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# Readiness for Positive Behavior Interventions and Supports (PBIS) and School Mental Health (SMH) Interconnection: Development of a Stakeholder Survey

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READINESS FOR POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS (PBIS)  
AND SCHOOL MENTAL HEALTH (SMH) INTERCONNECTION:  
DEVELOPMENT OF A STAKEHOLDER SURVEY

by

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Submitted in Partial Fulfillment of the Requirements

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## DEDICATION

I dedicate this dissertation to Peter Warren, and to my parents, Rosalie and Antonio Anello. Thank you for your love, support, and encouragement throughout this journey.

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I extend my deepest gratitude to Dr. Mark Weist, who has been an extraordinary mentor. In addition to championing this work, Dr. Weist has had unwavering faith in this project and in me. Thanks also to my committee, Drs. Fred Medway, Cheri Shapiro, and Mitch Yell. Their time, effort, and encouragement throughout this project are much appreciated.

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## ABSTRACT

Positive behavior interventions and supports (PBIS) and school mental health (SMH) are prominent initiatives in the United States to improve student behavior and promote mental health and wellness, led by education and mental health systems, respectively. Unfortunately, PBIS and SMH are often separate initiatives in districts and schools, which usually results in many missed opportunities from this failed interconnection. The current paper details a necessary first step in the process by describing the development of a measure of assessing readiness to interconnect PBIS and SMH within the schools. Relevant literature, pilot data, and methodology are discussed, in addition to psychometric properties of the survey and future applications of this instrument for research, practice, and policy.

*Keywords:* positive behavior interventions and supports, school mental health, readiness, student learning, child and adolescent mental health, survey development

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## CHAPTER 1

### INTRODUCTION

Although previous federal and state education laws have focused on academic proficiency, recent legislation has included provisions for addressing students' behavior and overall mental health and well-being. For example, the 2004 reauthorization of the Individuals with Disabilities in Education Improvement Act (IDEA 2004) required use of positive behavior supports for special education students. Furthermore, IDEA 2004 stipulated that professional development for teachers include training on positive behavior supports. In addition, the No Child Left Behind Act of 2001 (NCLB; 2002) incorporated promotion of students' behavioral and mental health and encourages parents and community members to participate in school activities and initiatives. To achieve these goals, school-wide Positive Behavior Interventions and Supports (PBIS) is an effective approach.

PBIS is a framework for teaching, promoting, and reinforcing positive behaviors, as opposed to relying on reactive and punitive discipline strategies when students exhibit inappropriate behavior (Sugai & Horner, 2002). PBIS is not an intervention itself; rather, it is a system of using positive behavior strategies to minimize problem behaviors and increase adaptive behaviors (Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson, et al., 2000). Once this framework is in place, appropriate interventions and programs can be implemented according to the needs of the students and the community. School and

district staff simply cannot design, fund, and implement separate programs for each federal and state education initiative; thus, employing a school-wide PBIS framework can coordinate resources and interventions to both meet students' needs and satisfy federal and state requirements (Lewis-Palmer & Barrett, 2007).

PBIS operates on a three-tier system. In Tier I, primary intervention and prevention strategies to support positive behavior are put in place for the entire student population. For those students who do not respond to primary interventions (approximately 15% of the student population), Tier II or secondary interventions are implemented to increase the strength of protective factors at school, such as academic assistance and mental health services, and to decrease the effects of any risk factors the students may have, such as low socioeconomic status. Finally, Tier III or tertiary interventions are utilized for the remaining students (about 5%) who do not respond to Tier II strategies. Tertiary interventions are reserved for students with severe or chronic emotional/behavior problems, and target reducing the level and frequency of said problem behaviors (Sugai & Horner, 2002).

When viewed from a prevention and early intervention perspective, PBIS is a suitable model for promoting adaptive behaviors and ameliorating problem behaviors before they escalate. This is especially important when considering that the 1 to 5% of students with the most severe behavior problems account for approximately 50% of the behavioral incidents handled by teachers and school administrators (Eber, Sugai, Smith, & Scott, 2002; Sugai, Sprague, Horner, & Walker, 2000). However, implementation of the three-tier PBIS framework is limited. Many schools focus on implementation of Tier I interventions and neglect the secondary and tertiary tiers. Whereas there is a great deal of

research regarding the efficacy of Tier I interventions, more studies investigating the efficacy and mechanisms of secondary and tertiary interventions are needed (Childs, Kincaid, & George, 2010). Cohen, Kincaid, and Childs (2007) suggested that psychometrically sound measures that specifically assess the fidelity of school-based secondary and tertiary interventions need to be developed. Although primary interventions target all students and improve behavior for the majority of the student population, the lack of emphasis on secondary and tertiary interventions (both in research and in practice) does a disservice to the students who have the greatest need for assistance, especially those with behavioral and emotional problems.

Often, students exhibiting behavioral problems have concomitant mental health issues. Thus, school mental health (SMH) is a much needed addition to the school setting. SMH refers to a variety of mental health and wellness services provided to students within the school environment. Such services include testing and assessment, mental health education and promotion programming, collaboration and wraparound supports, and counseling for individuals, groups, and families (Nabors, Weist, Tashman, & Meyers, 1999). SMH services are delivered by a variety of professionals, including school psychologists, counselors, social workers, and community-based mental health practitioners, as well as others with backgrounds in clinical child and adolescent psychology and psychiatry (Weist, Lever, Stephan, Youngstrom, Moore, Harrison, et al., 2009). Because PBIS is a framework for service delivery, integrating SMH with PBIS is a logical next step for increasing accessibility of youth mental health services. Many schools across the United States use the PBIS framework and are familiar with its operation. Thus, SMH interventions will fit well with the three-tier system, as both share

the core principles of prevention and early intervention, as well as the provision of minimally sufficient services to address current problems. Many evidence-based SMH interventions have been developed, and can be used for prevention and early intervention purposes as well (Evans & Weist, 2004). In addition, using both PBIS and SMH together adds depth and quality of services at Tiers II and III, and furthers SMH services through the formal implementation structure of PBIS (e.g., prevention and early intervention perspective, progress monitoring, data-based decision making, and use of evidence-based practices).

Unfortunately, bringing PBIS and SMH together can be difficult for school district personnel. Many schools and districts, even those presently using PBIS in any capacity, may be unprepared to integrate SMH services into their current menu of programs and activities. A central barrier to PBIS-SMH interconnection is the lack of a measure to evaluate the readiness of schools and districts for undertaking this process. Evaluating readiness is the first part of PBIS-SMH interconnection, which is a multistep process. Because such a measure does not exist, program implementers and school leaders do not have a formal method by which to gauge the level of preparedness for PBIS-SMH interconnection, or if practitioners and stakeholders are even willing to entertain this idea. When stakeholders perceive an intervention as unnecessary, too expensive, or incompatible with their values and beliefs, the intervention is likely to fail (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Thus, evaluating readiness for intervention implementation and, in this case, PBIS-SMH interconnection, allows interventionists to identify areas in which stakeholders are likely to endorse the plan (e.g. need for change) and areas where they are not quite ready (e.g. alignment with the community's values).

In the following paper, a more in-depth review is presented on PBIS, SMH, efforts to better integrate them, and issues related to assessing school readiness for this critical agenda.

### **Positive Behavior Interventions and Supports (PBIS)**

Originally developed as a behavior modification strategy for students with severe behavior problems and disabilities, PBIS has been successful in promoting more adaptive and socially appropriate behaviors for a wide variety of students in diverse settings (Sugai, Horner, et al., 2000). Because it is based on principles of applied behavior analysis (ABA), PBIS may be used with children at various levels of functioning. By focusing on reinforcing appropriate and adaptive behaviors, PBIS can “render problem behavior irrelevant, inefficient, and ineffective by helping an individual achieve his or her goals in a socially acceptable manner, thus reducing, or eliminating altogether, episodes of problem behavior” (Carr, Dunlap, Horner, Koegel, Turnbull, Sailor, et al., 2002, p. 5). Carr and colleagues also indicate that PBIS includes a person-centered approach, focusing on the individual’s unique set of strengths and abilities to promote adaptive behaviors and better functioning across domains.

Furthermore, the person-centered approach of PBIS lends itself to the implementation of the wraparound process. The wraparound process is a system of support for students with intensive needs. It is designed to provide assistance for these students and their families by taking a strength-based approach and coordinating services in the students’ school and community (Eber et al., 2002). In addition, intervention is driven by the individual student’s needs, rather than service availability. Once the student’s needs have been ascertained, a system of services and supports can be developed to maximize

strengths and minimize deficits (Eber et al.). The wraparound team includes the educators, behavior management staff, mental health staff, and the individual's family and other advocates. The composition of this team provides a balanced approach to intervention planning and design, with the individual's best interests and needs at the forefront. Furthermore, the wraparound process model promotes the selection and implementation of appropriate services that are sustainable over time. Although PBIS in the schools focuses on academic, behavioral, and socio-emotional growth, the overarching goal of the framework is the improvement of individuals' quality of life across settings and across the lifespan (Carr et al., 2002).

In order to maximize the effectiveness of PBIS, support for this framework should come from various sources. Support and evaluation of outcomes at the state, district, and school levels not only facilitate implementation, but also promote sustainability (Barrett, Bradshaw, & Lewis-Palmer, 2008). For example, PBIS coordination at the state level for Maryland public schools includes a PBIS advisory group, a statewide PBIS management team, and a statewide PBIS leadership team. These groups work together to advance PBIS implementation and evaluate data regarding student outcomes. Furthermore, each group has separate responsibilities (e.g., the PBIS advisory group works to garner political support for PBIS and related programs and interventions).

Data suggest that PBIS is an effective framework for ameliorating behavioral issues and promoting the academic success and competence of all students. For example, a longitudinal study conducted by Bradshaw, Mitchell, and Leaf (2010) examined the effectiveness of PBIS at the school-wide (Tier I) level. In five years of school-wide PBIS implementation at 37 Maryland public schools, both the number of student discipline

referrals and suspensions decreased significantly. Furthermore, school staff who received PBIS training implemented the framework with high fidelity. An investigation of a Tier II intervention (Check-In/Check-Out) resulted in significant decreases in student discipline referrals and teacher ratings of student problem behaviors (McIntosh, Campbell, Carter, & Dickey, 2009). Similarly, Todd, Campbell, Meyer, and Horner (2008) found that the Tier II Check-In/Check-Out procedure significantly reduced the frequency and severity of problem behaviors (e.g. noncompliance with teacher directives, talking out of turn, disrupting the classroom, etc.). Furthermore, Lassen, Steele, and Sailor's (2006) study of the effects of school-wide PBIS indicated increased math and reading standardized test scores, in addition to reductions in office discipline referrals and suspensions.

The PBIS framework also emphasizes data-based decision making and use of evidence-based interventions (Sugai, Horner, et al., 2000), which parallels similar directives in IDEA 2004 and NCLB (2002). For teachers and school staff delivering PBIS interventions, existing methods of data collection, such as curriculum-based measurement, can be easily adapted to measure behavioral change (Deno, 2003). Freeman, Smith, and Tieghi-Benet (2003) extrapolated the idea of continuous assessment to the systems level. They suggested that assessment be integrated into all levels of the school system in order to ascertain areas of strength and opportunities for improvement and professional development. By collecting data that addressed relevant yet indirect issues that exist at the systems level, Freeman and colleagues hypothesized that implementation of PBIS could be improved. Their implementation of this systems-level continuous assessment approach at one middle school resulted in increased coordination

of various academic and behavioral initiatives operating within the school, identification of potential beliefs and attitudes that may attenuate the implementation and effectiveness of PBIS, increased parental engagement in school activities, and implementation of more efficient PBIS data collection methods. Although further study is needed, these results indicate that systems-level data monitoring can positively affect PBIS implementation.

Although the utility and effectiveness of PBIS have been established, disseminating this framework remains a challenge. According to Spaulding, Horner, May, and Vincent (2008), 47 states reported using PBIS, although the degree of implementation is variable. For example, the number of schools implementing PBIS in those states ranged from zero to 804. Thirty-one states reported having PBIS state leadership teams in place. Notably, of the 100,627 schools in the United States, just 7,953 reported implementation of school-wide PBIS (Spaulding et al., 2008). Thus, the breadth and depth of school-wide PBIS implementation varies both within and between states. Furthermore, implementation of the three PBIS tiers is inconsistent. According to Lane (2007), the primary level, or school-wide PBIS, is the most commonly implemented tier. Although primary interventions target the entire student population, not all students respond to these supports. Secondary and tertiary level supports exist for these students, but interventions at those levels are often partially implemented or not implemented at all. In addition, Lane indicated that more work is needed regarding how to methodically identify students in need of support beyond primary level interventions. Because Tier II and III interventions are implemented less frequently and with varying degrees of fidelity, many students in need of more intensive levels of support are not receiving the assistance they need to function academically and/or socially.



Several issues may be hindering further implementation and dissemination of PBIS. For example, a well-designed and user-friendly data collection system is essential for implementing PBIS interventions with fidelity (Anderson & Borgmeier, 2010). Proper data collection allows school staff to identify students in need of intervention and to track the progress of students receiving services. Furthermore, support services can have a large impact on the implementation and fidelity of PBIS. Technical assistance centers, sufficient resources, time for assessment and implementation, and ongoing training for teachers, administrators, and other staff members are critical to the success and sustainability of PBIS. Thus, initializing and maintaining PBIS requires coordination and cooperation at the systems level.

Given the effectiveness of PBIS in a variety of domains, proponents of the framework are currently taking steps to expand its use. For example, Fox, Dunlap, and Cushing (2002) have proposed a downward extension of PBIS into IDEA Part C interventions and programming (services for children with disabilities ages 0-3 years). These authors recommended that early interventionists, behavioral specialists, and psychologists use the PBIS framework, including functional behavior assessments (FBAs) and data-based decision-making, with children and families receiving IDEA Part C services. Such strategies can be written into the Individualized Family Service Plan to facilitate implementation. When these children transition to IDEA Part B services at age 3, Fox and colleagues suggested implementing PBIS prior to elementary school. For example, PBIS can be integrated into Head Start and preschool classrooms to prevent some behavior problems before they escalate into frequent and/or severe problems. This is one example of encouraging continuity by using PBIS across settings.

## **School Mental Health (SMH)**

As evidenced by the aforementioned research, PBIS is effective in improving academic, behavioral, and socio-emotional functioning among students of all ages and levels of functioning, thus facilitating students' overall development and well-being. Likewise, promoting good mental health among students has been a concern among interventionists, school professionals, and other key stakeholders. According to Merikangas, He, Brody, Fisher, Bourdon, and Koretz (2010), 13.1% of children ages 8 to 15 years have a diagnosable mental disorder. However, Burnett-Zeigler and Lyons (2012) indicated that population estimates for youth with mental disorders can range from 12% to 32%. Unfortunately, only a small portion of these children and adolescents receive mental health services (Gaskin, Kouzis, & Richard, 2008). Furthermore, the rate of youth with mental disorders becomes even higher when including children and adolescents who are experiencing difficulties due to subclinical disorders (i.e. those experiencing symptoms of disorders but below the threshold for a clinical diagnosis). For instance, a study of American adolescents showed that there are more teens who were rated as having "moderate" mental health than those who were rated as "flourishing" (average versus high social, emotional, and psychological well-being; Keyes, 2006). Though teens with moderate mental health may not meet criteria for having a diagnosable disorder, they are nevertheless experiencing mental health concerns.

