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# Exploring the Effectiveness of School-Wide Positive Behavior Supports in the Elementary School Setting

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EXPLORING THE EFFECTIVENESS OF SCHOOL-WIDE POSITIVE  
BEHAVIOR SUPPORTS IN THE ELEMENTARY SCHOOL SETTING

A Thesis  
Presented to  
The Faculty of the Department of Psychology  
Western Kentucky University  
Bowling Green, Kentucky

In Partial Fulfillment  
Of the Requirements for the Degree  
Specialist in Education

By  
Ashley Bryce McGinnis  
May 2010

**EXPLORING THE EFFECTIVENESS OF SCHOOL-WIDE POSITIVE  
BEHAVIOR SUPPORTS IN THE ELEMENTARY SCHOOL SETTING**

Date Recommended 12/15/2009

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## Table of Contents

	Page
List of Tables .....	iii
Abstract .....	iv
Literature Review.....	3
Method.....	27
Results.....	30
Discussion.....	34
References.....	41
Appendix A: Human Subjects Review Approval Letter.....	45

## List of Tables

	Page
Table 1: Descriptive Information of Participating Schools.....	28
Table 2: Location of Referrals (n = 21).....	32
Table 3: Mean Number of Referrals for Specific Types of Behavior (n = 21)....	33

EXPLORING THE EFFECTIVENESS OF SCHOOL-WIDE POSITIVE  
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47 pages

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School-Wide Positive Behavior Supports (SWPBS) is a heavily promoted area that focuses on promoting pro-social behavior and preventing misbehavior. Many schools are moving towards SWPBS as the universal level of support for behavior. With Response to Intervention (RtI) being at the forefront of educational reform, this type of universal support is strongly recommended for academic needs, as well as behavioral needs. Data were collected from 25 schools in the West Region of Kentucky that collaborate with the Kentucky Center of Instructional Discipline (KYCID). A series of *t*-tests were completed in order to examine the relationship between Office Discipline Referrals (ODRs), Benchmark of Qualities (BoQ) scores, and the number of years a school had implemented SWPBS. Location of the ODRs as well as behaviors that led to ODRs were also examined. The findings of this study indicate that the longer a school has implemented SWPBS, the fewer ODRs it has during a school year. Also, BoQ's were positively impacted the longer SWPBS was in place at a school. Regarding problem behavior, it was found that ODRs came primarily from a classroom environment as opposed to common areas (bathroom, hallway, cafeteria, and playground). A descriptive analysis was completed on the types of ODRs most commonly found in classroom

settings, and it was discovered that the top three reasons for ODRs were defiance, fighting, and disruptive behavior. These findings can be used to guide schools on school-wide expectations and classroom management practices, as well as to affirm the continued implementation of SWPBS from year to year.



## Literature Review

This literature review provides an overview of SWPBS. The historical background of SWPBS is examined, including a discussion about the use of reinforcement and punishment as consequences for behavior. Finally, a review of the existing research on the use of SWPBS is described. The research focuses on SWPBS, studies related to the effectiveness of this type of universal support, as well as methods that are used to examine the effectiveness of SWPBS implementation.

### *Historical Background*

A negative perception of schools and school safety has been formed in the past decade due to shootings and other acts of violence at schools. However, the perception of violent crimes is much worse than their actual incidence. A more predominant problem in schools is disruptive behavior. Disruptive behavior can be any type of behavior that impedes the learning of students and others around them. The Annual Report on School Safety (2000) found that disruptive behavior is much more widespread than carrying weapons and physical fighting on school property. While weapon carrying and physical fighting have shown improvement, disruptive behavior has remained steady with no improvement over the past decade. In fact, data in this report indicated that 60-90% of students in the 8<sup>th</sup> and 12<sup>th</sup> grade “reported their teachers interrupted class to deal with student misbehavior at least once during an average week” (Annual Report on School Safety, 2000, p. 12). Schools have taken steps to prevent violent crimes by installing metal detectors and cameras, hiring resource officers, implementing zero tolerance policies, and using suspensions and expulsions as a disciplinary action (Sugai &

Horner, 2002). However, in the past there have been limited school-wide practices to address students who are disruptive.

