SWPBIS evaluation tools. First, literature describing the supports needed by students with ESN disabilities were identified, such as communication supports (Kurth & Enyart, 2016). Items were

created to reflect this body of knowledge. Next, a recent survey distributed to SWPBIS state coordinators was analyzed for relevant items (Landers et al., 2012). Some items from the state coordinator survey were adapted for this study. Finally, items in the most commonly used tier one SWPBIS evaluation tools as identified by Kurth et al (2017) were analyzed. These evaluation tools included the Benchmarks of Quality (BOQ; Kincaid, Childs, & George, 2010), School-wide Evaluation Tool (SET; Sugai, Lewis-Palmer, Todd, & Horner, 2005) and the Team Implementation Checklist (TIC; Sugai, Horner, Lewis-Palmer, & Rossetto, 2012). Each tool was analyzed for specific items related to SWPBIS processes and accessibility for students with ESN, with survey items created to reflect participation in SWPBIS by students with ESN. Following development of survey items, the survey was pilot tested during the 2016 meeting of the Association of Positive Behavior Support. Stakeholders attending this meeting were solicited to provide feedback on survey item wording and content. Ultimately, five participants completed the pilot survey. Items were reworded, added, or removed based on their feedback.

### **Instrumentation**

The final survey contains 36 items, and was administered anonymously using Qualtrics software, an online survey administration program (Qualtrics, 2016). The survey was found to have good internal consistency ( $\alpha = .789$ ) as measured using Cronbach's alpha. The first nine items solicited demographic information, including the respondents' current role and experience in SWPBIS. The next two items gathered information about current practices at their school site, including memberships on SWPBIS teams and placement patterns for students with ESN.

The survey asked respondents to answer using 'yes,' 'no,' and 'unsure' to questions about the extent to which students with ESN are involved in the key elements of tier one SWPBIS at their school (e.g., "are students with ESN involved in reward assemblies?") and the



extent to which school personnel have been involved in facilitating and supporting students with ESN to be involved in the key elements of SWPBIS (e.g., ‘have you ever given a reward ticket to a student with ESN at your school?’). The next three questions asked respondents to rate the accessibility of current PBIS practices for students with ESN using a likert-type sliding rating scale, where ‘0’ is “not at all” and ‘10’ is “extensively.” For example, respondents stated the extent to which school teams currently discuss how to include students with ESN in SWPBIS. The next six questions solicited respondent opinions about the extent to which different school personnel teach and include students with ESN in the elements of SWPBIS (e.g., ‘are students with ESN taught behavioral expectations for arrival, dismissal, and walkways’), using a 0-10 likert-type sliding rating scale where ‘0’ is “definitely no” and ‘10’ is “definitely yes.”

### **Survey Administration**

The survey was administered to 1,675 public school employees in one state in the U.S. Midwest. The state was selected for participation due to its strong support of and technical assistance for SWPBIS, along with its implementation of SWPBIS with a high degree of fidelity and sustainability across tiers. Respondents for the survey were school-based team coaches in the state’s SWPBIS participating schools. Coaches, in this study, are defined as school personnel who take on extra duties related to SWPBIS. At tier one, coaches are often general education teachers; at tier 2 and 3, coaches are more often counselors, administrators, or special education teachers. Coaches, in the state of this study, are usually (but not always) part of the SWPBIS team. Respondents represented schools that had participated in, or were currently participating in, SWPBIS training which occurs at seven levels in the state. The seven training phases, based on the National Implementation Research Network, focus on preparation (e.g., preparing data systems, piloting measure), implementation (e.g., professional development), and sustainability

across all three tiers (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). To solicit these school-based coaches, the state PBIS coordinator emailed a link for the online survey to SWPBIS coaches in the first week in November 2016, with a follow-up email sent two months later (in the first week of January 2017). The link to the survey was then closed to further responses in the first week of February 2017.