Thus, the public schools are an ideal setting for reaching children and adolescents in need of mental health services. Although recent legislation, such as NCLB (2002), includes heavy emphasis on academic proficiency, research indicates that socio-emotional skills are associated with positive academic and developmental outcomes for

youth across the lifespan. For instance, socio-emotional skills in children have been identified as unique predictors of academic performance and as sharing a reciprocal relationship with academic performance (Nadeem, Maslak, Chacko, & Hoagwood, 2010). Furthermore, students' good mental health has been associated with increases in prosocial behavior and family engagement in school activities, as well as decreases in discipline referrals, special education referrals, emotional problems, and behavior problems (Stephan, Weist, Katoaka, Adelsheim, & Mills, 2007).

Children's and adolescents' mental health is associated with a variety of positive outcomes. Guzman, Jellinek, George, Hartley, Squicciarini, Canequez, et al. (2011) found that parent and teacher ratings of first grade students' mental health were predictive of the children's math, science, and language achievement test scores. Researchers have also shown associations between youths' mental health and their later socio-emotional functioning. Merrell (2010) indicated that preventative interventions aimed at promoting socio-emotional learning are linked with positive socio-emotional growth, improved attitudes and general functioning at school, and decreases in disorders such as depression. Moreover, students with emotional disabilities have low academic achievement, high dropout rates, and are more likely to have contact with the justice system within two years of leaving school (Duchnowski & Kutash, 2011). Unfortunately, just over 6% of youth ages 5 to 17 have contact with a mental health professional (National Research Council, 2006).

Due to the staggeringly small numbers of children and adolescents in need of mental health services who actually receive some kind of treatment, and the even smaller number of those who receive evidence-based treatments, mental health service providers must go

to these students. To reach these students, SMH services are a logical solution. However, these services may be quite limited, due to reliance on the special education system and a lack of in-school mental health services (Weist, Goldstein, Evans, Lever, Axelrod, Schreters, et al., 2003). Thus, expanded school mental health (ESMH) has been proposed as a remedy for this issue. According to Weist and Evans (2005), ESMH refers to developing relationships between schools and communities to support students' mental health through preventative measures and evidence-based interventions. Agencies and organizations in the community, including universities, health departments, community mental health centers, hospitals, and advocacy groups, partner with schools to provide a wide range of mental health supports and services. With an emphasis on prevention and early intervention, activities and services to promote good mental health are offered for both regular and special education students (Weist et al., 2003). As with the PBIS framework, the entire student body is the target population (primary prevention), with more intensive services available for students experiencing more difficult or chronic mental health and behavioral problems (secondary and tertiary prevention). Furthermore, students' families and other key stakeholders should direct these school-community partnerships.

Including students' families in ESMH is a critical component of successful implementation of these services. Engaging students' families in school activities and functions has been associated with improved academic performance and developmental outcomes across childhood and adolescence (Weist et al., 2009). Regarding ESMH, family involvement is positively correlated with attendance rates and compliance with treatment and recommendations (Weist, et al., 2009). Although research has identified

the positive outcomes associated with family engagement in ESMH, there is a great deal of variability between ideal and actual practices.

Another important aspect of bringing mental health services to the schools is funding and resources. In recent years, the schools have become *de facto* mental health centers due to the increasing numbers of children and adolescents with various mental health issues (Merrell, 2010; Splett & Maras, 2011). Fee-for-service mental health practitioners are available in most communities, but this is not a feasible option for families of limited means, those without health insurance, or those living in rural areas. For ESMH services, funding typically comes from grants, contracts, or other private sources of funding (Weist et al., 2003). Youth enrolled in schools with ESMH services are usually referred out to fee-for-service, licensed practitioners in the community if they have serious and complex issues that are beyond the scope of services offered at school. Although the majority of ESMH funding comes from Medicaid, these reimbursements are typically less than the cost of services rendered (Smith, 2002). Funding through state and federal initiatives, in addition to state taxes and federal assistance programs, supplement Medicaid reimbursements. Other funding sources include private organizations, such as the Robert Wood Johnson Foundation and other local community organizations (Weist et al., 2003).

The sources listed here each represent a separate funding stream. This presents a challenge for schools, as the lack of flexibility in funding streams may lead to disagreement among the funding sources, who may be unsure about what services their funding is actually supporting. In order to support ESMH services, there must be a paradigm shift from reliance on fee-for-service mental health toward school-wide, preventative interventions funded by a variety of sources. In a study of 92 community

mental health centers in 36 states, for-profit organizations were more likely to adopt and implement newer evidence-based interventions than non-profit organizations, possibly due to the number of limitations placed on the non-profit organizations by external funding sources (Schoenwald, Chapman, Kelleher, Hoagwood, Landsverk, Stevens, et al., 2008). Resolving funding issues and restrictions may allow for more innovative techniques, as well as utilizing and evaluating more evidence-based interventions.

The lack of coordination among funding sources of SMH is analogous to the lack of coordination among mental health service providers in the schools and the community. According to Stephan et al. (2007), SMH has been identified as a solution to the fragmentation of mental health services for children and adolescents. Because students in need of SMH services often have multiple issues of concern, coordination of treatments can ensure these students receive adequate services to address all of their needs. In addition, collaboration on SMH service delivery allows community mental health practitioners to reach a large number of youth in need of assistance, permitting school professionals to increase their mental health staff and funding through community partnerships (Weist, Ambrose, & Lewis, 2006). Stephan, Mulloy, and Brey (2011) indicated that SMH collaboration and clear, consistent communication among practitioners can avoid inconsistent implementation and inappropriate treatments, and also promote prevention and early intervention strategies.

One technique for coordinating mental health services is the previously discussed wraparound process. It is important to note that wraparound is not a service itself (Eber et al., 2002); rather, it is a planning process in which to coordinate and organize the various services a student will receive, evaluation of the results of any interventions, and

delegating responsibilities to those working with the student. This method supports students by increasing communication among those working with the student, including parents, teachers, interventionists, and other school and community professionals (Eber et al., 2002). Wraparound can be especially helpful for students needing more intensive tertiary services. Furthermore, wraparound can also improve some issues regarding implementing evidence-based interventions in the schools. For instance, some school practices and programming may not be evidence-based, and those that are evidence-based may not be implemented with fidelity or for the recommended length of time.

Stephan and colleagues (2007) made several recommendations for coordinating youth mental health services and promoting ESMH. First, school professionals must be cognizant of the link between mental health and school performance. By promoting mental health, the overall well-being of students improves, and other peripheral concerns that are detrimental to academic achievement (e.g. discipline referrals, truancy, drop outs, and lack of school engagement) are ameliorated. Also, school and community stakeholders must come to an agreement regarding SMH goals and programming, so as to develop initiatives that are germane to the needs of the students and the community. Second, partnerships between the community, families, and schools should be strengthened through collaboration with national professional organizations and utilizing evidence-based programs to encourage communication and collaboration among various constituents. To track progress, regular assessments using psychometrically sound instruments should be conducted. These assessments are not limited to student-related outcomes; data should be collected regarding training, coaching, fidelity of implementation, and other outcomes of interest. Finally, implementation issues unique to

working in the schools must be considered. The systemic factors relevant to implementing interventions in the schools, such as the hierarchy of administrators and the importance of administrative support, should be taken into account when making entrée into the system and integrating SMH with existing programs and initiatives.

Furthermore, Mellin and Weist (2011) suggested conceptualizing collaboration among SMH professionals using a social capital framework. By viewing these interconnected relationships from a perspective of mutual support and trust, ESMH services and outcomes for students can be enhanced by sharing resources and information. By working together, more significant and lasting results can be attained as opposed to working independently. Moreover, Mellin and Weist indicated that social capital should be formed across professional and group affiliations in order for ESMH professionals to learn from other disciplines. For instance, mental health practitioners in the community can learn about the unique logistical, cultural, and legal issues regarding delivery of mental health services in the schools. Thus, increasing knowledge in this organic fashion can increase the effectiveness of interventions and streamline SMH service delivery.

Another factor integral to successful SMH interventions is buy-in and support of school administrators, teachers, and key stakeholders. In a qualitative study by Mellin and Weist (2011), “buy-in among school professionals” was one of the top five essential factors impacting SMH collaboration. Results of this study also suggested that the support of administrators is necessary for SMH. Not only does administrative support facilitate the adoption and implementation of SMH, but this support diffuses throughout the school to teachers and other staff members. Administrative support also affected the



extent of SMH collaboration among school personnel and community mental health professionals. Langley, Nadeem, Katoaka, Stein, and Jaycox (2010) found lack of teacher buy-in to be a key stumbling block for implementing SMH services. In their study of clinicians implementing an evidence-based, group SMH intervention, participants indicated that teachers who did not perceive an evidence-based SMH intervention as valuable and beneficial were less likely to allow their students to leave class to participate in the intervention. Administrative buy-in is also an important factor in the diffusion of support to teachers and other staff members, as these school professionals may not know how a new intervention or initiative fits into the organizational structure of the school (Massey, Armstrong, Boroughs, Henson, & McCash, 2005). Thus, it is imperative to have the support of school administrators, teachers, and other key stakeholders.

According to Flaherty and Weist (1999), it may seem counterproductive at first for community practitioners to spend time building relationships with school professionals when they could be working with students. However, having solid working relationships built on trust, open communication, and common goals translates into implementing evidence-based programs with fidelity and carefully monitoring outcomes to determine if students' needs are being met. However, practitioners must bear in mind that relationship-building is often a continual process, due in large part to the high turnover rates of school administrators, teachers, and staff.

It is also imperative that professionals in the school and community receive adequate and ongoing training in mental health promotion and SMH service delivery (Weist, 2005). According to Ball, Anderson-Butcher, Mellin, and Green (2010), having a variety

of professionals involved in ESMH is a source of strength for service delivery but a drawback regarding training. For example, community mental health professionals are trained to treat a wide variety of disorders, but often do not know how to deliver their services within a school setting or how to collaborate with teachers and paraprofessionals. Furthermore, practitioners from different disciplines may have divergent philosophies on mental illness, treatments, and working with children and adolescents.

Massey and colleagues (2005) recommended that teachers receive ongoing staff training so that they may understand the intervention process, referral procedures, the target population, and how the intervention functions in accordance with the academic curriculum. Reinke, Stormont, Herman, Puri, and Goel's (2011) survey of 292 teachers regarding their experiences with school mental health showed that only 55.5% confirmed hearing about evidence-based interventions. Furthermore, most of the participants indicated that they did not have sufficient knowledge and skill to deliver services relating to their students' mental health needs. This is especially troubling in light of the fact that 75% of participants stated that they had worked with students requiring mental health services within the last year.

### **Toward The Interconnection of PBIS and SMH**

As presented earlier, unfortunately, PBIS and SMH are not currently integrated due to several factors (e.g. schools' difficulty in implementing all three tiers of PBIS, lack of adequate resources and funding, inefficient data collection systems, lack of sufficient training and implementation support). Combining the two is a logical and beneficial step for several reasons. Because PBIS is a framework, it is not tied to any specific

intervention. Moreover, it lends itself to implementing evidence-based interventions due to its emphasis on data collection and evaluation of outcomes (Sugai, Horner, et al., 2000). SMH is an ideal set of services to fit with the PBIS framework, because the main focus is behavioral and socio-emotional variables that affect academic achievement. In addition, PBIS and SMH share the common goal of promoting the success and positive development of students across domains, including academics, behavior, social functioning, and emotional wellbeing. Integrating PBIS and SMH is an untapped source of prevention and early intervention services, as well as an opportunity for collaboration among practitioners of diverse professional backgrounds.

There are other practical benefits for integrating PBIS and SMH. For instance, mental health service delivery via public schools circumvents the issue of access, which affects many youth and their families (Weist, Stiegler, Stephan, Cox, & Vaughan, 2010). Offering mental health services at the school itself greatly reduces barriers such as transportation to mental health appointments. Some families may not have resources, such as a vehicle or bus fare, to travel to a community mental health center. Because schools are usually centrally located in the community and mental health services can be delivered during or after school, the issue of transportation is ameliorated (Stephan et al., 2007). Similarly, because mental health services are delivered at school, stigma is greatly decreased. Stigma, which is a major barrier to seeking treatment, can be lessened by both normalizing mental health treatment and training teachers and other school staff in mental health promotion (Stephan et al., 2007). When mental health services and preventative measures are integrated with other school programming, the taboo of requiring and seeking such services diminishes.

Furthermore, promoting awareness of mental health issues can open the door for increases in earlier identification and intervention for students who are experiencing mental health problems and may not be functioning optimally at home or at school. This also allows for identification of and intervention with students experiencing comorbid disorders and/or substance abuse (Stephan et al., 2007). The many professionals working with students on a daily or near-daily basis (e.g. teachers, support staff, school psychologists, mental health counselors, etc.) are in an advantageous and unique position to observe students receiving services and collect data regarding changes in behavior and school functioning. School psychologists and counselors can also provide intervention services for students in crisis, possibly thwarting self-harm or suicide attempts. In sum, the aforementioned benefits of PBIS and SMH promote mental health and wellbeing, thereby positively influencing academic achievement, school engagement, and school completion.

### **A Critical Need to Advance Strategies for Assessing School Readiness for PBIS-SMH Interconnection**

Although there is ample evidence to support the potential benefits of integrating PBIS and SMH, it is imperative to consider issues surrounding readiness to adopt change. This is an especially critical step, as PBIS-SMH interconnection is most likely an unfamiliar concept to most schools and communities. The construct of readiness to implement evidence-based interventions has been of interest to interventionists and researchers for years. A seminal example is Levesque, Prochaska, and Prochaska's (1999) transtheoretical model of change. Originally developed to assess readiness to change health-related behaviors (e.g. smoking and substance use), the model has been

extrapolated to change in a variety of contexts, including systemic change. With respect to clinical practice and intervention, several measures and models of readiness for change in organizations (Lehman, Greener, & Simpson, 2002), communities (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000), and clinicians' use of evidence-based treatments (Aarons, 2004) have been developed.

Readiness for integrating PBIS and SMH can be conceptualized using a process framework by Fixsen and colleagues (2005). This framework includes the steps of exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability. "Process" is a key term, as change does not occur instantaneously. Rather, there is a progression from considering change to fully implementing and espousing an intervention or framework. The first phase of this framework is exploration and adoption, in which a program is investigated to determine its goodness of fit with current issues, needs and resources of the community, and needs regarding evidence-based practice and programming. Based on the information gathered during exploration, a choice is made regarding whether to adopt and implement the intervention or continued use of current programming. If the intervention will be adopted, a plan for implementation is developed, with ideas for facilitating operations and reducing any barriers that would hinder implementation.

