

Best Practice PBIS Implementation: Evidence Indicators in Each Tier of the PBIS Champion Model

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Abstract: This study presents empirical data on the best practice implementation of the Positive Behavior Interventions and Supports (PBIS) Champion Model in schools at each of the three tiers of implementation. The purpose of this study was to identify PBIS best practice evidence indicators for each of the tiers. The design included a review of evidence indicators from a cohort of schools ($N = 117$) that participated in a three-year PBIS Champion Model workshop series during the 2016-2019 school years and met model criteria for implementation based on the PBIS Champion Model Framework. Evidence indicators were collected and analyzed from schools that met the requirements of each implementation level. While some met the requirements of all three levels, others met those of two, one, or none. Of the 117 schools in the cohort, 113 schools met the Tier 1 level (Bronze) requirement, 94 met the Tier 2 level (Silver) requirement, and 86 met the Tier 3 level (Gold) requirement. The findings indicate a variety of evidence indicators in each tier of the PBIS Champion Model Framework (i.e., processes, protocols, trainings, communication structures) that aligns with Deming's Plan, Do, Study, Act (PDSA) cycle for quality implementation. This study presents a practical resource that can guide successful systemic implementation of PBIS in each tier and can support student academic learning and behavior in those schools.

Keywords: Positive Behavior Interventions and Supports, PBIS, evidence indicators, implementation, school administrators, school culture

Schools and districts nationwide are experiencing a rapid increase in the number of students needing a variety of behavioral supports to access their education. These increasing numbers have some teachers, administrators, and parents in a state of concern. Stu-

dents deserve to have access to school environments that are safe, welcoming, protective, and preventative with high expectations conducive to their academic and social emotional learning. Creating such school environments that meet these complex behavioral needs is challenging but worth the investment of time and resources from the school and district. Educators must ensure best practice implementation is consistent to reach the best outcomes for students.

Why Best Practice PBIS Implementation is Essential for Students

Some compelling reasons to invest in best practice PBIS implementation include the strong positive correlation between behavior problems and low academic achievement (Gest & Gest, 2005; Landrum et al., 2003) and a reciprocal effect of behavior problems causing disruption in academic engagement. As a result, students may display lower levels of academic achievement due to a lack of engagement compared to students in a highly engaged class showing fewer behavior difficulties (Payne et al., 2007). Studies across general and special education settings have recognized the relationship between students' academic failure and increased incidents of problem behavior in school (Mayer, 1995; O'Neill et al., 2001; Porch & Protheroe, 2002; Praisner, 2003; Smith & Katsiyannis, 2004). Furthermore, the relationship between behavior incidents and negative student academic achievement outcomes continues to be a concern for teachers throughout the nation.

In addition, in over twenty years of research on discipline approaches, researchers have found that out-of-school suspension and zero-tolerance approaches correlates with lower achievement and fails to reduce or prevent misbehavior (Irvin et al., 2004; Losen, 2011; Mayer, 1995; Skiba & Peterson, 1999; Skiba & Rausch, 2006). Students who were suspended and/or expelled

were more likely to be held back a grade or drop out of school compared to those who were repeatedly disciplined (Balfanz & Boccanfuso, 2007). In relation to this finding, 37% of students with a mental health condition age 14 and older have been found to dropout of school, comprising the highest dropout rate of any disability group (NAMI, 2017). PBIS is one example of an evidence-based tiered system of support in which students have access to a wide range of behavioral and mental health interventions and supports in schools (Wang et al., 2013).

What Impacts Best Practice PBIS Implementation in Schools

Best practice PBIS emphasizes four integrated elements: (a) data-based decision making, (b) measurable outcomes supported and evaluated by data, (c) practices with evidence that these outcomes are achievable, and (d) systems that efficiently and effectively support implementation of these practices (Sugai & Horner, 2009). For such initiatives to produce positive effects on student behavior, Durlak and Wells (1997) emphasize the importance of implementing evidence-based mental health prevention and intervention initiatives in schools, which require proper development and implementation. Similarly, implementation science emphasizes the importance of organizational capacity and structures in effective implementation (Fixsen et al., 2005). Han and Wiess (2005) also highlight key factors that influence implementation as leadership, buy-in, and characteristics of the implementers. Although there is an abundance of research on the impact of PBIS implementation in schools, there has been limited work on practical systemic evidence indicators in each tier of implementation, making it difficult to assess accountability and sustainability beyond the use of traditional PBIS survey measures.