To ensure a representative sample of respondents, two methods were used. First, the school district in which each respondent worked was determined. Of the 559 districts in the state (inclusive of charter school districts, districts representing only one school, and special education school districts), approximately 25% participate ( $N = 138$ ) in SWPBIS training as described earlier. Of these 138 districts, respondents reported working in 80 (58%) of the school districts implementing SWPBIS. The number of respondents per school district ranged from one to 31, with a median of two respondents per district ( $M = 3.725$ ). Next, the Qualtrics sample size calculator was used to determine ideal sample size, based on a population of 1,675 along with a 95% confidence interval, and a 5% margin of error. A sample size of 313 was determined.

### **Data Analysis**

To respond to the research questions, several analyses were completed. Means were calculated for demographic responses. For questions in which respondents answered yes, no, or unsure, data was analyzed on the basis of the respondent's role (general education teacher, special education teacher, administrator, or related services provider). Statistical analyses were also performed using the Kruskal-Wallis ANOVA test for between-group comparisons on the basis of respondent role (general education teacher, special education teacher, administrator, or related services provider). This method was selected because initial analysis of the data revealed the assumption of normality was not met (Howell, 2013). When statistically significant between-

group differences were found, post-hoc testing was completed using Dunn's procedure with a Bonferroni correction for multiple comparisons. Finally, statistical analyses were performed using the Kruskal-Wallis ANOVA test for between group comparisons on the basis of the location in which students with ESN are educated at the school (general education classroom, special education classroom, or resource/pull-out classroom). Post-hoc testing was also completed following this analysis to investigate pairwise differences.

For purposes of data analysis, we created four groups of participants: general educators ( $N = 96$ ), administrators ( $N = 86$ ), special educators ( $N = 45$ ), and related service providers ( $N = 50$ ). The group of general educators also included teachers for students who are English Language Learners, reading teachers, specials teachers, early childhood teachers, and instructional coaches. The group of administrators only included participants who indicated that they were an administrator. The third group, special educators, also included participants who indicated that they are a "special area teacher." The fourth group of related service providers also included counselors, social workers, speech language pathologists, behavior specialists, paraeducators, nurses, psychologists, and transition coordinators.

## **Results**

A total of 1,675 school-based coaches were sent links to the online survey. Three hundred and forty-two coaches ultimately accessed the survey. Of these, 305 agreed to participate and completed surveys, yielding a response rate of 18.2%. Although our response rate was 18.2%, and slightly lower than the ideal sample size of 313, we received responses from participants from 58% of the school districts involved in the state's SWPBIS training. Additionally, there was diversity among the respondents from different types of communities: 163 (53.6%) were from

rural communities; 80 (26.3%) were from suburban communities; and 61 (20.1%) participants were from urban communities.

### **Participant Demographics**

Of the 305 participants who completed the survey, most of them were female (85.2%). The mean age of the participants was 41.8 years old and ranged from 21 to 65 years old. Additionally, the participants have worked in schools an average of 16.3 years (range 1-38). Two hundred seventy-three of the participants (89.8%) have been or currently serve on SWPBIS team; 23 (7.6%) have never been on a SWPBIS team; and seven (2.3%) were not sure if they are or if they have been on a SWPBIS team. The participants have served on SWPBIS teams for an average of 5.39 years (range 1-20).

Most respondents ( $N = 196$ , 64.5%) worked in elementary schools; 51 (16.8%) worked in middle schools, and 28 (9.2%) worked in high schools. Sixteen (5.3%) participants work in early childhood settings, 9 (3%) in K-12 schools, 3 (1%) in K-8 schools, and 1 (0.3%) in a secondary school (grades 7-12). The participants indicated they work in schools that range in size from fewer than 50 to over 500. Most participants ( $N = 144$ , 47.4%) worked in a school serving 251-500 students; 82 (27%) in school serving more than 500; 72 (23.7%) in a school serving 101-250 students, and 6 (1.9%) served fewer than 100 students.