The next phase is program installation. In this stage, preparations are made to operate the intervention. Such preparations include hiring and training staff members, securing funding, obtaining necessary technological resources (e.g. computers, data collection software, etc.), procuring space to run the intervention, and developing policies for student referrals, data collection, outcome measures and evaluation, and so forth. After

these resources are in place, initial implementation can occur. This phase can be difficult due to resistance to change or desire to stay with the current operating procedures. If initial implementation does not go well, the intervention is at risk for termination (Fixsen et al., 2005).

Following initial implementation is the full implementation phase. At this point, resources, staff, and a full client list are in place. Practitioners are working with clients and their families, with administrators facilitating the implementation of the intervention. Furthermore, the community has accepted and incorporated the intervention into its structure. If the intervention is successful and maintained within the community, it eventually becomes part of interventions considered “treatment as usual” (Fixsen et al., 2005). However, this does not mean that the intervention remains in its original form over time. In the innovation phase, different practitioners will face diverse conditions under which to implement the intervention. Some conditions will lend themselves to implementation fidelity, whereas others will make it challenging for practitioners to adhere to the core tenets of the intervention. Still other conditions will prove to be optimal situations for implementation, and may be integrated into the standard delivery of the intervention. Such changes are referred to as innovations, and can increase the effectiveness of the intervention. As always, such changes should be experimentally evaluated to determine if there is a statistically significant increase in positive outcomes over the standard form of the intervention.

The final, and ongoing, phase in Fixsen et al.’s (2005) framework is sustainability. Once full implementation has been established, the intervention must be maintained in the community with continuous support and facilitation. However, the changing

landscape of the community affects the sustainability of the intervention. For example, there will be changes in practitioners, staff, and administrators; funding and resources may be reallocated; and partnerships with universities and other associates may fade. In spite of these changes, interventionists must work to continue running the intervention and maximize the intervention's effectiveness.

Another framework for examining systems-level change is the concerns-based adoption model (CBAM; Hall, Wallace, & Dossett, 1973) which is specific to educational settings. Similar to Fixsen et al.'s (2005) work, Hall and Hord (1987) suggested that change is a process, rather than an isolated event. Furthermore, change occurs at the individual level before it becomes organization-wide; thus, staff members' perceptions affect how quickly change is adopted by the system. Hord, Rutherford, Huling-Austin, and Hall (1987) developed the Stages of Concern Questionnaire to evaluate respondents' concerns regarding change in the CBAM framework. The seven stages shift in emphasis from self to task to impact. Because change in CBAM is viewed as a very personal process, the earlier stages focus on concerns of how the change will impact the respondent directly. From there, the concerns move to task difficulty and influence on the respondent's work. The stages vary greatly, from 0 (awareness of change, having no concerns) to 6 (refocusing, generating ideas to improve the new intervention or initiative; Loucks & Hall, 1981).

Because the schools are a unique setting in which to implement systemic change, CBAM is especially pertinent when considering change from the perspectives of staff members with diverse professional backgrounds (e.g. teachers, administrators, mental health professionals). Loucks and Hall (1981) suggested that taking different

perspectives on change and innovation into account is crucial prior to implementing new interventions. They also noted the importance of garnering the support of school principals and other administrators when introducing any large-scale change.

Hall and Rutherford (1983) indicated that this model is helpful for staff development purposes as well. With interdisciplinary collaboration being a critical component for the success of PBIS-SMH interconnection, promoting professional growth and self-efficacy can facilitate working together with other school and community stakeholders. Roach, Kratochwill, and Frank (2009) identified school-based consultants, such as school psychologists, as a resource to assist with the implementation of change from a CBAM perspective. These consultants' expertise in the areas of evidence-based interventions and implementation integrity and fidelity can be especially useful for the purposes of ongoing training and evaluation of outcomes.

In addition to the frameworks developed by Levesque et al. (1999), Fixsen and colleagues (2005), and Hall et al. (1973), acceptability is another factor to consider when discussing readiness to integrate PBIS and SMH. According to Nastasi and Hitchcock (2009), acceptability is the degree of feasibility, relevance, likelihood of achieving predetermined goals, and accordance with one's values as indicated by various stakeholders. Although efficacy of the intervention is typically considered the main criterion for treatment acceptability, there are several factors that influence whether an intervention will be perceived as acceptable. According to Michaels, Brown, and Mirabella (2005), other issues such as iatrogenic effects, logistical issues, and larger social and legal repercussions affect how practitioners view an intervention. The results of their survey of SMH practitioners indicated that the top three reasons for using a



decelerative behavior treatment are support from the literature, producing long-term improvements in behavior, and positive experiences with the treatment in the past. Michaels and colleagues suggested that across professions (e.g. teachers, psychologists, direct care providers), positive behavior strategies are directly correlated with treatment acceptability; however, this relationship is moderated by the severity of the problem behavior. According to Fiks and Leslie (2010), school-community-family partnerships can increase treatment acceptability. This is especially germane to the PBIS framework and the importance of communication among stakeholders and professionals in all three settings. Nastasi and Hitchcock (2009) also noted the importance of assessing acceptability beyond the practitioner level and considering the views of stakeholders in the community.

### **Systemic Issues Regarding Readiness for PBIS-SMH Interconnection**

The literature is somewhat limited regarding readiness to implement PBIS and SMH. In a qualitative study, Savage, Lewis, and Colless (2011) found that school readiness for school-wide PBIS implementation is necessary prior to adopting the intervention, as well as after for sustainability purposes. Initial implementation was also facilitated due to the involvement of all school personnel, from administrators to teachers to support and custodial staff. The authors also indicated that readiness consists of perceiving a need for change, being open to acquiring new skills, and having sufficient preparation to implement the intervention.

Handler, Rey, Connell, Their, Feinberg, and Putnam (2007) noted several systemic issues germane to readiness for implementation. For instance, a leadership team consisting of school and community stakeholders should be in place to guide adoption

and implementation. School staff should also be encouraged to participate via trainings and bi-directional communication with administrators. Communication is important to keep staff up to date on changes with the program or procedures, and for administrators to gauge how staff members are reacting to and practicing the intervention.

Administrators can further show their support by attending leadership meetings and trainings, getting to know members of the leadership team, and realizing their role in the general buy-in of the program. Administrators with positive, upbeat attitudes focused on teamwork and problem-solving can trickle down to teachers and other staff members. A PBIS coach can assist with installation and initial implementation, and provide assistance and support for teachers and other practitioners. Finally, support from the school district is imperative. Specifically, the district must realize that systemic change requires some time, but the benefits of prevention and early intervention will reveal themselves later with improved academic performance and graduation rates and fewer discipline referrals and behavioral problems (Sugai & Horner, 2008).

Nonetheless, school-level readiness is not the only concern. Vanderbleek (2004) indicated that assessing family readiness for SMH services is imperative for increasing enrollment and decreasing attrition rates, especially as many families convey support of SMH but do not actually participate. The community at large must be ready to take action. Features of the community, such as resources, cultural influences, and members willing to get involved in planning, implementation, and support, should be considered to select an appropriate and effective intervention (Fixsen et al., 2005). Therefore, before adopting an intervention, the many stakeholders involved must be ready to make a

change and wait to see positive results. Unfortunately, there is scant literature regarding readiness at the family, school, district, or community level (Fixsen et al., 2005).

With this limited literature base on readiness for PBIS and SMH implementation, measures for this construct are even scarcer. There is also no measure to evaluate readiness to integrate PBIS and SMH, despite calls for development of such a measure (Kincaid, Childs, Blase, & Wallace, 2007). A few measures assess similar constructs, but none directly pinpoint readiness for PBIS-SMH interconnection. For example, Michaels and Brown developed the Survey of Treatment Acceptability to both qualitatively and quantitatively evaluate PBIS experts' thoughts and attitude regarding decelerative behavioral interventions, challenges to PBIS implementation, and working with individuals with disabilities, especially those requiring ABA therapy (Michaels et al., 2005). Bambara, Nonnemacher, and Kern (2009) constructed a measure to assess PBIS stakeholders' perceptions of enablers and barriers of PBIS implementation. Similarly, Lewis-Palmer, Horner, Todd, and Sugai (2001) designed the School-Wide Evaluation Tool (SET) to gather information regarding PBIS features currently in place, as well as goals and plans for future PBIS implementation. In terms of systemic change, there are several measures available to assess community-level and organizational change (see Fixsen et al., 2005). Thus, existing measures appear to focus on implementation and fidelity, barriers and facilitators to implementation, and service utilization. The current proposal aims to remedy the lack of a readiness for PBIS-SMH interconnection measure.

## CHAPTER 2

### METHODS

#### **Design**

The current study involves a mixed method design involving qualitative analyses (survey of relevant stakeholders and consultation with key informants) and quantitative analyses (survey development and psychometric analyses). The purpose of the study is to develop a survey to ascertain the level of readiness to integrate PBIS and SMH.

Therefore, the study and subsequent analyses are exploratory in nature.

This study was carried out in four phases. The first phase was a pilot study, conducted in September of 2011. A sample of key stakeholders with interests in PBIS and SMH were asked to complete an open-ended survey to determine fundamental factors for satisfactory implementation and interconnection of PBIS and SMH. Following the pilot study, Phase II involved aggregating and qualitatively analyzing this data to develop common themes relevant to PBIS-SMH interconnection. In addition, the Principal Investigator (PI) consulted with experts in PBIS, SMH, and related fields and reviewed the applicable literature. This information was used to develop a 35-item readiness for PBIS-SMH interconnection survey.

In Phase III of the study, the 35-item survey was revised further. The PI consulted with an expert in survey construction, as well as key informants with expertise in PBIS and SMH, who provided input regarding the content and language of the survey.

Based on these consultations, survey items were revised, added, or discarded accordingly. This resulted in a 98-item survey. Lastly, Phase IV included converting the survey to an online format, disseminating the survey to potential participants via email, and collecting and analyzing the data. Each phase of the study is discussed further below.

## **Procedure**

### **Phase I: Pilot study.**

A pilot study was conducted in September 2011 at the 16th Annual Advancing School Mental Health Conference in Charleston, South Carolina. Key PBIS and SMH stakeholders in attendance were asked to complete a brief, open-ended survey regarding barriers and facilitators of PBIS, SMH, and readiness for PBIS-SMH interconnection (see Appendix A for this survey). The survey is based on work by Horner, Todd, Lewis-Palmer, Irvin, Sugai, and Boland (2004) and Levesque et al. (1999). This pilot study was approved by the Institutional Review Board at the University of South Carolina (Project #00013349).

Participants included 25 key PBIS/SMH stakeholders (72% female). On average, participants have been working in their respective fields for 21.58 years ( $SD = 8.89$  years). They reported using PBIS for a mean of 7 years ( $SD = 2.83$  years). Participants indicated working in a wide variety of school- and mental health-related fields. The most common fields for this sample included government official ( $n = 5$ ), family member/advocate ( $n = 5$ ), director of state PBIS center/state-wide PBIS projects ( $n = 3$ ), and technical assistance provider/coordinator ( $n = 3$ ); see Table 3.1 for further

information. Of those who noted an age group served ( $n = 23$ ), most participants reported working with pre-adolescents and adolescents ( $n = 21$ ). In terms of population, most participants indicated working with students in special education ( $n = 20$ ), regular education ( $n = 18$ ), and students with emotional and/or behavioral disabilities ( $n = 20$ ). Refer to Table 3.1 for complete information regarding ages and populations served. Per Fink and Kosecoff's (1998) recommendations for pilot testing surveys, the pilot study participants are similar in expertise and work experience to the current study's participants.

The latter part of the survey asked participants to rate the current status and priority level of ten features of PBIS and SMH services in their school. Of 9 raters, 65.56% indicated that these features were currently in place, 26.67% stated the features were partially in place and 7.78% reported that they are not in place. Regarding priority level, 35.71% noted the features were of high priority, while 34.29% and 30.00% indicated medium and low priority, respectively. See Table 3.2 for the full results of this portion of the survey.

Participants were also asked to indicate the top five factors in each of the following categories: promoting effective PBIS, hindering implementation of PBIS, promoting effective ESMH services, challenges to providing effective ESMH services, and facilitating PBIS-SMH interconnection. See Appendix B for a complete listing of participants' responses.

## **Phase II: Development of preliminary survey.**

Responses to the pilot survey were compiled, summarized, and distilled into 20 themes, which were endorsed across categories. In addition, Bambara et al.'s (2009) study regarding barriers and enablers of positive behavior supports for individual students showed many similar themes. The 20 themes reflected the results of the pilot survey and Bambara and colleagues (2009), and can be found in Appendix C.

Following the development of the 20 themes based on the pilot study data, as well as literature review of PBIS and SMH adoption and implementation, a 35-item preliminary survey (see Appendix D) was distributed via email to key informants with expertise in PBIS, SMH, and/or related fields. Information regarding the survey content, wording of each item, length of the survey, and other thoughts was solicited from this group. Participants in this phase included 12 key informants, all members of the IDEA Partnership's National Community of Practice (CoP) on School Behavioral Health. This group, which is co-sponsored by the IDEA Partnership and the Center for School Mental Health at the University of Maryland, includes stakeholders with interests in promoting positive mental health and behavior for youth in their schools and communities. This National CoP is comprised of 15 state CoPs (including South Carolina) and has connections with 22 national organizations (such as the American Psychological Association, the National Association of School Psychologists, and the Council for Exceptional Children) and 9 national technical assistance centers (e.g. the Center for School Mental Health, the IDEA Partnership, and the National Technical Assistance Center for Children's Mental Health). The National CoP for School Behavioral Health provides opportunities for collaboration among those working to move SMH and similar

initiatives forward (IDEA Partnership, n.d.). This National CoP also includes several practice groups that cater to more specific aspects of school behavioral health, including the Connecting School Mental Health and Positive Behavior Supports Practice Group. Participants for Phase II were selected from the National CoP for School Behavioral Health due to this group's wealth of knowledge regarding school-based behavioral initiatives, in addition to their awareness of issues regarding PBIS-SMH interconnection.

The Phase II participant sample consisted of eight females and four males working in the fields of clinical psychology, special education, public health, student support services, education administration, and social work, with years of experience ranging from 5 years to over 25 years. According to Saris and Gallhofer (2007), survey development should include an examination of face validity. Thus, participants were asked to rate each survey item on its importance to PBIS/SMH interconnection using a 6-point scale, with 1 being "not at all important" and 6 being "essential." In addition, participants were asked to comment the items or edit the wording as they saw fit.