Behaviors, misbehaviors and pro-social behaviors are always naturally occurring in the environment. Every behavior is followed by a consequence (Maag, 2001). A consequence of studying could be a good grade; a consequence for hitting someone might be removal from the situation. A consequence can be a punishment or reinforcement. In the past, schools have looked upon punishment as the sole method for responding to misbehavior. Punishment is used to decrease behavior temporarily, without providing a necessary replacement behavior (Crone & Horner, 2003). Research has shown that punishment is ineffective at best, especially when used inconsistently (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007). Punishment can also be damaging to students. Damaging side effects of punishment include depression, anxiety, school failure, and drop-out. Furthermore, punishment has been associated with students withdrawing from the environment, becoming aggressive, getting ridiculed by their classmates, and developing a negative self-concept (Heitzman, 1983). The problem with punishment arises when a replacement behavior is not taught, therefore, leaving the behavior unchanged (Cameron & Sheppard, 2006). Effective punishment will reduce behavior if done correctly and objectively.

Punishment is often used by teachers because it is easy to administer and it is perceived as effective with most children. However, for children who have habitual or severe behaviors punishment is ineffective. Some teachers fail to realize that if punishment were effective then the problem behavior would be reduced; therefore, punishment would no longer be needed. Punishment is often used with little or no results

leaving the behavior unchanged. When punishment does not reduce the rate at which the behavior occurs, then it is considered ineffective (Maag, 2001). In order for punishment to be administered correctly, schools need to create policies that state the rules, the consequences if the rules are broken, and then follow through with the stated consequence (Heitzman, 1983). The use and effectiveness of punishment is often misunderstood, leading to its misuse and ineffectiveness. Repeatedly, teachers administer punishment without teaching an appropriate replacement behavior that would be needed. Without this replacement behavior, punishment becomes a futile act that discourages the teacher, and can elevate the student's misbehavior.

Schools have a long history of relying on harsh forms of punishment, such as zero tolerance policies. Zero tolerance has often been used as a default way of dealing with any type of problem behavior. A zero tolerance policy automatically suspends or isolates a student immediately after a given misbehavior. According to Fuentes (2003), it is estimated that every year 3 million students are suspended and 100,000 are expelled across the United States. Kentucky's suspensions and expulsions mirror this startling statistic. In 1999-2000 there were 65,508 suspensions in Kentucky and that number increased to 68,523 in the 2000-2001 school year. Over 25,000 of these suspensions were due to defying authority, which was defined as talking in class or talking back to teachers. This type of zero tolerance policy is having a negative impact on student achievement due to time spent outside of the learning environment, and it seemingly has little to no impact on the behavior for which the child is being punished (Fuentes, 2003). Another aspect of punishment is the issue of negative reinforcement of the teacher or administrator administering the punishment. If the problem behavior immediately

decreases after the use of punishment, the person administering the punishment is more likely to use this procedure in the future (Miltenberger, 2008).

Reinforcement, both positive and negative, increases behavior and is likely to sustain the desired behavior (Eggen & Kauchak, 2001). Some educators are reluctant to use reinforcement because of the long standing use of punishment. Also, teachers are hesitant to use reinforcement because of the inaccurate perception that reinforcement resembles bribery and does not encourage self-motivation to behave in a pro-social manner. However, educators are strongly encouraged to use reinforcement as opposed to punishment because of the potential negative impact that punishment has on students (Heitzman, 1983). Furthermore, positive reinforcement is effective universally, regardless of a child's characteristics. Regardless of how problematic a child's behavior is or the type of behavior being displayed, positive reinforcement strategies are typically effective for approximately 85% of students (Maag, 2001).

In addition to the research that supports the use of positive reinforcement instead of punishment, the Individuals with Disabilities Education Improvement Act (IDEIA) and No Child Left Behind Act (NCLB) imply that schools must support students with disruptive behaviors even if there is no disability present at the time of the misbehavior (Jacob & Hartshorne, 2007). Both pieces of legislation mandate accountability and academic progress. Furthermore, with 76% of teachers stating that they would be more effective teachers if they did not have to deal with behavior problems, the need for proactive strategies is imperative to recruit and retain new teachers (Warren et al., 2006; Wright et al., 2007).