Most of the respondents were general education teachers ( $N = 94$ , 30.9%), administrators ( $N = 90$ , 29.6%), special education teachers ( $N = 44$ , 14.5%), school counselors ( $N = 34$ , 11.2%), and school behaviorists ( $N = 6$ , 2%). The remaining positions were low frequency (less than 5 responses), and included specials teachers (music, art, technology), social workers, speech language pathologists, paraprofessionals, reading teachers, psychologists, transition coordinators, coaches, nurses, and early childhood teachers ( $N = 29$  total, 9.5%).

**Participation of School Personnel in SWPBIS Teams.** Respondents reported up to 24 different personnel as participants in the SWPBIS team. Respondents were provided a list of team members to select from, as well as an option for ‘other,’ in which case they wrote in a team member. As seen in Table 1, general education teachers were the most commonly cited team members ( $N = 280$ , 92.1%). School administrators were the next most commonly cited team members ( $N = 273$ , 89.8 %), followed by school counselors ( $N = 237$ , 78%). Special education teachers of students with ‘mild’ disabilities were reported as SWPBIS members by just over 60% of respondents ( $N = 183$ ). Special education teachers supporting students with extensive support needs (i.e., ‘severe’ disabilities) were reported to be members of SWPBIS teams less than half of the time ( $N = 152$ , 50% and  $N = 148$ , 48.7% respectively). All other school personnel were reported as serving on SWPBIS teams by less than 20% of respondents.

{INSERT TABLE 1 ABOUT HERE}

**Participation of Students with ESN in General Education Settings.** Respondents described where students with ESN spend the majority of their school day. Most respondents ( $N = 129$ , 42.4%) stated this group of students is taught in resource (pull-out) settings. Ninety-four (30.9%) reported students with ESN were taught in self-contained, separate classes. Lastly, 81 respondents (26.6%) report students with ESN are taught in general education settings.

Importantly, the percentage of time students with ESN were reported to spend in general education, pull-out, and separate classes was within 5% of time in all categories as reported by the state to the Office of Special Education Programs (IDEA Data Center, 2017), suggesting the accuracy of the respondents’ answers to this question of the survey.

**Involvement of Students with ESN in SWPBIS Activities and Instruction**

The first research question in this study was: To what extent do respondents perceive students with ESN are involved in the key elements of SWPBIS at their school? The respondents answered survey items by selecting “yes”, “no”, or “unsure” in response to questions about the extent to which students with ESN were involved in elements of SWPBIS such as reward assemblies and reward ticket programs. The respondents also answered survey items related to whether students with ESN receive discipline referrals, whether behavioral incidents involving students with ESN are documented, and whether behavior plans exist for students with ESN. As indicated in Table 2, the majority of each group of respondents (general educators, administrators, special educators, and related service providers) reported that students with ESN are involved in reward assemblies and reward ticket programs, although special education teachers were less likely to report this to be true.

Across the four groups of participants, there were differences in the extent to which behavioral violations are reported for students with ESN, as well as the existence of documented plans for how behavior violations are managed. Overall, fewer general educators indicated that students with ESN were involved in the systems for documentation and management of behavioral violations. For example, 52.6% of the general educators and 88.4% of the administrators surveyed indicated that there is a documented system for dealing with and reporting behavioral violations for students with ESN. Additionally, almost 38% of general educators reported that they didn’t know if there was a documented system for dealing with behavioral violations for students with ESN.

There were also differences in responses regarding respondent belief in the existence of a documented plan for which behavior violations of students with significant disabilities are managed by the school office. Only 55% of general educators reported “yes” to this question,

and almost 36% of them indicated that they didn't know if there was a documented plan for this (Table 2). In contrast, 82% of administrators surveyed indicated that there is indeed a documented plan for which behavior violations are managed by the school office.

An almost equal number of general educators indicated that there is a documented crisis plan for responding to dangerous situations involving students with ESN (44.7%) as did general educators who indicated that they didn't know if there was a crisis plan (41.5%; Table 2). In contrast, 78.8 % of administrators surveyed reported that there is a crisis plan for responding to dangerous situations involving students with ESN.