Based on the importance ratings and face validity, the following items were dropped from the survey: "Families and community members are encouraged to participate in school activities" "School staff regularly communicate with larger school community (via newsletters, website, etc.)," and "School team is aware of and has access to community data (e.g. unemployment/ crime/violence/rate of foreclosure/other housing issues, etc.)." These items fell below a threshold of 4.70 based on a scatter plot. Four participants also reworded items using the Track Changes function in Microsoft Word. The language of the survey was edited according to participants' suggestions in order to increase clarity and specificity of meaning. For example, Fink and Kosecoff (1998) and



Fowler (1995) recommended that each survey item include just one idea, to reduce confusion for the respondent and to allow for ease of data interpretation later. Items containing multiple ideas were rewritten or broken into separate questions. Other recommendations for survey development from Fowler (1995) were incorporated into this re-drafting of the survey. Such recommendations include the incorporation of definitions of key terms used in the survey (here, PBIS and SMH), introducing these definitions prior to the survey items, and segmenting complex items into separate questions. The latter strategy circumvents the issue of “double-barreled requests” in which it is unclear to what sections participants’ responses refer (Sarlis & Gallhofer, 2007). For example, the item “Teams have meetings with action- and solution-focused agendas” allows participants to respond separately for “PBIS teams” and “SMH teams,” as the answers may be different for these two groups. These recommendations not only increased the readability of the survey, but also helped ensure that respondents understand what the items are asking and to what ideas the constructs are referring.

The PI also met with a nationally recognized survey development expert, Dr. Robert Johnson of the College of Education at the University of South Carolina. Dr. Johnson reviewed the first survey draft and made suggestions regarding item clarity and the format and structure of the survey. Changes were made to reflect his recommendations. He also endorsed the aforementioned iterative process for developing a new measure and preparing it for psychometric analyses.

### **Phase III: Consultation and final revisions.**

Following modifications to the preliminary survey based on input from key informants in Phase II, the revised survey was then distributed via e-mail to several members of the National CoP for School Behavioral Health. These individuals are all experienced in SMH, and have a particular interest in joining SMH with the PBIS framework. After discussing the survey items and intended future use of the survey on a conference call, the PI and her research mentor (Mark Weist) invited conference call participants to email their comments on the survey to the PI. Two participants provided feedback. Once again, the survey was revised to reflect these suggestions. This draft of the survey was forwarded to a core group of five PBIS/SMH experts (Lucille Eber and Susan Barrett of the National PBIS Technical Assistance Center, Joanne Cashman and Mariola Rosser of the IDEA Partnership, and Sue Bazyk of Cleveland State University), who are also acting as consultants on this study. Following a final edit based on comments from these experts, the survey was formatted and finalized for dissemination. A second conference call, including the investigators, PBIS/SMH experts, and National CoP for School Behavioral Health members, was held to discuss the final draft and survey dissemination strategies.

### **Phase IV: Dissemination of major survey and data collection.**

The major survey study was approved by the Institutional Review Board at the University of South Carolina (Project #00015885). In this fourth and final phase of the study, the major survey was formatted for online data collection. The online format was used to reach a large group of potential participants, and facilitate ease of completion and

data collection. A link to the major survey was then distributed to potential participants via email and postings on websites of various relevant professional organizations. A list of email addresses was assembled using listservs from CSMH, the National CoP on School Behavioral Health, and other related organizations. E-mails including a brief description of the survey and the SurveyMonkey link were also sent to others with knowledge and interests in PBIS and SMH. As an incentive for participation, participants had the opportunity to be entered into a drawing to receive a gift card for \$100, \$75, or \$50. Those participants who wished to be entered into a drawing provided their name, email address, and daytime phone number. However, this information was stored separately from their survey responses to protect confidentiality.

A similar survey development and recruitment procedures was utilized by Johnson (2010) for her School-Based/Linked Mental Health Services Survey. Johnson's online measure was distributed via listservs, websites, professional organizations and connections, and social media sites. However, this measure centered on respondents' knowledge of SMH best practices, current stage of change (Levesque et al., 1999) regarding implementation of SMH best practices, self-efficacy for SMH service delivery, and schools' proficiency of SMH service delivery.

## **Materials**

To evaluate readiness to integrate PBIS and SMH, participants completed a brief online survey. The 98-item surveys took approximately 15 minutes to complete. Specifically, the items pertained to the exploration/adoption and installation phases of interventions outlined by Fixsen and colleagues (2005). Participation was anonymous,

and only basic identifying information (e.g. occupation, age, etc.) was collected in addition to the survey responses.

## **Participants**

Participants included 346 individuals from a national sample. Data were collected from June 5, 2012, through August 26, 2012, via SurveyMonkey.com. Through the collaboration and partnership with the National CoP for School Behavioral Health, this organization played an integral role in guiding and promoting interest in the survey. The major survey was discussed and endorsed on several of their regularly scheduled conference calls. Furthermore, the survey and corresponding link was advertised through postings on National CoP listserv announcements, as well as various websites of affiliated organizations. The large sample, as well as the diversity of professions represented, is due in great part to the support of the National CoP for School Behavioral Health.

The target population for the proposed study was school and community stakeholders, teachers, administrators, family members, mental health practitioners, and other professionals working with PBIS and SMH. Inclusion criteria for participants were as follows: individuals who are currently working in a setting using PBIS and SMH (e.g. a school or school district), delivering mental health services to youth enrolled in school, and community members who support PBIS and SMH services.

Of the 346 participants, 273 completed the major survey. The following demographics describe those who completed the survey in its entirety. Most participants were female ( $n = 214$ , 78.4%). The majority identified as school social workers ( $n = 56$ ,

20.5%). Other highly represented professions include regular education teachers, school psychologists, and school administrators. Thirty-nine participants identified their profession as “other,” and included behavioral specialists, paraprofessionals, and technical assistance providers. Participants also worked at the state, district, and building levels, with most indicating the latter ( $n = 172$ ). Practitioners with 25 or more years’ experience in their field comprised 20.9% of the sample. In terms of school level, 38.5% of participants worked in elementary (K-5) schools. Most participants worked in non-metropolitan urban settings, defined as areas having more than 2,500 but less than 250,000 residents (50.9%). Due to the interest in PBIS and SMH in geographically diverse regions around the United States, geographic areas were defined in terms of population density (USDA Economic Research Service, 2012; Zelarney & Ciarlo, 2000). This ensured that participants from rural and frontier regions would be properly represented. Regarding the percentage students receiving free or reduced lunch, 15.4% of participants worked in settings where 41 to 50% of students fell into this category. See Table 3.3 for further demographic information for this sample.

For the factor analyses, Everitt (1975) recommended a minimum of 10 participants per variable. Furthermore, Kline (2011) and Loehlin (2004) indicated that sample size for factor analyses should be at least 200 to ensure the validity of the results. Kline (2011) also suggested that samples of 200-300 are sufficient for analyses to detect poor model fit. The current sample of 346 more than satisfies these recommendations.

## Analytic Procedures

Several data analytic techniques were used to evaluate the data collected from the major survey (Phase IV). First, descriptive statistics were compiled to determine the composition and characteristics of the sample. Next, several analyses were conducted to describe characteristics of the survey items. Item level analyses provided information regarding means and standard deviations, as well as variability and any ceiling or floor effects. Next, Cronbach's alpha was used as an indicator of internal consistency. Also, Pearson correlations were conducted to examine inter-item correlations. A priori between-group analyses were planned in order to evaluate differences in responding by profession; however, due to the small  $n$  per each professional group, there was insufficient power to detect meaningful group differences (Cohen, 1988).

Several factor analyses were used to determine the factor structure of the survey. First, a confirmatory factor analysis (CFA) was conducted to ascertain if the survey items load onto the following factors: support/buy-in/resources, collaboration and teamwork, positive student outcomes, and use, understanding, and applications of PBIS. These factors were selected based on the pilot survey data and subsequent key themes, as well as work by Bambara et al. (2009) and Handler et al. (2007). Groups of survey items were hypothesized to correspond to each factor (see Table 3.4). Major survey items are found in Appendix E.

## CHAPTER 3

### RESULTS

Descriptive analyses were conducted to examine the survey responses and ascertain the presence of ceiling or floor effects. All responses were normally distributed. Skew index scores ranged from  $-.87$  to  $.51$ . Kurtosis index scores ranged from  $-.81$  to  $1.39$ . According to Kline (2011), non-normal distributions are identified by skew index scores with absolute values over  $3.00$  and kurtosis index scores with absolute values greater than  $10.00$ . The skew and kurtosis index scores from the current sample were well below these cut-offs. Furthermore, visual inspection of graphs indicated normal distributions and no outliers for all items. Item means ranged from  $2.01$  ( $SD = 0.72$ ) to  $3.16$  ( $SD = 0.76$ ).

Next, a series of correlations were performed. Spearman's  $\rho$  correlations were used to examine inter-item correlations among the ranked survey response items. These correlations ranged from  $-.19$  to  $.89$ . To examine internal consistency, Cronbach's alpha was calculated. The  $\alpha$  of  $.98$  indicated a high level of internal consistency.

Following these analyses, a CFA was conducted to investigate the aforementioned hypothesized factor structure for the survey. This analysis was carried out using MPlus software (Muthén & Muthén, 1998-2011), while all other analyses were calculated with SPSS software (IBM, 2011). The CFA was conducted using the specified model and the weighted least squares parameter estimation, which is recommended for analyzing

categorical data from samples of at least 200 participants (Flora & Curran, 2004). Various model fit estimates were examined. The root mean square error of approximation (RMSEA) estimate was .082. According to Hu and Bentler (1999) and MacCallum, Browne, and Sugawara (1996), an RMSEA estimate of .05 is indicative of good model fit, while .08 suggests a “mediocre” model fit. RMSEA estimates over .10 are suggestive of poor model fit. The comparative fit index (CFI) of .83 was below the recommended cut-off of .95 (Brown, 2006; Hu & Bentler, 1999). Although the CFI for this sample approaches the cut-off, this suggested that the hypothesized model is not an optimal representation of the data. Similarly, the Tucker-Lewis index (TLI) of .83 was below the suggested cut-off of 1.00 (Brown, 2006). The chi-square estimate of model fit was not examined, as various sources suggested it is not an accurate indicator of model fit with larger samples (Cheung & Rensvold, 2002; Meade, Johnson, & Braddy, 2008). Based on the current sample, these estimates did not collectively support the hypothesized factor structure as a strong model.

Thus, an EFA was conducted to develop a factor structure from the data. This analysis was run using MPlus (Muthén & Muthén, 1998-2011). Because the factor indicators were categorical, the robust weighted least squares estimation (WLSMV) method was used. WLSMV uses a diagonal weight matrix, and is robust to variation in model complexity, sample size, and non-normality (Brown, 2006; Muthén & Muthén, 1998-2011). Also, due to the categorical nature of the survey’s factor structure, WLSMV is a more appropriate estimation technique than the weighted least squares method (WLS), which is used for continuous factors. To promote a theoretically strong factor



structure, in addition to facilitating interpretability, the number of factors was limited to four.

Eigenvalues from the EFA were examined using the scree test. The scree plot, in which the factor numbers are listed on the horizontal axis and the eigenvalues are listed on the vertical axis, illustrates where the slope of the line decreases. Ideally, there is a clear “bend” in the line, indicating the corresponding factor solution for the data (Brown, 2006). In Figure 3.1, the line drops sharply at one, indicating a one-factor solution for the survey. Because the data suggested a one-factor solution as opposed to the originally hypothesized four-factor structure, readiness to interconnect PBIS and SMH may be a unitary construct. This is examined further in the Discussion section.

The EFA data was evaluated further to determine which items should be removed from the survey. A shorter survey can promote use among school professionals and facilitate data collection at multiple time points in the adoption/installation phase of PBIS-SMH interconnection. Eigenvalues for each item under the single-factor structure ranged from .436 to .895. Recommendations for eigenvalue cut-points vary; Kline (2011) suggested that .50 is an acceptable eigenvalue for indicators' loading on their primary factor. However, Sterba (2011) reported using eigenvalues of .70 or greater for high indicator loadings, per Nunally and Bernstein's (1994) recommendation. For this study, a cut-off score of .70 was used, which is a more rigorous standard. Thus, 62 items of the original 98 remained. An additional item was retained; specifically, the item “PBIS and SMH teams meet together.” Based on consultation with experts, it was decided that communication between these two groups is essential to PBIS-SMH interconnection. Thus, the shortened survey contains 63 items (refer to Appendix F for

the complete survey). Furthermore, through consultation with PBIS-SMH experts, some survey items were slightly reworded to increase clarity. To gauge internal consistency, Cronbach's  $\alpha$  was calculated for the short version of the survey. An  $\alpha$  of .98 suggested excellent internal consistency, and was similar to the  $\alpha$  found for the original survey.

Table 3.1 *Pilot Study Participant Demographics*

Variable	Percentage/Mean/ <i>n</i>
Sex	
Male	28.00%
Female	72.00%
Mean years in field	21.58 years ( <i>SD</i> = 8.89 years)
Mean years using PBIS	7.00 years ( <i>SD</i> = 2.83 years)
Current position	
Family member/advocate	5
State PBIS center director/project director	3
Faculty/researcher	1
Mental health consultant	1
Government official	5
Technical assistance provider/coordinator	3
Youth leader	1
MCO administrator	1
School counselor	1
School administrator	1
Joint planning team director	1
Teacher	2
Age groups served	
Infant/toddler	4
Early childhood	16
Pre-adolescent	21
Adolescent	21
Young adult	14
Populations served	
Regular education	18
Special education	20
Developmentally delayed	14
Learning disability	15
Mental disability	17
Emotional/behavioral disability	20

*N* = 25

Table 3.2 Status of PBIS Features

In place	Partial	Not in Place		High	Med	Low
7	2	0	1. PBIS team in place for positive behavior support implementation and problem solving	2	1	4
7	2	0	2. PBIS team includes school administrators	2	2	3
5	3	0	3. School administrators on PBIS team actively participate in team meetings and decision-making processes	2	3	2
6	2	1	4. Focus on improving social, emotional, and/or behavioral health of all students	3	1	3
6	3	0	5. Resources allocated for PBIS implementation	2	3	2
5	4	1	6. Resources designated for prevention efforts	4	2	1
4	4	1	7. Enough support staff members to assist with PBIS implementation	2	4	1
7	2	0	8. Decisions regarding PBIS implementation are based on data collected at your school	1	4	2
7	1	1	9. Decisions regarding individuals students based on data re: behavior, academic performance, etc.	3	2	2
5	1	3	10. Your school is dedicated to integrating PBIS and SMH services	4	2	1
Total						
59	24	7		25	24	21
%						
65.56	26.67	7.78		35.71	34.29	30.00

Table 3.3 Major Survey Participant Demographics

Variable	N	%
<b>Gender</b>		
Female	214	78.39
Male	59	21.61
<b>Profession</b>		
Clinical/Counseling/Community Psychologist	11	4.02
Clinical Social Worker	18	6.59
Faculty/Researcher	10	3.66
Family Member/Advocate	4	1.47
Government Official	4	1.47
Legislator	0	0.00
Nurse	1	0.37
Physician	0	0.00
Related Service Provider (Speech, Occupational Therapy)	13	4.76
School Administrator	26	9.52
School Counselor	8	2.93
School Psychologist	27	9.89
School Social Worker	54	19.78
Teacher (Regular Education)	39	14.29
Teacher (Special Education)	15	5.49
Youth Leader	0	0.00
Other	43	15.75
<b>Level Currently Working (may check more than one)</b>		
State Level	35	12.82
District Level	115	42.12
Building Level	172	63.00
<b>Years of Experience in Field</b>		
1-5 years	45	16.48
6-10 years	45	16.48
11-15 years	43	15.75
16-20 years	47	17.22
21-25 years	36	13.19
More than 25 years	57	20.88
<b>School Level</b>		
Preschool	3	1.10
Elementary (grades K-5)	105	38.46
Elementary/Middle (K-8)	39	14.29
Middle (grades 6-8)	37	13.55
Middle/High (6-12)	17	6.23
High (grades 9-12)	35	12.82
Alternative School	8	2.93
Other	29	10.62