With this knowledge it is crucial that schools do something different to prevent behaviors before they happen and use a positive approach to supporting desirable behaviors. Zero tolerance policies combined with suspensions are clearly not effective at reducing or even managing problem behaviors. School systems instead need to become proactive, and create an environment that is conducive to learning for all students, and find a systematic way to deal with problem behavior when it does happen. A school-wide positive behavior support (SWPBS) system is one way to achieve these goals while still meeting the needs of individual students (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007).

#### *School-Wide Positive Behavior Supports*

SWPBS is implemented at a school-wide level. It is a three tier system that includes practices for school-wide areas, non-classroom areas, and individual student practices. The goal of a SWPBS model is to reduce problem behavior by teaching and rewarding appropriate behavior, instead of waiting for problem behavior to happen. SWPBS works to increase pro-social behavior and decrease difficult behaviors (Shannon, Daly, Malatchi, Kvarfordt, & Yoder, 2001). It is estimated that 50% of all behavior problems occur in non-classroom areas. This is because there are not clear expectations or those expectations are often not taught directly.

SWPBS is a system of support set up within a school in order to promote positive behavior by preventing misbehavior. It is a proactive approach that not only teaches students appropriate behavior, but defines what appropriate behavior looks like and supports the students throughout the process. SWPBS decreases the occurrence of misbehavior by providing necessary levels of support throughout the school building,

including classrooms, hallways, and playgrounds (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007). SWPBS uses consequences to systematically reinforce appropriate behavior. By proactively preventing behavior by using positive reinforcement of appropriate behavior, SWPBS decreases the need for the use of punishment as a consequence for misbehavior.

SWPBS has four key elements that interact in order to create a learning environment that is supportive of students' behavioral needs. These elements are outcomes, practices, data, and systems. By identifying these four elements, SWPBS puts an emphasis on research and effective practices that are guided by data in order to create an effective system that helps schools reach a desired outcome. The first element, outcome, behavioral or academic, is what one would expect to happen. Outcomes must be valued by those whom it affects. These people are called stakeholders, such as teachers, students, parents, and/or administrators. The second key element is that of research-validated practices. These practices ensure that students are receiving quality services that are efficient and effective. Schools must resist the urge to follow the next trend in education. Decisions must be guided by factors such as current research, conceptual and theoretical foundations, and outcome goals. The third element is to use data in order to drive decisions at school, classroom, and individual levels. Data should be used in order to make curriculum changes, modifications to programs and/or plans, and monitor progress. The last component is systems. The systems element is something that is needed for schools to meet their intended outcome, implement effective practices, and guide data-based decisions (Sugai & Horner, 2002). These four elements revolve around supporting student behavior, helping students gain social competence and

experience academic achievement, as well as supporting the staff and driving effective decision-making (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007).

The elements of SWPBS are easier to put into place if a school operates on what Sugai and Horner (2002) call a “four systems” perspective. This perspective outlines the types of support that are needed in order to support students at multiple levels. Student behavior does not happen in a vacuum. They need support at a school-wide level, in the classroom, outside of the classroom (playground, hallways, lunchroom, etc.), and, in some instances, on an individual student level.

Before SWPBS can be implemented, several decisions need to be made in order to make it successful. Initially, a school needs to agree on how it is going to address discipline problems. A common understanding among teachers is needed at the onset of such a program in order for it to be effective. The school will also need to have a positive statement of purpose and a small number of positive expectations for students and staff. The key here is to keep the environment positive. This will provide students with a model of appropriate behavior, rather than a long list of “no’s”. Students then need to be taught the expectations. If students are taught what is expected of them, then the learned expectations can not be questioned or misunderstood. These expectations need to be practiced and then reinforced to ensure they are not forgotten. Schools also need to have procedures in place to monitor and evaluate the effectiveness of the SWPBS. This is to ensure effectiveness, eliminate unnecessary practices, and make necessary modifications. Monitoring will save time, money, and frustration if done regularly (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007).

When implementing a SWPBS program in any school or school district, Handler et al. (2007) identified several practical considerations that are crucial for success in any SWPBS program. First administrative support is essential. Administrators must be willing to implement necessary changes in order make SWPBS effective. They must have knowledge of the SWPBS system and be willing to take part in all leadership and team meetings. Administrators must be visible to the students and staff throughout the implementation process. This would include handing out desired rewards or participating in reward activities. The administration also has to be willing to monitor the implementation of the SWPBS program. Schools that have shown the best results with SWPBS have had strong involvement from their administration (Handler et al. 2007).