{INSERT TABLE 2 ABOUT HERE}

### **Involvement of School Personnel in Implementing SWPBIS for Students with ESN**

The second research question in this study was: "To what extent do respondents believe school personnel are involved in facilitating and supporting students with ESN to be involved in the key elements of tier one SWPBIS (e.g., giving rewards, teaching expectations, managing discipline). Respondents selected yes, no, or unsure to answer these questions. As indicated in Table 3, most school personnel surveyed answered "yes", that they have been involved in teaching behavior expectations to all students and managing discipline for all students. However, only 59% of general educators surveyed indicated that they have been involved in teaching behavior expectations to a student with ESN, and only 50% of general educators indicated that they have been involved in managing discipline for a student with ESN. Further, only 49% of general educators indicated that they have been involved in examining discipline data for students with ESN. Interestingly, almost 98% of the general educators surveyed indicated that they have been involved in providing SWPBIS rewards for any student; however, only 72.9% of general educators surveyed have been involved in providing rewards for students with ESN.

{INSERT TABLE 3 ABOUT HERE}

### **Differences in the Extent to which Students with ESN are Included in SWPBIS**

The third research question in this study was “Do respondents believe there are differences in the extent to which different school personnel teach and include students with ESN in the elements of tier one SWPBIS? Using a likert-type rating scale (0 = not at all; 10 = extensively), respondents answered questions about the extent to which students with ESN are taught the elements of SWPBIS and included in SWPBIS activities at their school site. As shown in Table 4, across the four groups of participants (general educators, special educators, administrators, and related service providers), there were no significant differences in the extent to which the PBIS team discusses how to include students with ESN. There were also no significant differences for questions that asked respondents if it is possible to include students with ESN in all tiers of SWPBIS, if it is important to include students with ESN in SWPBIS activities, and if it is important to include students with ESN in school-wide processes.

However, there were significant differences across the four groups of participants related to the extent to which behavioral expectations are taught to students with ESN in different, specific areas of the school (e.g., playground, classroom). A Kruskal-Wallis H test was used to investigate differences in the extent to which students with ESN were taught expectations for arrival, dismissal, and walkways, according to the respondent’s position: GET ( $N = 97$ ), Administrator ( $N = 86$ ), SET ( $N = 45$ ), and Related Services ( $N = 48$ ). Distributions of the extent to which students with ESN were taught these expectations were not similar for all groups; the differences in distributions were statistically significant between groups,  $H(3) = 15.913, p = .001$ . The post hoc analysis revealed significant differences in the respondent’s ratings of the extent to which students with ESN are taught expectations for arrival, dismissal and walkways.



General educators' ratings were significantly less than the administrator's ratings of the extent to which students with ESN are taught expectations for arrival, dismissal, and walkways ( $H = -33.03, p = .007, r = -.24$ ). General educators' ratings were also significantly less than the related services providers' ratings of the extent to which students with ESN are taught expectations for arrival, dismissal, and walkways ( $H = -40.70, p = .005, r = -.279$ ).

We also discovered differences across the four groups of respondents in the extent to which students with ESN are taught expectations for the playground or leisure areas. A Kruskal-Wallis H test was used to investigate these differences, and based upon inspection of a boxplot, distributions of the extent to which students with ESN were taught these expectations were not similar for all groups, and the distributions were statistically significantly different between groups,  $H(3) = 12.1, p = .007$ . The post hoc analysis revealed significantly lower ratings by general educators when describing the involvement of students with ESN in learning expectations, as compared to administrators ( $X^2 = -30.91, p = .017, r = -.223$ ) and related service providers ( $X^2 = -33.62, p = .037, r = -.23$ ).