Table 3.3 continued

Geographic Location		
Metropolitan	77	28.21
Non-metropolitan urban	139	50.92
Rural	55	20.15
Frontier	2	0.73
Percentage of Students Receiving Free/Reduced Lunch		
0-10%	13	4.76
11-20%	17	6.23
21-30%	28	10.26
31-40%	32	11.72
41-50%	42	15.38
51-60%	33	12.09
61-70%	33	12.09
71-80%	28	10.26
81-90%	14	5.13
91-100%	33	12.09

*N*=273

Table 3.4 *Hypothesized Factors and Corresponding Items*

Factor	Items
Support/buy-in/resources	4, 6a, 6b, 7, 8, 9a, 9b, 10a, 10b, 21a, 21b, 22a, 22b, 23a, 23b, 41, 42, 43a, 43b, 44, 45, 46a, 46b, 47, 48
Collaboration and teamwork	11, 12, 14, 15, 24, 25, 26, 29a, 29b, 29c, 30a, 30b, 30c, 32a, 32b, 33a, 33b, 34a, 34b, 35a, 35b, 36, 52, 53, 54, 55a, 55b
Positive student outcomes	5a, 5b, 5c, 16a, 16b, 16c, 17a, 17b, 17c, 18, 19a, 19b, 19c, 20a, 20b, 20c, 27a, 27b, 27c, 28a, 28b, 28c
Use, understanding, and applications of PBIS	1a, 1b, 2, 3a, 3b, 3c, 13,, 31, 37a, 37b, 37c, 38a, 38b, 38c, 38d, 38e, 39a, 39b, 40a, 40b, 49, 50, 51

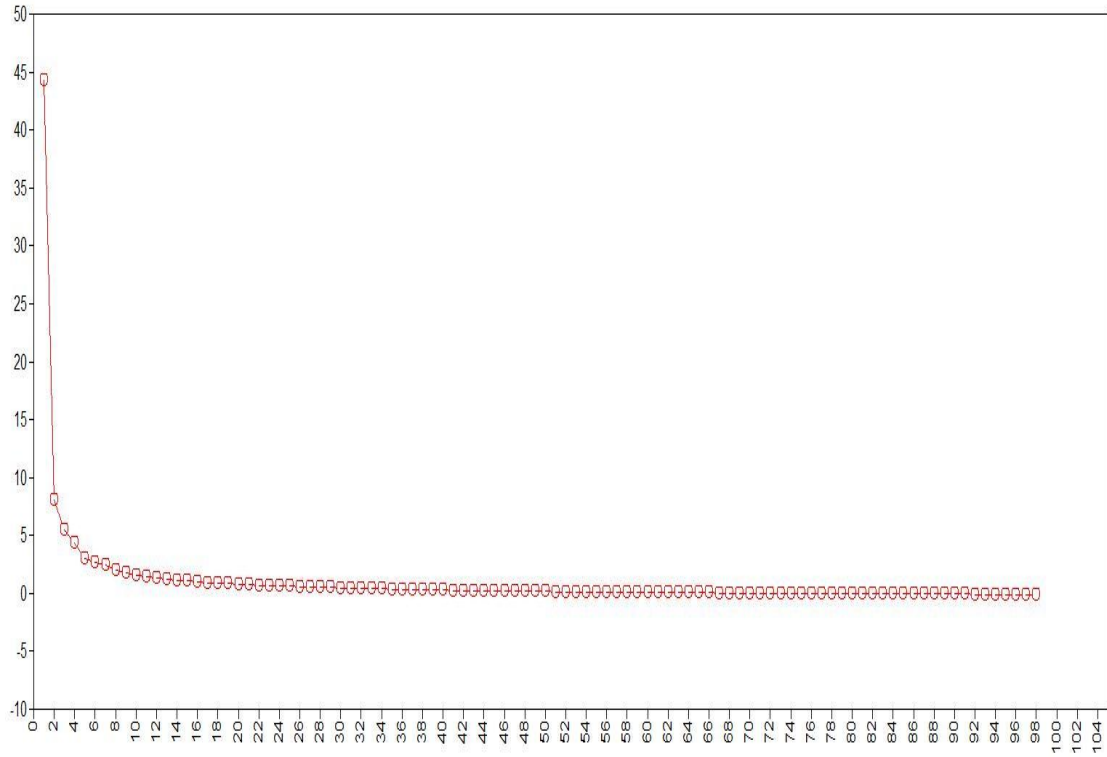


Figure 3.1 Scree Plot for Exploratory Factor Analysis



## CHAPTER 4

### CONCLUSION

The interconnection of PBIS and SMH is an essential next step in promoting improvements in children's behavior and functioning across domains. SMH services can be seamlessly integrated within the multi-tiered framework of PBIS, allowing parents, teachers, mental health professionals, and others to tailor the type and intensity of the intervention to the students' unique needs. Furthermore, PBIS is an evidence-based framework (see Sugai, Horner, et al., 2000; Sugai, Sprague, et al., 2000), and is featured on the National Registry of Evidence-based Programs and Practices (NREPP; <http://www.nrepp.samhsa.gov/>) of the Substance Abuse and Mental Health Services Administration (SAMHSA). Similarly, there are many evidence-based mental health interventions and prevention strategies available to meet a variety of needs (Alicea, Pardo, Conover, Gopalan, & McKay, 2012; Browne, Gafni, Roberts, Byrne, & Majumdar, 2004; Splett & Maras, 2011), as well as studies examining strategies to overcome barriers to implementation (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; Reinke, Stormont, Herman, Puri, & Goel, 2011; Schaeffer, Bruns, Weist, Stephan, Goldstein, & Simpson, 2005). Not only are there many potential benefits to PBIS-SMH interconnection, but this is a practical way to increase the availability of mental health services in the schools. With their mutual emphasis on preventative measures and evidence-based practices, PBIS and SMH fit together to promote better mental health, as well as academic and socio-emotional competence.

Although pairing PBIS and SMH is advantageous to students, schools, families, and communities, it is a large undertaking. Interconnecting PBIS and SMH begins at the systems level, but requires the support and endorsement of individuals and the community at large. To ensure that PBIS-SMH interconnection is a welcome addition to the school and community, it is imperative to evaluate readiness prior to installation and implementation (Fixsen et al., 2005). As noted by various researchers in their theoretical frameworks (Fixsen et al., 2005; Hall et al., 1973; Levesque et al., 1999), readiness is a key factor for any subsequent change to be lasting, meaningful, and successful. To support the successful adoption and installation of the intervention, stakeholders and those working with students must view the intervention as a potential solution to recognized problems or issues within the school community. If they are not prepared to take action to address these problems, the intervention has a small chance of success. Hall et al. (1973) indicated that change is process occurring in individuals first, and then flows outward to the rest of the community. Therefore, individual community members must be open and ready to adjust their ways of thinking and behaving in order for change to take place.

Fixsen and colleagues (2005) noted that any potential interventions must fit well with needs identified by the community, as well as the community's overarching values and mores. Furthermore, there must be sufficient resources available, such as staff, office space, and other materials, to support the implementation of the intervention. Similarly, the intervention must be acceptable to the community, and conceptualized as an appropriate and reasonable way to address recognized problems (Nastasi & Hitchcock, 2009). Furthermore, the community will consider the broader impact of the intervention

beyond the school setting, and the possibility of unintended side effects that may occur (Michaels et al., 2005).

Therefore, the development of the readiness for PBIS-SMH interconnection survey is a timely addition to the field and the literature. This survey and the study of its psychometric properties can provide interventionists and researchers with a tool to gauge the degree to which schools and communities are prepared to integrate PBIS and SMH. Prior to the current study, no such measure existed, despite a critical need for this tool discussed in the literature in order to move this line of research and intervention forward (Kincaid et al., 2007).

Through a pilot study and consultation with experts in the fields of PBIS, SMH, and survey construction, the original 98-item survey was developed. A confirmatory factor analysis (CFA) indicated that the hypothesized four-factor structure (support/buy-in/resources, collaboration and teamwork, positive student outcomes, and use, understanding, and applications of PBIS) was not an optimal representation of readiness. Although the calculated RMSEA suggested adequate (but not excellent) model fit, the CFI and TFI estimates were both short of the recommended cut-off points (Brown, 2006; Hu & Bentler, 1999). Thus, an exploratory factor analysis (EFA) was conducted. This analysis revealed a single-factor structure, with eigenvalues for items ranging from .436 to .895. A scree plot showed a precipitous drop after one factor, which strongly supports the single-factor solution for this survey. Therefore, according to the current sample, readiness for PBIS-SMH interconnection appears to be a unitary construct.

To facilitate use of the survey and interpretability of results, the indicator or item eigenvalues were examined to determine items that could be removed from the survey. A conservative cut-off eigenvalue of .70 was used. Although there is no consensus in the literature regarding appropriate cut-off scores, sources (Kline, 2011; Sterba, 2011) have suggested that eigenvalues of .50 or greater denote strong factor loadings. Thus, the cut-off used here is a rigorous standard. After removing items below this point, the survey was revised further through consultation with PBIS-SMH experts. This resulted in a 63-item survey.

The idea of a single-factor structure has several important theoretical implications. Here, the hypothesized four-factor structure was not supported by the data, despite research highlighting these factors as integral players in intervention adoption and implementation (Fixsen et al., 2005; Handler et al., 2007; Nastasi & Hitchcock, 2009). Instead, one factor was the strongest fit for the data, as indicated by the EFA scree plot and corresponding indicator eigenvalues. This suggests that readiness for PBIS-SMH interconnection may be a unitary construct. From a practical applications perspective, many elements must be in place to successfully adopt and implement any intervention (i.e. buy-in and support from administrators, adequate funding, teaming structures, endorsement of the intervention from key stakeholders, etc., Fixsen, et al., 2005). Similar to the current study, Chamberlain (2003) examined various factors regarding implementation of a systems-level intervention. In assessing organizational readiness to implement the Oregon Multidimensional Treatment Foster Care model, potential community partner organizations were surveyed regarding barriers to implementation, current resources, their history of service provision, and relationships with community

stakeholders. Thus, various areas are tapped in the course of evaluating the concept of “readiness.” However, the current study does not support the idea of discrete sub-factors of the overarching PBIS-SMH readiness construct. Based on this study and others, it appears that many areas contribute to the single construct. Nevertheless, it is imperative that interventionists examine a variety of areas for adequate buy-in and resources prior to adoption and installation. For example, although key stakeholders may strongly support PBIS-SMH interconnection, a lack of sufficient funding or teaming structures may undermine the success or, at the very least, attenuate the degree of success the intervention can achieve.

In addition to raising awareness of readiness issues in general, the Readiness for PBIS-SMH Interconnection Survey has utility on several fronts. First, being available online at no cost removes the barriers of accessibility that often influence intervention adoption and implementation in the schools. Moreover, the survey can be used at multiple time points to continually evaluate readiness as schools and communities move forward toward full implementation of PBIS-SMH interconnection. Because assessment and intervention are iterative processes, the PI recommends that data regarding readiness be collected throughout the preparatory stages of PBIS-SMH interconnection. Also, communities and school districts can use the survey as a tool to identify potential pilot schools for PBIS-SMH interconnection; that is, schools with the highest degree of readiness can be “test sites” for this initiative, and later serve as exemplars of how to effectively implement the intervention.

Furthermore, the survey can spark conversations among school and community stakeholders about the benefits of PBIS-SMH interconnection. Because PBIS

implementation can vary so greatly from place to place (Spaulding, Horner, May, & Vincent, 2008), an examination of resources and implementation fidelity can assist schools in carrying out PBIS and SMH interventions as intended and designed by their developers. From that point, schools can evaluate their SMH delivery, available services, and partnerships with service providers in the community. This type of self-study need not be exclusively focused on areas needing improvement; schools and communities should also be encouraged by areas in which readiness is strong and build upon those to work toward establishing readiness across domains. Similarly, evaluating readiness can support a frank discussion of school and community resources to interconnect PBIS and SMH. Although a discussion of resources typically leads to talking about finances, resources refers to a plethora of supports, including social capital in the form of existing working relationships among school staff, and connections with community leaders, mental health service providers, and related professionals (e.g. social workers, physical and occupational therapists, speech-language pathologists). Discussing these issues can lead to opportunities for building buy-in and support among administrators, school staff, and community members. The power of these working relationships should not be underestimated. Social capital can be quite influential when building support for new initiatives (Mellin & Weist, 2011).

In addition, use of this survey prior to initiating PBIS-SMH interconnection can identify several factors imperative to successful implementation. The aforementioned positive working relationships and buy-in and support of key school and community stakeholders are only the beginning. To further solidify the critical need for this initiative, data highlighting the link between good mental health and positive academic

and social outcomes can be shown to school and community stakeholders. Once the need for this work has been established, the call for other implementation supports can be discussed. For instance, less restrictive funding streams in schools and districts can facilitate PBIS-SMH interconnection, as well as other initiatives and interventions. Flexibility in spending can support this initiative and provide much needed resources to ensure implementation with fidelity and systematic evaluation of outcomes. Furthermore, districts can consider the need for PBIS and SMH coaches, which would be similar to instructional and curriculum coaches currently working in many schools. These local PBIS and SMH experts can provide assistance with initial and ongoing trainings, as well as trouble shooting and working through other issues that arise in the course of adoption and implementation.

In addition to identifying implementation supports, the survey also points to several paradigm shifts necessary to move PBIS-SMH interconnection research and practice forward. Because both PBIS and SMH focus on student needs and supporting their academic and socioemotional growth, merging these systems can emphasize the use of person-centered (and, where applicable, community-centered) approaches to service and intervention planning. By evaluating readiness and the needs of the students and the community, schools and districts can introduce new services to address these issues, as well as modifying current services and delivery modalities accordingly. Similarly, because PBIS is data-driven, the idea of data-based decision making can also be applied in schools and communities. Although anecdotal records are often utilized, quantitative data is needed to objectively evaluate outcomes and track progress. Over time, schools and communities can come to rely on quantitative data and periodically review results

and make changes as necessary. Spillane (2012) noted several important considerations for data-based decision making in the school setting, including accounting for organizational routines in both the formal hierarchy of school staff and the practical applications of the data. Because schools are unique organizational systems, understanding of the chain of command and duties of various staff members can assist interventionists in designing data collection and tracking systems that are tailored to the needs of the schools. Having data that are easily accessible and interpretable, especially when gauging PBIS-SMH interconnection readiness, can facilitate decision making and determining next steps.