One research-based PBIS framework designed to help with effective implementation and sustainability is called the PBIS Champion Model (Hannigan & Hauser, 2015; Hannigan & Hannigan, 2018). The model, displayed in Figure 1, works as a framework for creating a comprehensive systems approach for the design and delivery of an effective behavior system at a school or district. This action-oriented framework provides quality criteria and how-to steps for developing, implementing, monitoring, and sustaining each level of the system: Tier 1 (Bronze), Tier 2 (Silver), and Tier 3 (Gold). Each tier in the system consists of three categories, also known as ABC categories: Category A—Markers, Category B—Characteristics, and Category C—SMART Goals and the Work of the PBIS Team. Each category is composed of quality criteria and a set of

defined actions and evidence of implementation in each tier (Hannigan & Hauser, 2015).

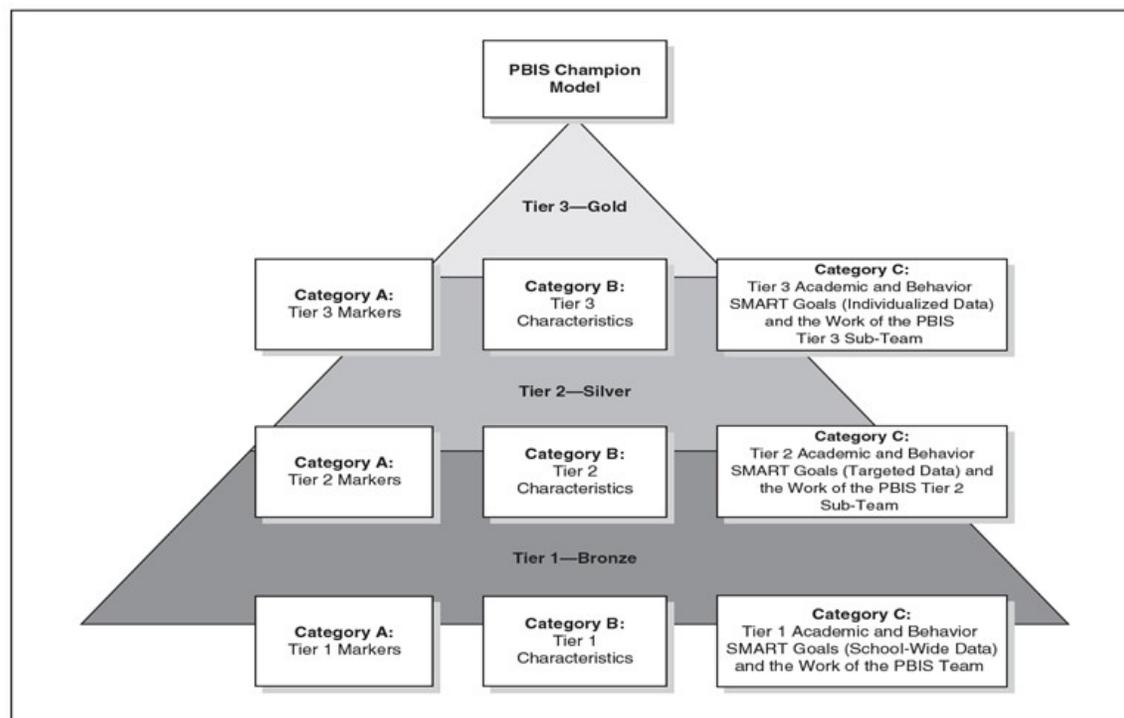
Establishing a solid foundation in each tier of implementation with the PBIS Champion Model is essential for best practice implementation. Applying this model requires administrators and the school's leadership/behavior team to provide evidence indicators for each tier of quality implementation throughout and at the end of each school year. If provided evidence indicators do not align with the ABC categories in each tier, there is likely to be a gap in implementation (a lack of evidence). *Category A: Markers* focuses on the systemic components of the implementation, *Category B: Characteristics* focuses on the visibility of implementation amongst the school and stakeholders, and *Category C* focuses on SMART goal data demonstrating the effectiveness of the implementation of academic and behavioral success of the students. By synthesizing the best practice evidence indicators for each tier from model PBIS Champion Schools, this study aims to provide a comprehensive overview of what is necessary for best practice evidence indicators in each tier. Three research questions guided this work:

- 1) What are the best practice evidence indicators for Tier 1 PBIS Champion Model implementation?
- 2) What are the best practice evidence indicators for Tier 2 PBIS Champion Model implementation?
- 3) What are the best practice evidence indicators for Tier 3 PBIS Champion Model implementation?

Methods

In order to investigate the best practices in each tier of PBIS implementation, the evidence indicators of each tier of the PBIS Champion Model implementation were evaluated using a qualitative, multiple-case study design. This consisted of examining the submitted documents/evidence indicators from multiple schools that attained each tier of the PBIS Champion Model. Utilizing this multiple-case qualitative design is one way of studying a social phenomena, such as implementation of PBIS best practices, while enabling the collection of empirical materials to enhance understanding. According to Yin (2003), the multiple-case design uses the logic of replication in which the procedures are replicated for each case. Furthermore, reviewing the evidence can inform internal accountability practices and assist schools in developing the collective capacity needed for sustained and effective school improvement efforts (Boudett et al., 2005; Elmore, 2004).

Figure 1

PBIS Champion Model

Description of the PBIS Champion Model Three Year Workshop Phases

The PBIS Champion Model workshops are designed to develop the capacity of administration and their school's behavior/leadership team in establishing model PBIS implementation in each tier. A three-phase professional learning experience is required of the school teams that are part of these workshops. The three-tiered approach includes professional development for all PBIS team members across a three-year period.

Phase 1 Year 1: Tier 1 School-Wide PBIS Implementation (3 8-hour trainings). The PBIS Champion Model Framework Overview and School-wide Tier 1. ABCs of Tier 1: A-Tier 1 Ten Markers, B-Tier 1 Characteristics, and C-Tier 1 SMART Goals and the Work of the PBIS Team.

Phase 2 Year 2: Tier 2 Targeted Intervention Implementation (3 8-hour trainings). The PBIS Champion Model Framework Overview and Tier 2 Targeted Interventions. ABCs of Tier 2: A-Tier 2 Eight Markers, B-Tier 2 Characteristics, and C-Tier 2 SMART Goals and the Work of the PBIS Tier 2 Sub-Team.

Phase 3 Year 3: Tier 3 Individualized Interventions PBIS Implementation (3 8-hour trainings). The PBIS Champion Model Framework Overview and Tier 3 Individualized Interventions. ABCs of Tier 3: A-Tier 3 Five Markers, B-Tier 3 Characteristics, and C-Tier 3 SMART Goals and the Work of the PBIS Tier 3 Sub-Team.

Participants

The PBIS Champion Model workshops series was provided to PBIS school teams located within a similar county region, and 117 PBIS school teams participated. Of these 117 PBIS school teams, 76 school teams represented primary school levels and 41 school teams represented secondary school levels, including alternative education sites. Four schools that were part of the original cohort did not continue the workshop series after the first year and did not meet model PBIS level implementation criteria. All of the PBIS school teams were in their initial stages of PBIS implementation at the start of this workshop series.

Sampling

Purposeful sampling was utilized, consisting of only school PBIS teams who registered and attended the three-year PBIS Champion Model workshop series

and study. Purposeful sampling is commonly utilized to help the researcher form generalizations from individual cases--in this case school PBIS teams participating in the PBIS Champion Model workshops who were responsible for PBIS implementation in each tier at their school (see sample populations in Sandelowski, 2000). All participants at the workshops were asked to submit PBIS implementation artifacts for each tier of implementation each school year for a total of three school years. These school sites were ideal participants for the study because they were in their initial stages of PBIS implementation at the beginning of the PBIS Champion Model workshop series. They all stated that they lacked systemic tiers of behavior supports prior to the workshops.