{INSERT TABLE 4 ABOUT HERE}

We also used a Kruskal- Wallis H test to investigate differences in the extent to which students with ESN were taught expectations for the classroom, according to the respondent's position: GET ( $N = 95$ ), Administrator ( $N = 85$ ), SET ( $N = 45$ ), Related Services ( $N = 48$ ). Based upon inspection of a boxplot, distributions of the extent to which students with ESN were taught these expectations were not similar for all groups. However, the distributions were statistically significantly different between groups,  $H(3)=13.367, p = .004$ . The post hoc analysis revealed significant differences in the involvement of students with ESN, with lower ratings by General

educators compared to administrators ( $X^2 = -33.57, p = .007, r = -.242$ ) and General educators and compared to service providers ( $X^2 = -34.54, p = .030, r = -.235$ ).

### **Differences in Inclusion in SWPBIS Due to Educational Placement**

The fourth research question in this study was: Do respondents perceive differences in participation in SWPBIS instruction and activities for students with ESN on the basis of their placement in general education or special education classes? Respondents used a likert-type rating scale (0 = not at all; 10 = extensively) in this analysis. Across the groups of respondents who indicated that students with ESN were educated in general education classes, resource classes, or self-contained classes, respondents indicated that the participation of students with ESN in SWPBIS instruction and activities was similar for most items, with the exception of the importance of including students with ESN in SWPBIS activities. A Kruskal-Wallis H test was used to investigate differences in the extent to which respondents believed it was important to include students with ESN in SWPBIS activities, according to where students with ESN are taught: General education ( $N = 76$ ), Resource ( $N = 119$ ), Self-contained separate class ( $N = 90$ ). Based upon inspection of a boxplot, distributions of the extent to which respondents believed it was important to include students with ESN in SWPBIS activities were not similar for all groups. However, the distributions were statistically significantly different between groups,  $H(2) = 6.428, p = .040$ . The post hoc analysis revealed significant differences in the respondent's ratings of the importance of including students with ESN in SWPBIS activities, according to whether students with ESN were educated in separate classrooms as compared to general education ( $H = 23.31, p = .034, r = .19$ ). Specifically, those educators who indicated students with ESN are currently taught in separate classrooms rated their inclusion in SWPBIS as less important than those educators who indicated students with ESN are currently taught in general education classrooms.

### Discussion

The overall purpose of this study was to understand the extent to which SWPBIS coaches report students with ESN are included in SWPBIS instruction and activities, given the stated purpose of SWPBIS to address the needs of *all students* with a focus on *all staff* and *all school settings* (Sugai & Horner, 2002). Overall, respondents perceive that students with ESN are involved in the incentive-based components (e.g., reward assemblies and reward ticket programs) of their school's SWPBIS plan. However, there were differences in perception among the groups of respondents in the extent to which behavioral expectations are taught to students with ESN. There were also differences among the respondents in the reported existence of behavior plans and systems for documenting and managing behavior violations for students with ESN. For example, fewer general educators reported that there was a documented system for dealing with behavior violations than did administrators who were surveyed. A troubling finding of this study was that 41.5% of general educators surveyed indicated that they did not know if there was a crisis plan for responding for dangerous situations involving students with ESN.

In fact, on the whole, general educators and related services providers were more likely to report being "unsure" of participation of students with ESN in a variety of SWPBIS activities and instruction. In contrast, administrators and special education teachers were less likely to report feeling unsure and provided descriptions of involvement of students with ESN that were often different from that reported by general educators and administrators. For example, only 52.6% of general educators reported there was a documented plan for dealing with behavioral violations for students with ESN, whereas 88.4% of administrators and 71.1% of special educators reported such plans exist. Similarly, 98% of related services providers report students with ESN are part of reward assemblies, whereas only 84.4% of special educators report this to

be true. Together, the findings of this study illustrate the extent to which understanding and awareness of student involvement in SWPBIS activities varies substantially by the role of the school personnel, with administrators and special educators having more similar responses to one another (on the whole), and general educators and related services having responses more similar to one another. Similarly, the findings demonstrate large numbers of educators are not sure how, or if, students with ESN participated in SWPBIS activities and instruction in general.