With the aggregation of survey results over time, community and school leaders can work together to resolve the fragmentation of youth mental health services. Unfortunately, there is still a lack of coordination and communication among the various professionals working with school-age youth experiencing mental health issues. These professionals include teachers and other school staff, school mental health workers, school social workers, community social workers, school psychologists, community-based psychologists, and psychiatrists, among others. While protecting the privacy and confidentiality of students and families is an ethical and legal imperative, appropriate communication among service providers is in the best interest of the populations served. By allowing for more communication among these service providers, some of whom may be unaware that they are serving the same students, consistency in service provision can be increased, while the redundancy of some services (e.g. counseling) may be reduced. Similarly, this coordination and communication can also assist with increasing collaboration among disciplines. By pooling resources and coordinating efforts, school



and community professionals may work together to effect greater change. This is especially timely, in light of discussions of mental health care reform and corresponding changes in health care legislation.

Although the current survey provides a needed resource to PBIS-SMH interventionists and practitioners, this is an initial step in the PBIS-SMH interconnection. Further research is necessary in several related areas. First, future studies should focus on establishing the predictive validity of the measure. For sites using the survey, this would involve measuring readiness at multiple points in the intervention adoption and early implementation phases, and examining any correlations with readiness at these stages and the later degrees of success in interconnecting PBIS-SMH services. Furthermore, subsequent research should examine possible methods to score the measure. At the moment, schools and communities can qualitatively evaluate readiness by comparing areas where respondents indicated established areas of support, and where there appear to be weaknesses regarding teaming structures, resources, and so forth. However, establishing score ranges can provide users of the survey with a general idea of their level of readiness. For the final (short) version of the survey, scores would range from 63 to 252 (based on scoring of 1 to 4 per item). If a rating of 75% were indicative of readiness (i.e. an average rating of 3 or higher on survey items), then scores of 189 or higher would indicate strong readiness for PBIS-SMH interconnection. Scores of 126 to 188 would indicate that the school or community is somewhat ready (i.e. average ratings of 2 to 3), and scores of 125 or lower would suggest inadequate readiness. From there, subsets of survey items can be examined for further information. Again, empirical studies are needed to establish cut-points and predictive validity of these score ranges.

Based on survey results, a variety of readiness-increasing activities in the form of workshops and in-service trainings can be developed to work on insufficient areas identified by the survey. Because assessment should inform intervention, the survey can point to areas where staff members are in need of additional support and be provided with these trainings on an ongoing basis.

Using the current study as a starting point, several related measures can be developed to assist schools and communities with their overall intervention and mental health service delivery efforts. First, a more succinct measure of readiness for PBIS-SMH interconnection could be developed for use as a screening tool. This could assist with identification of potential pilot schools, or places where other work is needed prior to considering PBIS-SMH interconnection.

Furthermore, there is a need for schools to screen students for possible mental health issues. Just as schools periodically evaluate students' reading and math skills, a brief measure of mental health status could identify students at risk for externalizing and internalizing disorders, as well as other issues. An example of this type of measure is the Strengths and Difficulties Questionnaire (Goodman, Ford, Simmons, Gatward, & Meltzer, 2000), which has been validated as a screener for a variety of disorders (e.g. affective disorders, hyperactivity). Using screening measures would be more efficient than relying on a parent or teacher referral, which would require time for a potential issue to surface and be monitored by the school's student assistance team. A brief screener could point to issues that might require monitoring and/or intervention.

Once PBIS-SMH interconnection has become an established intervention and a part of the typical services provided in schools and communities, another measure examining the impact of PBIS-SMH interconnection could be developed. This measure could assess several larger-scale issues, such as cases of social services involvement with families, substantiated cases of child abuse, the number of children removed from the care of their parents or guardians, and the cost effectiveness of mental health service delivery through the schools. Mental health service utilization can also be monitored (e.g. the number of children receiving counseling, psychiatric services, and so forth), in addition to the number of severe behaviors observed (e.g. self-injurious behaviors, suicidal ideation and attempts). Although PBIS-SMH interconnection would have to be well-established in schools and communities, research on the larger influence of this model could provide further support for this type of intervention. In addition, PBIS-SMH interconnection can reach well beyond the local school and individual families to effect positive changes in the community.

However, the current study has several limitations. First, survey methodology is susceptible to influence by social desirability or personal biases. This is a source of measurement error in participants' responses to the survey. Although Heerwegh (2009) suggested that online surveys come with an inherent sense of mistrust for data security and confidentiality, it is unlikely that this affected responding to the current survey. Because the survey did not include any personal or sensitive questions, and asked for only general demographic information (e.g., gender, job title), there was a low risk of social desirability bias and concerns for confidentiality.

The use of an online survey format is both a strength and a limitation. On a positive note, online surveys are relatively quick and inexpensive to administer. Furthermore, it is assumed that the majority of the target population for this study has internet access. Thus, many potential participants can be reached through emailed survey invitations. The survey takes only about 15 minutes to complete, and participants were offered an incentive (entry into a drawing for a \$100, \$75, or \$50 gift card). However, online surveys are limited by several factors. First, potential participants may receive a great deal of unsolicited email or survey requests, and might not be inclined to participate in yet another survey. Furthermore, the ease of online surveys could actually be detrimental, as participants may “multitask” and complete other jobs (e.g., returning phone calls and emails) while completing the survey (Heerwegh, 2009). The lack of the participant’s full attention to task can result in inaccurate responding.

Nonresponse or a selection bias is also an issue. Although the survey was disseminated to a large group of potential participants, it is unclear if those who partially or completely responded to the survey differ from those who chose not to participate. However, the current sample includes participants from a variety of professions, thus increasing external validity.

In conclusion, the current study addresses a long-standing gap in the literature regarding the development of measures assessing readiness to implement interventions. Furthermore, in spite of the growing interest in PBIS-SMH interconnection, there was no measure to evaluate the level of readiness (and desire) within schools and communities to do so. The current study is a beginning step in remedying this issue. By developing a psychometrically sound measure to evaluate readiness for PBIS-SMH interconnection,

more attention is being drawn to ways to feasibly provide SMH services that are accessible, cost effective, and driven by the needs of students, schools, and communities. Moreover, PBIS-SMH interconnection fosters the collaboration of professionals from many different backgrounds, fields, and work environments. By combining their efforts, these professionals can support students in a variety of ways to encourage academic achievement, social skill development, and problem solving and coping skills. The development of the Readiness for PBIS-SMH Interconnection Survey is a both a contribution to and an investment in the mental health and well-being of students from all walks of life.

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## APPENDIX A: PILOT SURVEY



DEPARTMENT OF PSYCHOLOGY

Dear School Mental Health/PBIS Stakeholder,

Attached is an anonymous survey that we are asking you to complete to provide your perspectives on integrating PBIS and school mental health, including barriers and recommendations.

Your participation involves answering questions about your current position, populations you serve, and your experiences with PBIS and school mental health services. Specifically, you will be asked to note your perspectives and suggestions for implementing PBIS and school mental health services in schools.

By completing the survey, you are indicating your consent to participate in this study. It should take approximately 10 to 15 minutes to complete. Please let us know if you have any questions.

Thank you very much for your help!

Sincerely,

Vittoria Anello, B.A.  
School Psychology Graduate Student

Mark Weist, Ph.D.  
Professor and Faculty Advisor



## SCHOOL MENTAL HEALTH - PBIS QUESTIONNAIRE

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*Please answer the following questions about yourself*

**Choose the item that best describes your current position:**

- Family Member/Advocate
- Youth Leader
- Teacher
- School Administrator
- School Psychologist
- School Counselor
- Clinical/Counseling/Community Psychologist
- School Social Worker
- Clinical Social Worker
- Physician
- Nurse
- Allied Health Professional (Occupational Therapy, Speech Therapy)
- Government Official
- Legislator
- Faculty/Researcher
- Other \_\_\_\_\_

**I am:**

- Female
- Male

**How many years have you been working in your field?**

\_\_\_\_\_

**What age groups do you primarily serve? (Check all that apply)**

- Infants and toddlers (ages 0-3 years)
- Early childhood (ages 4-8 years)
- Pre-adolescents (ages 9-12 years)
- Adolescents (ages 13-18 years)
- Young adults (ages 18-21 years)

**What populations do you serve? (Check all that apply.)**

- Regular education students
- Special education students
- Students with developmental disabilities
- Students with learning disabilities
- Students with mental disabilities
- Students with emotional and/or behavioral disabilities and/or disorders
- Other \_\_\_\_\_

**Approximately how many students are in your schools' student population?**

\_\_\_\_\_

**Does your school use Positive Behavior Interventions & Supports (PBIS)?**

- Yes       No

**How many years have you been using or practicing PBIS?**

\_\_\_\_\_

**In your opinion, what are the top 5 factors promoting effective PBIS?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**What are the top 5 factors that would hinder implementation of PBIS?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Are more comprehensive or expanded mental health services provided at your school?**

- Yes       No

**In your opinion, what are the top 5 factors promoting effective expanded school mental health services?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**What are the top 5 things that would make it difficult to provide expanded school mental health services?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**What are the top 5 factors that would facilitate PBIS and school mental health integration at your school?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**In what time frame could your school be prepared to integrate PBIS and school mental health services?**

\_\_\_\_\_

**For the following items, indicate the current status of the feature in your school and the level of priority for improving the feature.**

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place		High	Med	Low
			<b>School-wide</b> is defined as involving all students, all staff, & all settings.			
			1. A PBIS team is in place for positive behavior support implementation and problem solving			
			2. The PBIS team includes school administrators			
			3. School administrators on the PBIS team actively participate in team meetings and decision-making processes			
			4. At your school, there is a focus on improving the social, emotional, and/or behavioral health of all students			
			5. At your school, resources are allocated for PBIS implementation			
			6. Resources are designated for prevention efforts			
			7. There are enough support staff members at your school to assist with PBIS implementation			
			8. Decisions regarding PBIS implementation are based on data collected at your school			
			9. Decisions regarding individual students are based on data regarding behavior, academic performance, etc.			
			10. Your school is dedicated to integrating PBIS and school mental health services			

## APPENDIX B: RESPONSES TO PILOT SURVEY

### Top factors promoting effective PBIS

- Showing effective implementation of PBIS close to home
- Top-down visible support (CSSO → Superintendent → Principal)
- Personal connection between learning school/district and those who successfully use PBIS
- Community promotion
- PBIS lowers ODRs
- PBIS promotes a positive learning and teaching environment
- PBIS encourages a decrease in exclusionary discipline (i.e. suspension)
- Provides support for behavioral needs
- Increases academic achievement
- It's evidence-based
- Readiness
- Principal leadership/support
- Teacher and school buy-in
- Collaboration
- Open communication
- Conflict resolution
- Structured approach
- Teacher education
- School-wide
- Relationships (staff and students)
- Buy-in of staff
- Community supports
- Strong support of administration
- Support and buy-in of the teachers
- Its general acceptance as a practice that is customary
- It is easy to understand and has common ties and common cultural norms
- It makes quick changes at least at a beginning level
- Use of overall tiered structure/logic
- Use of data for decision making – teams using data

- Aspect of social marketing to secure buy-in
- Use of implementation science/evidence base
- Leadership role
- Reduction in ODRs
- Increased instruction
- Positive school climate
- Reduction in suspensions
- Reduction in restrictive placements
- Reinforcement/teaching core principles in classroom regularly
- Focusing on positive behaviors rather than punishment/negative
- Interventions for all students
- Creates a culture of positivity in schools
- Expectations are clear and for all students
- Superintendent and assistant superintendent
- District leadership team
- Tertiary replication process
- Administrators (district level to building level) on board
- Moving up all 3 tiers of support
- Administrator buy-in
- Teacher buy-in
- Effective school coaching
- District leadership
- Well trained leadership team with administrator actively involved
- Good data collection system
- Routine analysis of data leading to actions
- Regular fidelity of implementation checking
- Emphasis school-wide for all students/all staff
- Reduce non-academic barriers to learning
- Increase academic achievement
- Increase positive school climate and safety
- Increase social skills
- Decrease discipline referrals/suspensions/expulsions
- Building leadership and commitment (principal)
- District leadership and commitment
- Skilled and consistent coaching
- Ongoing use of data
- Dedicated time for PD and planning
- Need to reduce suspension/expulsion rates (SPP 4B)
- Need to increase graduation rates (SPP 1B)

- Need to reduce dropout rates (SPP 1B)
- Need to increase LRE rates (SPP 4B)
- To ensure reduction of non-academic barriers to student achievement and post-secondary
- Continuum of supports for all students – 3 tier logic
- Framework for expanding school mental health
- Connection to positive school culture and climate
- Improvement in academic performance
- Coordination of fragmented practices
- Effective training
- Effective coaching/TA
- Administrative support
- Broad-based district/community support
- Sufficient planning time for key personnel
- Commitment from school district
- Leadership from principal
- SBBH team – mental health
- Strong, positive Tier 1 team
- Training for teams and school staff
- Teacher buy-in
- Interactive student participation in creative school behavior expectations
- Anecdotal stories to show evidence that it works
- Spending time with students to understand expectations
- Follow through – as hard as it is to change, when you stay consistent, it pays off!
- Good data tracking tool
- Knowledgeable administrators
- Knowledgeable families
- Coaching/monitoring
- Mentoring

#### **Top factors that would hinder implementation of PBIS**

- Seen as a quick fix
- No buy-in by administration
- No buy-in by staff
- Lack of providing good information
- Educators don't believe students should be "rewarded" for appropriate behavior
- Lack of funding
- A desire to punish over using correction to teach
- Lack of behavioral competence
- Wanting to do things the way they've always been done
- Requires 80% buy-in from school



- Not having everyone at the table
- Funding
- Sustainability discussions in the beginning
- Community buy-in
- Promotion
- School time
- School personnel
- Staff changes yearly
- Funding
- Trained trainers
- Leadership
- Refuse to change
- Administration does not support
- Teachers and staff do not implement
- Superficial in implementation
- May not help (actually may negatively impact students and more severe issues)
- Promotion of simplistic solutions and understandings
- Too dependent on behavioral reinforcement
- Pre-service teacher curriculum/approach
- Policy - often punitive for both students and staff (code of conduct/NCLB)
- Lack of integration between instruction/RTI
- Contingency for success → outcomes of high stakes test
- Administrator training
- Any cost associated with implementation
- Buy-in of administration
- Buy-in of staff
- Focus on NCLB requirements
- Negative views on effectiveness/principles by teachers
- Lack of support from district administration
- Lack of buy-in by building principals (they are cheerleaders for program)
- Non district support
- Non administration support
- No data
- Schools not participating in EBP/current initiatives
- Lack of system approach to coach/training/etc.
- Top-down implementation
- Poor data system
- Reactive administration
- Lack of fidelity
- Lack of data based decision making
- Lack of external reviewers