Data Collection

Institutional Review Board approval was obtained for the use of the PBIS school artifact data that was submitted each year as part of the PBIS Champion Model workshop series. All schools were provided with an explanation and accepted the conditions under the informed consent form prior to the start of the workshops; they specifically indicated they would submit artifacts for each tier, and this information would be shared anonymously to other educators in the field through research, such as this study, if model criteria in each tier were met.

Data Analysis

This multiple-case study design included the analysis of multiple information sources as recommended by Yin (2003) such as, but not limited to, documents, archival records, interviews, direct observations, participant observations, and physical artifacts. For the purpose of this study, sources included (a) qualitative data (documents/physical artifacts) in Tier 1 for 113 out of the 117 (Tk-12) schools met the Bronze Level criteria, (b) qualitative data (documents/physical artifacts) in Tier 2 for 94 of the 117 (Tk-12) schools met the Silver Level criteria, and (c) qualitative data (documents/physical artifacts) in Tier 3 for 86 of the 117 (Tk-12) schools met the Gold Level criteria. The overall intent of this rigorous artifact data collection was to develop an in-depth understanding of best-practice evidence indicators in each tier of PBIS implementation. Schools that participated and met the PBIS Champion Model school criteria for Tier 1 (Bronze Level), Tier 2 (Silver Level), or Tier 3 (Gold Level) were asked to submit their evidence of implementation (documents/physical artifacts). The evidence for each tier of implementation was analyzed and triangulated using the PBIS Champion Model ABCs in each tier. The evidence indicators were derived from

the schools that met the ABC criteria in each tier. Each school submitted multiple evidence points for each tier. In order to analyze the common evidence indicators, an open-coding system was utilized to rank the artifact types that were most commonly submitted in each tier of implementation.

Limitations

There was one main factor that affected the validity and reliability of this study: non-representative sampling. Although the participants in the research study represent the school behavior teams that met all of the components of the PBIS Champion Model in each tier, they may not adequately represent each school site because of inconsistencies of implementation that often occur at schools. It would be beneficial to also analyze the factors impeding implementation based on their implementation in each tier.

A few additional limitations were present in this study. A lack of group homogeneity was a limitation because participating PBIS teams came from different school levels (primary and secondary), and implementation can differ between these levels. Secondly, sample sizes were not equal across primary and secondary levels. A majority of the participating schools were at the primary level, making generalizability challenging across secondary grade levels. Finally, the study used no comparison group, making it difficult to compare implementation success.

Findings

Findings of this study are in the form of best practice evidence indicators for each tier of the PBIS Champion model implementation. Table 1 displays the indicators for Tier 1, Table 2 displays indicators for Tier 2, and Table 3 displays indicators for Tier 3.

Discussion and Recommendations

Our recommendations for implementation success are framed around Edward Deming's Plan, Do, Study, Act (PDSA) cycle (Tague, 2015). The PDSA cycle is an effective organizational change management model utilized with teams across a variety of domains, and it is often used to help teams improve the quality of implementation. The first step, *plan*, is often defined as a process for a team to ensure alignment of aims and goals. The second step, *do*, is defined as a process for teams to implement their plan. The third step, *study*, is often defined as a process for teams to study effectiveness and analyze the results of their plan based on relevant data. The fourth step, *act*, is defined as a process for teams to adjust or modify the plan to improve implementation based on their findings. The evidence

Table 1

*Summary of Evidence Indicators in Tier 1 of PBIS Champion Model Implementation***Tier 1 Evidence Indicators**