One possible explanation of the findings that the degree of involvement varies by role of the school personnel is that respondents have different types and frequencies of interactions with students with ESN. In many cases, special educators spend more time with students with ESN across the school day than other respondents, due to their physical separation from general education (e.g., Morningstar et al., 2017). Therefore, one could surmise the responses of special educators are the most accurate reflection of actual practices for students with ESN. Further supporting this hypothesis, previous researchers have demonstrated general education teachers are less likely to know about, and thus provide, supports and services to students with ESN (Blecker & Boakes, 2010). Similarly, other respondents may be reporting what they believe to be true in general, or what they believe *should* be true. For example, the SWPBIS literature emphasizes its applicability to all students (c.f. Hawken & O'Neill, 2006), which may result in some respondents believing that SWPBIS is in fact implemented as intended for all students.

Similarly, general educators reported less involvement in facilitating SWPBIS participation for students with ESN than other groups of respondents. For example, general educators were overall less likely to report: providing rewards, teaching behavior expectations, managing discipline, and examining discipline data for students with ESN than administrators, special educators, and related services providers. Similarly, general educators reported less

involvement in teaching behavior expectations and managing discipline issues for students with ESN. For example, the results revealed general educators were less likely to report that students with ESN were taught expectations for arrival, dismissal, and walkways; taught expectations in playground and leisure areas; and taught expectations in the classroom compared to administrators and related services providers. Further, general educators reported students with ESN were less likely to be taught expectations for playgrounds and leisure areas and for the classroom than administrators and related services providers. Finally, respondents who indicated students with ESN are taught in self-contained or separate settings rated the need for students with ESN to be involved in SWPBIS activities less important than those respondents who indicated students with ESN were currently taught in general education settings.

Together, these findings illustrate the diminished involvement or awareness of general educators in providing supports and instruction on SWPBIS to students with ESN. These findings are similar to other reports of general educators being less involved in teaching students with ESN (e.g., Giangreco, Broer, & Edelman, 2001; Lee, Soukup, Little, & Wehmeyer, 2009). This finding further suggests the programmatic separation of students with ESN from general education-related SWPBIS efforts by virtue of their physical separation. In summary, findings from the present analyses present a glimpse in the participation of students with ESN in SWPBIS instruction and activities, as reported by SWPBIS coaches. These findings suggest special educators remain primarily responsible for facilitating involvement of students with ESN in SWPBIS and that these students are not consistently part of tier one SWPBIS efforts.

### **Limitations**

The present study sought to describe the inclusion of students with ESN in tier one SWPBIS instruction and activities using a survey of school-based SWPBIS coaches. This

approach to addressing our research questions has limitations which must be considered. First, our method involved surveying school-based coaches in a single state. While this state was selected due to its fidelity of implementation of SWPBIS practices, the findings from a single state cannot be generalized to all other states, given the unique policy and practical differences across states. A second limitation is that we ultimately obtained a smaller sample size than is considered ideal given the quantity of surveys initially distributed. While we were still able to obtain participants from a wide range of schools and school districts, the ideal and actual number of respondents differed by a total of eight participants, and thus our findings must be interpreted with due caution. Third, our attempts to survey on-the-ground implementers of SWPBIS instruction and activities led us to survey coaches; however, there may be other school personnel who could provide fuller and richer information about how SWPBIS is taught and made available to students with ESN. Future research should continue to seek perspectives of multiple stake holders and respondents. Finally, the use of a survey, though grounded in extant research, is in itself limiting. Respondents were able to provide only limited explanatory information in a survey, and future research may benefit from more detailed analyses including observations and interviews to further understand the inclusion of students with ESN in SWPBIS.