Second, alongside a strong administration is the need for a solid leadership team. This collaboration is important because often times leadership teams are hesitant to make school-wide decisions about discipline and other procedures without the support of their administration. A strong leadership team will help aid in initial staff buy-in and needed support for the SWPBS system to flourish. This leads to a third crucial factor of SWPBS success which is staff support. Staff support of a SWPBS system is the key component because without staff buy-in the system will fail due to the fact that there would be no one to implement the plans effectively and teach the desired expectations. Combined with the development of successful coaching strategies and district support, these factors will aid the successful implementation of a SWPBS system (Handler et al., 2007).

Safran and Oswald (2003) reviewed several studies in this area and found positive outcomes when positive behavior supports are put into place. Several factors emerged as essential for successful SWPBS implementation. First, when collaborative teams work



together using office referrals and other school data, behavior priorities can be established that will lead to effective student interventions. This type of data is also helpful in evaluating the effectiveness of such interventions. Second, they also found that when SWPBS uses multiple measures of evaluating effectiveness (including direct observations and teacher ratings), it results in positive outcomes for the students involved. Lastly, SWPBS that are in place in explicit settings (e.g., high traffic areas) also had positive changes when expectations and/or interventions were in place.

### *Tier System of SWPBS*

SWPBS is a researched-based model that is designed to reach all students. It is a 3-tier model that provides a continuum of supports for all students within a particular school. In the first tier, known as the primary level, students receive universal supports. The intent of this tier is to provide all students with the same level of support and instruction. A student moves into the second tier when a teacher or the data identifies a specific problem. The student continues to receive the universal supports as well as additional supports in order to provide additional instruction. The third tier is considered an intensive level of intervention where the student receives one-on-one support in order to address the given area of weakness (Brown-Chidsey & Steege, 2005).

Shannon et al. (2001) found three very important themes in regard to SWPBS. First, individuals with challenging behaviors are hard to identify. Second, there is in fact a need for such supports for not just students, but also pre-school children and adults. Lastly, SWPBS is effective in working with populations with challenging behavior. These are important themes because it is necessary to see the importance of such supports so that educators, both teachers and administrators, understand the value of implementing

such a system at their school. This support is necessary for a SWPBS to be effective because teacher buy-in was found to be a great barrier and facilitator when implementing a SWPBS in a study by Kincaid, Childs, Blase, and Wallace (2007).

Updates to special education regulations and IDEIA require that children with problem behaviors be supported in the school environment. Schools must move beyond past practices: observe, test, place in special education. They must try interventions, modify the environment if necessary, and give the child a chance to succeed with those modifications in place. SWBPS and Response to Intervention (RtI) are both based on the same three-tier model. The RtI approach was designed to provide individual or group instruction and interventions to students in need, both academically and behaviorally, while monitoring progress to make effective education decisions that are data driven (Sandomierski, Kincaid, & Algozzine, 2008). Moreover, the RtI initiative is embedded in IDEIA and states that there must be a link between intervention (either academic or behavior) and the student's response to the intervention. With RtI, both accountability and progress are being monitored. It is important to note that often a student's behavior is directly linked to academics deficits, thus behavior problems could directly impact a child's progress in the curriculum (Arnberger & Shoop, 2008).

There are several important relationships between RtI and SWPBS. First, they are both problem-solving models used to target children in need and serve as a tool for prevention. Second, they both are based on the 3-tier preventative model discussed previously. The primary level will serve 80% of students, the secondary level will reach 15% of students, and the tertiary level will be needed to reach 5% of students. Lastly, both RtI and PBS require fidelity checks to be implemented correctly, decisions based on

data, and the use progress monitoring to make those decisions. However, Sandomierski et al. (2008) said it best, "...while RtI and SWPBS share common parentages, histories, and features, there is still much work to be done to ensure that a combined approach can deliver on the promise of improving both academic and behavior outcomes for all students" (¶17).

The current study examines only the first tier of SWPBS. The second and third tiers of SWPB are beyond the scope of this study. However, all tiers will be described in order to provide important contextual information.