-
- School mission statement includes behavior component
 - Monthly meeting dates and completed agendas
 - PBIS Team and Coach established
 - SMART goals established
 - Staff presentation on Tier 1 implementation
 - Staff email updates (at least monthly)
 - Staff feedback survey input
 - Staff training during staff meetings
 - Minors and Majors defined
 - Flowchart for discipline responses
 - Referral form aligned with identified process
 - Staff training on forms
 - Process for entering minor and major data
 - Designated PBIS team member ensuring behavior data updated before meetings
 - Top five reports at meetings (i.e., location, time of day, etc.)
 - Selected behavior expectations and rules
 - Posted expectations and rules in each setting
 - Students and staff can recite the selected expectations (certificated and classified)
 - Sample of *caught being good tickets* or point system aligned with school wide expectations
 - Student awards and reinforcements based on student feedback (student survey or interviews)
 - Student incentives are provided in a variety of methods (i.e., individual, classroom, school wide) and are timely
 - Sample of staff and student rewards or reinforcements
 - Sample of lessons or process to teach school wide expectations to students and staff (i.e., PPT, videos, passport day, etc.)
 - Evidence of implementing the Tier 1 markers after each training
 - Observation walkthrough data--goal of 30 or more points
 - Monthly log of implementation steps
 - School PBIS handbook, training PowerPoint presentation
 - Classroom expectations and rules posted
 - Classroom routines and procedures in place
 - Positive language observed
 - Reteaching opportunities of expectations and rules (i.e., lessons, circles, SEL, etc.)
 - Tier 1 4 C's (Climate, Communication, Curriculum, Culture) implemented in classrooms
 - PBIS agenda items demonstrating time for evaluating implemented actions
 - Benchmark of Quality Survey completion goal 80% or other PBIS surveys (i.e., TFI)
 - SMART goals met (i.e., suspension, subgroup discipline, minors, and majors)
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indicators from each tier in this study can be best implemented using the PDSA cycle as a framework. In each tier, there are identified evidence indicators for PBIS teams that align with the *plan, do, study, and act* stages. In fact, all of the evidence indicators reveal the importance of having a designated group of local experts that know their goals, roles, and responsibilities and have a structure in place for analyzing the behavior data for the students and adjusting goals based on student and stakeholder needs on an ongoing basis.

When implementation stagnates, we recommend that educators examine whether or not their actions in

each tier address two important elements: 1) the collection of evidence of implementation effectiveness and 2) the use of the PDSA cycle of implementation improvement. If they do not, it likely indicates a misalignment of implementation. Subsequently, the designated team in each tier should revisit the *plan* to ensure the alignment is adjusted and stakeholders involved understand the steps to move implementation (i.e., the area of focus--tiered implementation of PBIS) back in alignment with its common goals.

Table 2

*Summary of Evidence Indicators in Tier 2 of PBIS Champion Model Implementation***Tier 2 Evidence Indicators**

-
- Purpose of Tier 2 PBIS sub-team clear and consistent bi-monthly meeting dates and completed agendas (including Tier 2 problem statements and actions)
 - PBIS Tier 2 lead established
 - Behavior specialist is on the team
 - Tier 2 SMART goals established
 - Staff Tier 2 PowerPoint presentation
 - Staff email
 - Staff feedback survey input
 - Staff Tier 2 training during staff meetings or other designated times
 - Structure of staff feedback on Tier 2 needs and implementation at least monthly (i.e., input link, component on academic PLC agenda, etc.)
 - Staff updates provided regarding Tier 2 interventions at least monthly
 - Entrance criteria established for each Tier 2 intervention offered
 - Menu of Tier 2 interventions established
 - Up-to-date data utilized at Tier 1 and Tier 2 PBIS meetings
 - Staff understands the purpose of each Tier 2 intervention
 - Staff understands the process for referring students for Tier 2 interventions
 - Process for entering Tier 2 intervention data
 - Staff member is designated to ensure the Tier 2 data is updated before Tier 2 meetings
 - Process for monitoring Tier 2 intervention data is established and visual to all members (i.e., behavior data wall, shared spreadsheet, etc.)
 - All members of the Tier 2 team have access to Tier 2 information and data
 - Tier 2 Collective and Individual SMART Goals monitored at every meeting
 - Process in place for modifying Tier 2 intervention, considering a new intervention, exiting student from intervention, or referring to the Tier 3 sub-team for additional support
 - Process established for fidelity checks of all Tier 2 interventions offered at the school
 - All stakeholder roles and responsibilities reviewed to ensure implementation
 - Additional support trainings or meetings established to review fidelity
 - Process for gathering staff input regarding Tier 2 implementation fidelity at least monthly
 - Tier 2 snapshots completed for each Tier 2 intervention offered
 - 80% or higher on the T2-MSR or other PBIS Survey (i.e., TFI)
 - Sample of re-teaching lessons or opportunities (i.e., PPT, videos, behavior rehearsals, behavior academies, etc.)
 - Attendance log of Tier 2 re-teaching opportunities (i.e., 6-8 sessions of re-teaching)
 - Student projects or other service learning opportunities
 - Lessons based on function of behavior and aligned with Tier 2 intervention student receiving
 - Mastery evidence (i.e., behavior exams)
 - Staff is designated to conduct re-teaching opportunities for every Tier 2 intervention offered
 - Sample of Tier 2 intervention incentives
 - Sample of Tier 2 incentives aligned with student Tier 2 intervention goals
 - Student awards and reinforcements based on student feedback (student survey or interviews)
 - Student incentives are provided in a variety of ways and are timely
 - Funding available for Tier 2 interventions
 - Process established to gather all staff input on Tier 2 implementation
 - Process or evidence of updated staff directly involved in a Tier 2 intervention at least twice a month
 - Practical process in place for staff or families to communicate
 - Student voice evident in communication
 - Plan for a timely response to communication needs
 - Roles and responsibilities clear
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Table 3