### **Implications for Policy and Practice**

The evidence presented here suggests students with ESN may not be fully included in SWBPIS initiatives at their schools. However, students with ESN frequently demonstrate problem behavior (O'Neill, 2004). Because presence of problem behavior likewise increases chances for both being removed from general education and experiencing aversive practices such as restraint and seclusion (Trader et al., 2017), more concerted efforts must be made to prepare all school personnel to prevent and respond to problem behaviors for this group of students. For

example, the principles of ABA and specialized instruction suggests the effectiveness of behavior intervention plans, and these plans should include crisis plans whenever necessary. However, the results of this study revealed that general education teachers were unaware of crisis plans for students with ESN. These findings pose serious threats to the provision of appropriate behavioral, emotional, communicative, and other supports of students with ESN.

The preparation of each school staff member to implement SWPBIS efforts for each student at a school is thus recommended. Previous reports have demonstrated loopholes in tier one SWPBIS assessment tools (c.f. Kurth et al., 2017), enabling schools to target “most” staff and students. Addressing this loophole through targeted training and policy would likely be advantageous for students with ESN. Further, the adoption of school practices and policies that focus on integrating SWPBIS across tiers of instruction, so that any students who are taught in separate classrooms for all or part of the day, are included in SWPBIS instruction and activities is essential. This is particularly relevant given the potential of SWPBIS to create infrastructure to support and maintain inclusive practices in general (Freeman et al., 2006).

### **Implications for Research**

Limited studies have investigated the involvement of students with ESN in SWPBIS efforts. Future research is needed to fully investigate the extent to which students with ESN are meaningful participants in SWPBIS instruction and activities across all three tiers. The present study suggests their limited involvement; however, by only focusing on a single state and a single tier of instruction, our results are not generalizable. Understanding more fully the experiences of students with ESN across states and tiers, including the extent to which tiered instruction is accessible, cumulative and iterative for this population of students, is needed.

Additionally, understanding the extent to which SWPBIS conveys positive impacts on the social, emotional, academic, and/or behavioral long- and short-term outcomes of students with ESN must be described. At present, the programmatic and physical separation of students with ESN limits their participation in SWBPIS. Yet, the impact of this separation on student outcomes is not understood. Future research is needed to understand how, and if, students with ESN benefit from participation in SWBPIS. Likewise, research examining different configurations of support at various tiers must be investigated to determine their impact on outcomes for students with ESN.



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Table 1  
*Membership on SWPBIS Team*

School Position	Total Frequency	Percent
General education teacher	280	92.1
Administrator	273	89.8
Counselor	237	78
Special education teachers for students with “mild” disabilities (ADHD, LD)	183	60.2
Special education teachers for students with “severe” disabilities (ASD, ID, MD)	152	50
Special education teachers for students with emotional/behavioral disorders	148	48.7
Behaviorist	57	18.8
Paraprofessional	50	16.4
Social worker*	42	13.8
School psychologist*	15	4.9
Specials teachers*	15	4.9
Not sure who is on SWPBIS team	12	3.9
Title teacher*	10	3.3
Parent or Family Coordinator*	7	2.3
Nurse*	4	1.3
Librarian*	3	1
Related services (OT, SLP)*	2	.7
Instructional Coach*	2	.7
Cook*	1	.3
Office Clerk*	1	.3
Custodian*	1	.3
Curriculum Coordinator*	1	.3
Student leadership*	1	.3
Early education teacher*	1	.3
One team for each tier*	1	.3

*Note.* ADHD = Attention Deficit Hyperactivity Disorder; LD = Learning disability; ASD = Autism spectrum disorder; ID = intellectual disability; MD = multiple disabilities. OT = occupational therapist; SLP = speech language pathologist. \* = the respondent entered this role in response to the open-ended prompt “other”

Table 2  
*Perceptions of the Involvement of Students with ESN in the Key Elements of SWPBIS*