- Inadequate reviews of key concepts and practices
- Inadequate “competence” an any of the 3 tiers
- Faculty/staff buy-in
- Administrative buy-in
- Administrator turnover/board mandates
- Poor fidelity of implementation
- Lack of training and TA
- Lack of principal commitment
- Weak leadership (even when committed)
- Not using data at a high frequency
- Not teaching behavior consistently and frequently
- Misunderstanding the role of acknowledgements within a school wide system
- Internal (school) and external (district) preparedness
- Insufficient internal, external, and community buy-in
- Poor resource management associated with scale-up of PBIS
- Insufficient use of data management, analysis, and team meetings
- Insufficient succession planning to fill voids created by loss of core team members at school and district levels
- Perception that schools/staff don’t need to recognize positive behavior
- Concerns for funding it
- Perception it might be just another thing to do
- Idea that teachers shouldn’t have to teach social skills
- Competing models for school time and money
- Commitment from district official (lack of)
- Failure to implement with fidelity
- Inability to create a broad planning team
- Lack of adequate TA/training
- Cooperation from school staff
- Lack of money
- Lack of training
- Time for teams to meet
- People wearing too many hats
- Teachers not buying in
- Not including teachers and support staff in creation of expectations
- Inconsistency among teaching staff
- Staff and student turnover
- Not consistently collecting data
- Attitude

- Lack of interest
- Lack of administrative support

### **Top factors promoting effective expanded school mental health services**

- Co-location of mental health services and education services
- Administrator buy-in
- Teacher buy-in
- Engagement of school and non-school people in common activities
- HIPAA/FERPA reconciliation to enable communication
- Promote w/ community
- RTI is part of the law
- We don't have effective SMH in my state
- Community/parent/family involvement
- Strong multi/interdisciplinary leadership
- Planning process
- Readiness
- Relationships
- Funding
- Collaboration between education and mental health
- Practitioners who understand children's mental health and who are capable of providing a continuum of supports across all 3 tiers
- Communicating effectively
- Willing to take a risk
- Practitioners may represent many disciplines but who have the capacity to work together in common vision
- Communication
- School buy-in
- Funding flexibility
- Collaboration with systems level planning teams
- Change in role and function of clinician
- Use of data/progress monitoring
- Use of evidence base
- Getting families involved
- "Fixing" problem behavior
- Increased instruction time
- Better understanding mental health issues
- Understanding by teachers of mental health issue
- Administrative commitment
- Integrating district leadership teams
- Family voice
- Children being serviced in their home schools and community, in a supportive manner where all needs met
- PBIS

- Systematic evaluation
- Administrative satisfaction with school mental health services
- Mental health center higher “hit rate” – maintaining clients
- Parental satisfaction
- Reduced stigma
- Collaboration with school staff
- Supporting all students to be successful
- Enable students to access services and remain in school
- Increase student social/emotional skills
- Faculty/board/administrative support
- Availability and portability of services
- Availability of clinicians to participate in systems planning teams
- Data decision rules to determine interventions
- Progress monitoring through teams
- Deliberate structures for ensuring family voice at all levels
- Ability to codify return on investment in ways that make sense to decision makers
- Strong district leadership teams
- Articulation between building care teams
- Coordinated services at Tier 3 across sites
- Insurance of continuity of services for all students, district wide
- State/federal requirements, e.g. NCLB, IDEA
- Research on effective practices
- School need to develop MH capacity
- Links between positive MH and academics
- Public mental health approach for children (Georgetown model)
- Community/school partnership
- Trained staff providing services
- Staff flexibility to meet needs of students
- Training of all school staff to understand MH needs
- Clear policies to access services
- Current services are working in our school
- District and principal are committed
- School staff see improvement in children
- Administrative buy-in
- Education
- Willingness to change

## Top things that would make it difficult to provide expanded school mental health services

- Stigma
- Teachers/administrators who see mental health as “not my job”
- Money and reluctance to share resources
- Minimal school staff who parachute in
- Lack of funds
- No relationship between DOE and MH in my state
- No or little MH professionals in most of our schools
- Rural communities with few MH services
- Stigma related to MH services
- Lack of administrator support
- Funding
- Funding
- Staff
- Buy-in
- Education of everyone
- Lack of room
- Lack of educational support
- Licensing complications
- Fragmentation and isolation of roles
- Deficit-based/medical model-based intervention
- Must have buy-in from administrators and teachers and must be meeting their needs
- Lack of connection to academic outcomes
- Funding
- Label
- Refer out – idea that MH providers will “fix”
- Time (staff time, students out of class)
- Perception of MH
- Funding
- Buy-in of administration
- Availability of clinicians
- Space issues within school
- People not wanting to collaborate – agendas can’t be left at door
- Not seeing clients/kids/families as the reason we are in business
- Seeing mental health as pathology – not on a continuum of MH wellness
- Lack of data
- Lack of EBP usage
- Cost
- Perceived lack of value
- Poor training of on-site mental health practitioners

- Lack of internal collaboration
- A “send him to the experts” mentality
- Funding questions
- Administrative/board/community – lack of support
- Availability and portability of services
- Significant funding cuts
- Lack of community/state vision/support
- Predetermined menu-driven services
- Clinicians not being able to participate on planning teams in schools
- Lack of a clear plan at district/community level
- Lack of trained clinicians
- Lack of data that speaks to returns on investment
- Weak district leadership team
- Inability access high quality training and TA for newly expanded sites
- Lack of district wide vision, supported by internal and external stakeholders
- Poor implementation at pre-existing sites
- Money
- Time
- Lack of expertise
- Not the school’s responsibility
- Difficulties partnering with community-based providers
- Lack of support from school officials
- Lack of training for providers
- Lack of understanding of student MH needs by faculty
- Lack of a clear vision for student services
- How it is paid for – restrictive
- Permission from families
- Not enough money
- Stigma with parents/students/teachers
- Close-mindedness
- Attitude

#### **Top factors that would facilitate PBIS and school mental health integration**

- Integrated planning
- Collaborative relationships
- Administration working together
- Collaborative environment
- Invitation to MH community
- Coordination of efforts
- Student I.D.
- Leadership

- Vision
- Communication
- Buy-in
- Better support by leadership in education and MH
- Collaboration
- Blended funding
- Calling it mental health or frankly PBIS would be barriers because each have different connotations
- What I do is driven by campus, teacher, and individual need and listening to needs facilitates my going into unexpected roles/activities
- Using a strength-based approach and stigma
- Clear, detailed examples with data to support buy-in (incl. cost benefit)
- Framework applied and understood by all
- Flexible funding streams
- Fidelity tools
- Implementation guide describing the “how”
- Return on investment
- Keeping kids in home school
- Increased “test” scores – academic achievement
- Decreased need for restrictive mental health (interventions such as hospitalization)
- It is already occurring
- 3 tiers
- Integrated training
- Data use expanded
- Family and student voice and partnership
- Using similarities/strengths and building on them to move forward
- School leadership
- Poor data
- Community wide awareness of the benefits
- Awareness of the research
- Cross training
- Funding mechanisms that support integration
- A graduated continuum of integration
- Integrated planning and training
- Administrative/board support
- Availability and consistency of supports and TA
- Clinicians able to participate on planning/systems teams at all 3 tiers in schools
- Use of data to decide on which interventions to provide to whom

- Ongoing progress monitoring of all interventions
- Blended professional development
- A community/district level leadership team
- Promoting understanding of link between MH and school performance
- Demonstrating to schools how to partner and community providers
- Showing them how to run effective meetings
- Putting policies in place to support 3-tier development
- Promoting the use of research-supported interventions
- Administrative support
- Willingness of providers to work within PBIS framework
- Training for school staff
- Training for provider staff
- Time to develop a strategic plan w/ stakeholders
- Different billing/payment model
- Cooperative families
- Incentives
- Promotion through NASDE, NASB, etc.



## APPENDIX C: THEMES FROM SURVEY RESPONSES

1. Support/buy-in from principal
2. Support/buy-in from other key staff
  - a. Assistant principal
  - b. Lead educators
  - c. School mental health staff
3. Belief in impact on school behavior
  - a. Attendance
  - b. Behavior
  - c. Suspensions
4. Belief in impacts on academic performance
5. Belief in promotion of a positive learning environment
6. Belief in facilitation of data-based decision-making
7. Active family-community involvement
8. Collaboration between school and community mental health
9. Staff understanding and acceptance of mental health
10. Good communication mechanisms in school
11. Positive team functioning
12. Effective leadership of teams focused on behavior and mental health
13. Adequate funding
14. Active, comprehensive training

15. Implementation support
16. Effective data systems
17. Staff understanding of PBIS
18. Staff understanding of SMH
19. Staff endorsement of benefits of collaborative PBIS and SMH
20. Active student involvement

## APPENDIX D: PRELIMINARY SURVEY

1. The school principal (assistant principal) expresses support for PBIS in public meetings and assists in scheduling training and assuring ongoing support for effective implementation.
2. The school principal (assistant principal) serves as a champion for PBIS, showing enthusiasm for it, actively involved in team decision making and praising and acknowledging team efforts.
3. A wide range of staff in the building are actively involved in decision making and implementation of PBIS.
4. School staff express positive views of the impact of PBIS on student behavioral and academic functioning.
5. PBIS leads to decreases in suspensions, office discipline referrals, truancy, and dropouts.
6. School staff view PBIS as effective in encouraging students' classroom cooperation and motivation toward academic achievement.
7. School staff feel that PBIS promotes a school climate where learning and positive relationships among members of the school community are encouraged.
8. School staff see PBIS as a way to make the school environment safer and more welcoming to family and community members.
9. School staff rely on data (such as student outcomes, school characteristics, and how well interventions are carried out) to make decisions.

10. School staff are trained in how to collect and use data.
11. Families and community members are encouraged to participate in school activities.
12. Family members support students' learning and good behavior at home and at school.
13. Family members of students at all levels of PBIS encourage their academic achievement.
14. School staff and community mental health practitioners work as partners to improve quality of life for all students.
15. School staff and community mental health practitioners collaborate to choose interventions that are appropriate, practical, and in line with the school's values and standards.
16. School staff indicate that they see school mental health as feasible and important for students' well-being, development, and achievement.
17. There is clear and consistent communication among school staff and administrators through regular bulletins, newsletters, staff meetings, etc.
18. School administrators provide constructive feedback to school staff.
19. School staff's progress on interventions and programs is communicated to administrators on a regular basis.
20. School staff regularly communicate with each other and school administrators about PBIS and SMH implementation, as well as staff, student, and/or family issues and questions.

21. PBIS and SMH team members express their perspectives in a way that builds satisfied, cohesive, and effective teams.
22. PBIS and SMH teams have regularly scheduled, structured meetings with action-centered agendas.
23. The school principal actively seeks and secures district resources to support PBIS and SMH.
24. PBIS and SMH training reviews key points about student development, discipline, and behavior change principles.
25. PBIS and SMH team members participate in an initial training workshop, as well as brief follow-up trainings throughout the year.
26. Resources are available for school staff seeking more information on PBIS and SMH decision making and problem solving.
27. School staff have the opportunity to build PBIS and SMH competence and mastery by practicing skills with a more experienced team member.
28. Schools have a system in place for ongoing data collection and analysis.
29. Schools' data collection system is quick, easy to use, and built into existing interventions.
30. School staff express understanding of the basic principles of PBIS, including behavior change, problem solving, and use of reinforcement to increase the frequency of appropriate behavior.
31. School staff indicate their grasp of SMH, including promoting well-being of all students, identifying students in need of assistance, and working with other school staff and mental health practitioners to support students in need.

32. School staff express approval of combining PBIS and SMH.
33. School staff indicate that combining PBIS and SMH will be beneficial to students' behavior, academic achievement, and general development.
34. Students actively participate and collaborate with school staff and mental health professionals to give feedback and suggestions on school interventions and programs.
35. Students express that their input is valuable and used to make positive changes.

## APPENDIX E: MAJOR SURVEY



### *Survey on School Readiness for Interconnecting Positive Behavior Interventions and Supports (PBIS) and School Mental Health (SMH)*

June 5, 2012

Dissertation Project for Vittoria Anello,  
School Psychology Program, University of South Carolina  
Mentor: Professor Mark Weist

Collaborators: Lucille Eber and Susan Barrett,  
National PBIS Technical Assistance Center;  
Joanne Cashman and Mariola Rosser, IDEA Partnership; and  
Sue Bazyk, Cleveland State University  
(with all collaborators part of the National Community of Practice on  
Collaborative School Behavioral Health)

We greatly appreciate your help with what we believe is an important project that will have considerable benefit for schools in the U.S., as more are moving to multi-tiered programs to promote positive student behavior and learning. We are asking you to complete a survey that will take 15 minutes or less of your time and that will lead to a publicly accessible resource available to schools and collaborating community partners by the fall of 2012.

The following survey includes items regarding school readiness to interconnect Positive Behavior Interventions and Supports (PBIS) and School Mental Health (SMH). If you are working at the building level, please rate the following items based on experiences in your school or schools. If you are working at the district or state level, please complete the survey if you have regular contact with particular schools and rate the items based on your experiences with these schools. As thanks for your time and participation, you will be entered into a drawing to receive a \$100, \$75, or \$50 gift card. If you are working at

the district or state level without such ongoing interaction with particular schools, it most likely does not make sense for you to complete this survey, and please accept our thanks for considering this request. Your participation is anonymous and confidential. If you choose to share your contact information for the gift card drawing, this information will be stored separately from your survey responses.

Positive Behavior Interventions and Supports (PBIS) is a framework for promoting and reinforcing positive behaviors. In this system, positive behavior strategies are utilized to minimize problem behaviors and increase adaptive behaviors. It usually operates on a three-tier system, ranging from school-wide strategies for all students (i.e. universal or Tier I interventions), to targeted interventions (Tier II) for more at-risk students, and finally to individualized, intensive interventions (Tier III) for students with more challenging behavioral issues.

School Mental Health (SMH) refers to implementing a full array of mental health promotion, prevention, early intervention, and intervention programs and services for youth in general and special education through partnerships between schools, families, and collaborating community agencies such as mental health centers. These programs and services augment those delivered by school personnel, and can play a critical role in expanding and improving the quality of multi-tiered PBIS programs. SMH programs and services may be delivered by a variety of professionals, including school psychologists, counselors, social workers, and community-based mental health practitioners, as well as others with backgrounds in clinical child and adolescent psychology and psychiatry.