*Summary of Evidence Indicators in Tier 3 of PBIS Champion Model Implementation***Tier 3 Evidence Indicators**

- Purpose of Tier 3 PBIS sub-team clear and consistent
- Weekly meeting dates and completed agendas (includes Tier 3 problem statements and actions)
- PBIS Tier 3 lead established
- Behavior specialist is on the team
- Tier 3 SMART goals established
- Staff Tier 3 PowerPoint presentation
- Staff feedback survey input
- Staff Tier 3 training during staff meetings or other designated times
- Structure of staff feedback on Tier 3 needs and implementation at least monthly (i.e., input link, component on academic PLC agenda, etc.)
- Staff updates provided regarding Tier 3 regularly (i.e., at least weekly with direct stakeholders)
- Roles and responsibilities of behavior experts clearly identified for both general education and special education
- Staff understand their role in Tier 3 implementation (clear instructions)
- Entrance criteria established for each Tier 3 intervention offered
- Menu of Tier 3 interventions established
- Up-to-date data utilized from Tier 2 meetings
- Staff understand the purpose of each Tier 3 intervention
- Staff understand the process for referring students for Tier 3 interventions
- Threat assessment expertise at the school or available to the school
- Tier 3 lead identified to initiate Tier 3 process within a day
- Plan includes general education and special education expertise
- Timely process for entering Tier 3 data
- A staff member designated to ensure the Tier 3 data is updated before Tier 3 meetings
- Process for monitoring Tier 3 intervention data established and visual to all members (i.e., behavior data wall, shared google sheet, etc.)
- All members of the Tier 3 team have access to Tier 3 information and data
- Tier 3 Collective and Individual SMART Goals monitored at every meeting
- Process in place for modifying Tier 3 intervention, considering a new intervention, exiting student from intervention

Too often, schools lack evidence of PBIS implementation--particularly in the area of student-needs-aligned implementation in each tier. Therefore, it is critical for educators doing this work to not only know how to identify the evidence of effectiveness of this work, but most importantly to understand that implementation in each tier requires an organizational structure to ensure ongoing effectiveness and sustainability of implementation. Although the three research questions of this study were used to examine the best practice indicators in each tier, we encourage practitioners to systematize their processes for ongoing success. Without this systemization, schools often experience a breakdown in implementation as teams in each tier are adjusted and restructured or as new leaders are assigned to a school or team. The PBIS Champion Model can assist as an organizational frame that aligns with the PDSA cycle, and it can ensure ongoing imple-

mentation success if each tier of the framework is followed with full fidelity and accountability structures are established and maintained.

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