Survey Question	General Educators			Administrators			Special Educators			Related Services Providers		
	Yes	No	Unsure	Yes	No	Unsure	Yes	No	Unsure	Yes	No	Unsure
Are students with ESN involved in reward assemblies?	94.8	2.1	3.1	91.9	5.8	2.3	84.4	6.7	8.9	98	2	0
Are students with ESN involved in reward ticket program?	93.8	1	5.2	90.7	4.7	4.7	88.9	6.7	4.4	98	2	0
Have you given a reward ticket to student with ESN?	81.1	15.8	3.2	87	7	5.8	80	17.8	2.2	88	8	4
Are students with ESN given office discipline referrals?	68.8	9.4	21.9	84.9	14.0	1.2	71.1	17.8	11.1	70	18	12
Is there a documented system for dealing with and reporting specific behavioral violations for students with ESN?	52.6	9.5	37.9	88.4	10.5	1.2	71.1	20	8.9	80	2	18
Is there a documented plan for which behavior violations are managed by school office / administration for students with ESN?	54.7	9.5	35.8	82.4	15.3	2.4	62.2	17.8	20	64	12	24
Is there a documented plan for which behavior violations are managed by the classroom teacher for students with ESN?	53.7	11.6	34.7	81.2	16.5	2.4	68.9	17.8	13.3	64	10	26
Is there a documented crisis plan for responding to dangerous situations involving students with ESN?	44.7	13.8	41.5	78.8	11.8	9.4	57.8	2.2	20	76	8	16

Table 3  
*School Personnel Perceptions of the Involvement in Facilitating Involvement of Students with ESN in SWPBIS*

Survey Question- Responses to the question “In the past year, have you been involved in...”	General Educators			Administrators			Special Educators			Related Services Providers		
	Yes	No	Unsure	Yes	No	Unsure	Yes	No	Unsure	Yes	No	Unsure
... providing SWPBIS rewards for any student?	97.9	2.1	0	95.3	3.5	1.2	88.9	11.1	0	98	2	0
... teaching behavior expectations to any student?	100	0	0	98.8	1.2	0	97.8	2.2	0	100	0	0
... managing discipline for any student?	97.9	2.1	0.0	97.7	2.3	0	100	0	0	82.4	17.6	0
... providing rewards to students with ESN?	72.9	24.0	3.1	88.4	9.3	2.3	88.9	11.1	0	82	16	2
... teaching behavior expectations to a student with ESN?	59.4	37.5	3.1	87.2	12.8	0	86.7	13.3	0	78	22	0
... managing discipline for a student with ESN?	50	45.8	4.2	89.5	10.5	0	82.2	17.8	0	50	48	2
... examining discipline data for any student?	85.4	13.5	1.0	97.7	2.3	0	86.7	13.3	0	94	4	2
... examining discipline data for students with ESN?	49	42.7	8.3	84.7	15.3	0	80	20	0	76	22	2

Table 4  
*School Personnel Perceptions of Involvement in Teaching and Including Students with ESN in SWPBIS*

	<i>N</i>	$X^2$	df	<i>p</i>
To what extent does the PBIS team discuss how to include SwESN in SWPBIS?	271	2.715	3	.438
To what extent does the PBIS team modify materials to make universal PBIS materials accessible for SwESN?	262	4.749	3	.191
To what extent is AT, such as AAC devices, designed to support participation of SwESN in universal PBIS activities and instruction?	239	1.842	3	.606
Are SwESN taught behavioral expectations for arrival, dismissal, and the walkways?	276	15.913	3	.001
Are SwESN explicitly taught behavioral expectations for the playground or other leisure areas?	272	12.1	3	.007
Are SwESN explicitly taught behavioral expectations for the classroom?	273	13.367	3	.004
Do you think it is possible to include all students with significant developmental disabilities in all tiers of school-wide PBIS?	276	2.265	3	.519
Do you think it is important to include SwESN in SWPBIS activities (e.g., assemblies)?	278	7.126	3	.068
Do you think it is important to include SwESN in school-wide processes (e.g., rewards and discipline procedures)?	278	4.518	3	.211