For each item below, please check one choice from the following scale to indicate your level of agreement with each statement, reflecting your perception of how your school is doing with PBIS, SMH and interconnecting them:

Strongly Disagree      Disagree      Agree      Strongly Agree  
 1                                  2                                  3                                  4

	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
<b>PBIS/SMH Applications</b>				
1. School staff express understanding of the basic principles of Positive Behavior Interventions and Supports (PBIS), including				
a. Behavior change and problem solving	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Use of reinforcement to increase the frequency of appropriate behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2. School staff apply PBIS principles to content areas other than their own.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. School staff indicate their grasp of School Mental Health (SMH), including				
a. Promoting the well-being of all students	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Identifying students in need of assistance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Working with other school staff and mental health practitioners to support students in need	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
4. School staff express approval of combining or interconnecting PBIS and SMH by implementing a multi-tiered system of behavioral support, with SMH embedded within the PBIS framework.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5. School staff indicate that interconnecting PBIS and SMH will be beneficial to the following:				
a. Students' behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

<u>Administrator Support</u>				
6. School administrators demonstrate support in public meetings/communications for the following:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7. School administrators assure ongoing support for effective implementation of interconnected PBIS/SMH by allocating appropriate resources (e.g., release time for team members, coaching full time employees, etc.).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8. School administrators serve as champions for PBIS and SMH, by actively promoting their collaborative benefits, and praising and acknowledging involved staff for their efforts.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9. School administrators provide constructive feedback to school staff regarding implementation and fidelity of:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10. The school principal actively seeks district resources to support:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11. School administrators actively partner with family and community members and expect all school staff to do the same.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12. School administrators actively partner with family and community members and expect all leadership teams to do the same.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Staff Support</u>				
13. School staff are aware of how to interconnect PBIS and SMH (e.g., the two programs working closely together as reflected in coordinated team planning and actions).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

14. A wide range of school personnel are actively involved in decision making and implementation of PBIS (staff includes, but is not limited to, administrators, regular and special education teachers, classroom aides, school counselors, behavior specialists, nurses, related service providers (occupational therapists, physical therapists), office staff, cafeteria staff, bus drivers, etc.).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15. A wide range of school personnel are actively involved in decision making and implementation of SMH promotion, prevention and intensive intervention strategies (staff includes, but is not limited to, administrators, regular and special education teachers, classroom aides, school counselors, behavior specialists, nurses, related service providers (occupational therapists, physical therapists), office staff, cafeteria staff, bus drivers, etc.).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16. School staff indicate that as a result of PBIS, positive effects on the following are observed:				
a. Students' well-being	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' behavioral development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17. School staff indicate that as a result of SMH, positive effects on the following are observed:				
a. Students' mental health and well-being	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
18. PBIS leads to decreases in behavioral consequences for students, such as suspensions, office discipline referrals, truancy, and/or dropouts.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19. School staff view PBIS as effective in encouraging the following:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

20. School staff view SMH as effective in encouraging the following:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
21. School staff indicate that the following promote a positive school climate where learning is encouraged:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
22. School staff indicate that the following promote a positive school climate where positive relationships among members of the school community are encouraged:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
23. School staff see the following as a way to make the school environment safer and more welcoming to family and community members:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Family and Community Support and Participation</u>				
24. Family members are offered educational materials and interactive sessions to become informed about PBIS and SMH strategies to support positive behavior and mental health in all students.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
25. School staff, community mental health practitioners, and families work as partners to improve the quality of life for all students.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
26. School staff and community mental health practitioners collaborate to choose interventions that are appropriate, practical, and in line with the school's and families' values, standards, and cultural practices.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
27. Families view PBIS as effective in encouraging:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

28. Families view SMH as effective in promoting:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Communication</u>				
29. There is clear and consistent communication among school staff, administrators, students, and families regarding school-wide approaches for promoting positive mental health, academic achievement, and behavior through the following:				
a. Bulletins/Newsletters	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Staff meetings	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Listservs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
30. To build a family-friendly community school, school staff strengthen the school by partnering with the following:				
a. Community organizations	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Businesses	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Institutions of higher learning	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Teaming Structures</u>				
31. School teams are aware of how to interconnect PBIS and SMH (e.g., the two programs working closely together as reflected in coordinated team planning and actions).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
32. Team members express their perspectives in a way that builds satisfied, cohesive, and effective teams.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
33. Teams have regularly scheduled meetings.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
34. Teams have structured meetings.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
35. Teams have meetings with action- and solution-focused agendas.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
36. PBIS and SMH teams hold meetings together.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

PBIS and SMH Professional Development				
37. PBIS trainings review key points about the following:				
a. Student social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Student behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Behavior change principles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
38. SMH trainings review key points about the following:				
a. Student social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Student behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Behavior change principles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d. Mental health literacy and everyday strategies for promoting mental health	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e. Early symptoms of mental health challenges and how to respond	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
39. Team members participate in an initial training workshop.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
40. Team members participate in regular, brief ongoing trainings, supervision, technical assistance and coaching.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
41. Resources are available for school staff seeking more information on PBIS decision making and problem solving.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
42. Resources are available for school staff seeking more information on SMH decision making and problem solving.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
43. Teams utilize and collaborate with systems support coaches who help guide implementation.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
44. School staff have the opportunity to build PBIS competence and mastery by practicing skills with more experienced team members.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
45. School staff have the opportunity to build SMH competence and mastery by practicing skills with more experienced team members.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

<u>Data Collection and Analysis</u>				
46. Schools have a building-based data system in place for ongoing data collection and analysis of data in the following areas:				
a. Academic performance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Student engagement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
47. Schools' data collection system is user-friendly.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
48. Schools' data collection system is able to document, track, monitor, and generate reports on student behaviors and interventions.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
49. School staff rely on data (such as student outcomes, school characteristics, and how well interventions are carried out) to make decisions.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
50. School staff are trained in how to collect and use data for school-wide student decision-making purposes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
51. School staff are trained in how to collect and use data for individual student decision-making purposes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Student Participation</u>				
52. Students actively participate and collaborate with school staff to give feedback and suggestions on school interventions and programs.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
53. Students actively participate and collaborate with mental health professionals to give feedback and suggestions on school interventions and programs.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
54. Students indicate that their input is valuable and contributes to positive changes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
55. Students are engaged in:				
a. the PBIS process	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH initiatives	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Please provide any additional comments in the space below.

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Thank you for completing the PBIS-SMH Readiness Survey! Please tell us about yourself:

1. Please indicate your gender:  
Female      Male
2. What is your current position? Select one of the following:  
Clinical/Counseling/Community Psychologist  
Clinical Social Worker  
Faculty/Researcher  
Family Member/Advocate  
Government Official  
Legislator  
Nurse  
Physician  
Related Service Provider (Speech Therapy, Occupational Therapy)  
School Administrator  
School Counselor  
School Psychologist  
School Social Worker  
Teacher (Regular Education)  
Teacher (Special Education)  
Youth Leader  
Other \_\_\_\_\_
3. At what level are you currently working? Select all that apply.  
State level  
District level  
Building level



4. How many years of experience do you have in your field?

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- More than 25 years

5. For the school(s) you provided ratings for:

a. Please indicate the level of the school(s). (If working at multiple schools, please select the type of school in which you spend most of your time or have the closest connection to.)

- Preschool
- Elementary (grades K-5)
- Elementary/Middle (grades K-8)
- Middle (grades 6-8)
- Middle/High (grades 6-12)
- High (grades 9-12)

Alternative school:

- Alternative elementary (grades K-5)
- Alternative elementary/middle (grades K-8)
- Alternative middle (grades 6-8)
- Alternative middle/high (grades 6-12)
- Alternative high (grades 9-12)
- Other \_\_\_\_\_

b. Please indicate the setting of your school. Select one of the following:

- Metropolitan (more than 250,000 residents or located in a metro area)
- Non-metropolitan urban (more than 2,500 but less than 250,000 residents)
- Rural (area with less than 2,500 residents)
- Frontier (less than 7 people per square mile)

c. Please indicate the percentage of students in your school/district/state receiving free or reduced lunch.

0-10%

11-20%

21-30%

31-40%

41-50%

51-60%

61-70%

71-80%

81-90%

91-100%

If you would like to be entered in a drawing to receive a gift card for \$100, \$75, or \$50, please provide your contact information below (please note that this information will be separated from your other responses so they remain anonymous):

Name \_\_\_\_\_

Email address \_\_\_\_\_

Daytime phone number \_\_\_\_\_

## APPENDIX F: MAJOR SURVEY, SHORT VERSION



### *Survey on School Readiness for Interconnecting Positive Behavior Interventions and Supports (PBIS) and School Mental Health (SMH)*

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Collaborators: Lucille Eber and Susan Barrett,  
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(with all collaborators part of the National Community of Practice on  
Collaborative School Behavioral Health)

The following survey includes items regarding school readiness to interconnect Positive Behavior Interventions and Supports (PBIS) and School Mental Health (SMH). The purpose of this survey is to evaluate readiness to interconnect PBIS and SMH; that is, delivering SMH services through the PBIS framework. Readiness includes perceptions of all those involved (teachers, students, administrators, family members, etc.), feasibility of implementing changes, and types of available resources.

Positive Behavior Interventions and Supports (PBIS) is a framework for promoting and reinforcing positive behaviors. In this system, positive behavior strategies are utilized to minimize problem behaviors and increase adaptive behaviors. It usually operates on a three-tier system, ranging from school-wide strategies for all students (i.e. universal or Tier I interventions), to targeted interventions (Tier II) for more at-risk students, and finally to individualized, intensive interventions (Tier III) for students with more challenging behavioral issues.

School Mental Health (SMH) refers to implementing a full array of mental health promotion, prevention, early intervention, and intervention programs and services for youth in general and special education through partnerships between schools, families,

and collaborating community agencies such as mental health centers. These programs and services augment those delivered by school personnel, and can play a critical role in expanding and improving the quality of multi-tiered PBIS programs. SMH programs and services may be delivered by a variety of professionals, including school psychologists, counselors, social workers, and community-based mental health practitioners, as well as others with backgrounds in clinical child and adolescent psychology and psychiatry.

The survey is intended for schools and communities with one or both of these systems in place (fully or partially). The results of the survey will point out where schools/communities are prepared for PBIS-SMH interconnection, as well as areas for improvement, based on the observations and impressions of the respondent. Survey respondents include individuals who are familiar with their school's behavior management systems and mental health service delivery (e.g. administrators, general and special education teachers, related service providers, school psychologists, school social workers, etc.). These diverse perspectives are essential to get a well-rounded picture of the state of readiness for PBIS-SMH interconnection. If you are working at the building level, please rate the following items based on experiences in your school or schools. If you are working at the district or state level, please complete the survey if you have regular contact with particular schools and rate the items based on your experiences with these schools.

Any information you provide is confidential. Your responses will be combined with those from other participants to better understand readiness for PBIS-SMH interconnection in your school or district. Once the areas of strength and opportunities for improvement are identified, your school or district can utilize the appropriate resources to increase readiness. A list of evidence-based resources will be available in the near future.

For each item below, please check one choice from the following scale to indicate your level of agreement with each statement, reflecting your perception of how your school is doing with PBIS, SMH and interconnecting them:

Strongly Disagree      Disagree      Agree      Strongly Agree

1                                  2                                  3                                  4

	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
<b>PBIS/SMH Applications</b>				
1. School staff apply PBIS principles to content areas other than their own.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2. School staff express approval (through survey, focus groups, etc.) of combining or interconnecting PBIS and SMH by implementing a multi-tiered system of behavioral support, with SMH embedded within the PBIS framework.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. School staff indicate (through survey, focus groups, etc.) that interconnecting PBIS and SMH will be beneficial to the following:				
a. Students' behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<b>Administrator Support</b>				
4. School administrators promote interconnection of PBIS and SMH (examples include participating in meetings, publically advocating their collaborative benefits, and praising and acknowledging involved staff for their efforts)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5. School administrators assure ongoing support for effective implementation of interconnected PBIS/SMH by allocating appropriate resources (e.g., funding, hiring staff, etc.).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6. School administrators serve as champions for PBIS and SMH, by actively promoting their collaborative benefits, and praising and acknowledging involved staff for their efforts.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

7. School administrators support effective implementation of interconnected PBIS/SMH by allowing for staff professional development (e.g. release time, coaching, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8. The school principal actively seeks district resources to support (through use of professional development days for training, stipends for team and coaching, etc.) the following:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9. School administrators actively partner with family and community members and expect all school staff to do the same.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<b>Staff Support</b>				
10. School staff are made aware of how to interconnect PBIS and SMH (e.g., the two programs working closely together as reflected in coordinated team planning and actions).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11. School staff indicate (through survey, focus groups, etc.) that as a result of PBIS, positive effects on the following are observed:				
a. Students' well-being	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' behavioral development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12. School staff indicate (through survey, focus groups, etc.) that as a result of SMH, positive effects on the following are observed:				
a. Students' social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

13. School staff view (through survey, focus groups, etc.) PBIS as effective in encouraging the following:				
a. Students' classroom cooperation (e.g. engaging appropriately during instructional time, reduced classroom referrals)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement (e.g. attendance, homework, and work completion)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence (e.g. increase in number of students with 0-1 office discipline referrals)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
14. School staff view (through survey, focus groups, etc.) SMH as effective in encouraging the following:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence (e.g. appropriate peer relationships and interactions)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15. School staff indicate (through survey, focus groups, etc.) that the following promote a positive school climate where learning is encouraged:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16. School staff indicate (through survey, focus groups, etc.) that the following promote a positive school climate where positive relationships among members of the school community are encouraged:				
a. PBIS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17. School staff see (through survey, focus groups, etc.) PBIS as a way to make the school environment safer and more welcoming to family and community members.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

<u>Family and Community Support and Participation</u>				
18. Family members are offered educational materials and interactive sessions to become informed about PBIS and SMH strategies to support positive behavior and mental health in all students (e.g., a family resource library, family training calendar, and group and individual family training events)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19. Families view (through survey, focus groups, etc.) PBIS as effective in encouraging:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20. Families view (through survey, focus groups, etc.) SMH as effective in promoting:				
a. Students' classroom cooperation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Students' motivation toward academic achievement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Students' social competence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Communication</u>				
21. There is clear and consistent communication among school staff, administrators, students, and families regarding school-wide approaches for promoting positive mental health, academic achievement, and behavior.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<u>Teaming Structures</u>				
22. PBIS and SMH teams hold meetings together.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
23. School teams are made aware of how to interconnect PBIS and SMH (e.g., the two programs working closely together as reflected in coordinated team planning and actions).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
24. Team members express their perspectives in a way that builds satisfied, cohesive, and effective teams.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
25. Teams have regularly scheduled meetings.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4



26. Teams have structured meetings.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
27. Teams have meetings with action- and solution-focused agendas.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<b>PBIS and SMH Professional Development</b>				
28. PBIS trainings review key points about the following:				
a. Student social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Student behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Behavior change principles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
29. SMH trainings review key points about the following:				
a. Student social and emotional development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. Student behavior	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. Behavior change principles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d. Mental health literacy and everyday strategies for promoting mental health	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e. Early symptoms of mental health challenges and how to respond	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
30. Team members participate in an initial training workshop.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
31. Team members participate in regular, brief ongoing trainings, supervision, technical assistance and coaching.				
a. PBIS team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
32. Teams utilize and collaborate with systems support coaches who help guide implementation.				
a. PBIS teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. SMH teams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
33. School staff have the opportunity to build PBIS competence and mastery by practicing skills with more experienced team members.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

<u>Student Participation</u>				
34. Students are engaged in the PBIS process (e.g., students serve on teams, provide feedback to leadership teams, are involved in training and establishing goals and priorities for action plans).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

In what areas related to PBIS/SMH readiness is your school or district especially strong? Please describe below.

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Where does your school/district most need improvement before moving forward with PBIS/SMH interconnection? Please describe below.

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