*Tier 1.* In regards to SWPBS, the first level of prevention will be effective for approximately 80% of all students; this is known as primary prevention or universal supports. This will reduce cases of new problem behaviors, thus preventing them from occurring. Therefore, the primary level is considered a proactive approach to preventing problem behaviors before they occur. By learning and practicing the expectations set up by the school, misbehavior will be greatly reduced because the students will know what is expected of them. Behavior is taught, practiced, and monitored in all schools settings, including the classrooms, hallways, recess, and the cafeteria. As a result, students are aware of the expectations during every aspect of their school day. However, even with primary prevention in place, approximately 20% of students will still need further support beyond that given at the primary level (Turnbull et al., 2002).

*Tier 2.* When a student is still experiencing chronic behavior problems, it may be necessary to provide a more intense level of intervention, which would be the second tier of support known as secondary prevention. This level will address about 15% of the student population. This level does not indicate the need for an Individual Education Plan

(IEP); it only indicates a more supportive level of intervention is needed above what the universal supports will provide. At this level students will need more supportive interventions that service their specific behavior need. These types of interventions can include social skills training, peer mentors, or homework clubs (Todd, Campbell, Meyer, & Horner, 2008); the intervention can be in the form of groups, Check-in/Checkout programs, or self-monitoring/management within the classroom. Interventions at the secondary level should focus on re-teaching needed expectations in a more systematic way. The goal at this level is to reduce the problem behavior and increase pro-social behavior (Turnbull et al., 2002).

The most effective way to make decisions regarding a child's movement from the first tier to the second tier should be team-based decisions (Scott, 2003). It is suggested that one aspect of the decision making process be to track discipline data, like Office Discipline Referrals (ODRs). ODRs need to be looked at in regard to the number of referrals, the specific behavior concerns, and in what setting the behavior happened. This type of information can lead to an analysis of a specific pattern of behavior, and lead to more effective interventions. The number of referrals a student receives could flag him or her for possible secondary interventions. A systematic method for flagging students simplifies the identification of students at risk (Crone, Horner, & Hawken, 2004). Scott (2003) recommends that ODRs not be the only way to make a decision about when to move a child from tier one to tier two. Teacher referrals should also be considered. The teacher should be able to provide information about strategies used in the classroom and the context in which the behavior is occurring. This will help determine whether the problematic behavior can be dealt with within the classroom. Additional interventions

may not warrant movement to the second tier. The behavior may be problematic in the classroom, but can be managed with additional strategies used by the classroom teacher. This is why it is important to use a team-based decision making process in order to gather relevant qualitative and quantitative data so effective behavioral interventions can be developed, either at the universal or secondary level (Scott, 2003).

*Tier 3.* Beyond the first two tiers, there is a tertiary level of intervention which will be needed for approximately 5% of a school's population. This level is for students who display the most intense behavior problems and need individual behavior supports in order to modify undesirable behavior. The level of intervention is more intense and the student usually receives one-on-one instruction in the targeted areas. It is after this level that students may qualify for services under IDEIA if adequate progress is not being made. Progress should be monitored weekly to see if the student is progressing with implemented intervention. Even if a student does not qualify for special education services, behavior supports at this level are still necessary, and often beneficial (Turnbull et al., 2002).

#### *Methods of Evaluating Effective Implementation*

The two most common ways to evaluate a SWPBS system is through the use of School-wide Evaluation Tool (SET) and Benchmarks of Quality (BoQ). These two methods are both researched based, but use different types of evaluations to measure the fidelity and integrity of a schools SWPBS implementation.

The SET is a method used to evaluate schools universal SWPBS implementation across seven different areas. These areas include (a) expectations defined, (b) expectations taught, (c) rewarding behavior expectations, (d) responding to behavior

violations, (e) monitoring and decision-making, (f) management, and (g) district level support (Positive Behavior Supports Survey, 2007). The SET is conducted by having an outside rater conduct interviews with students, teachers, and administrators, and then examining the products of the implementation. The schools are then systematically rated based on information gained from the interviews and obtained products. Once the ratings are complete, the school is given their assumed level of implementation. This is a percentage that can range from 0 to 100%. A study by Horner et al. (2004) found the SET assessment to have strong psychometric properties including internal consistency ( $r = .96$ ), mean test-retest agreement in all seven areas (89.2% to 98.8%), and construct validity ( $r = .75$ ) as compared to the Effective Behavior Support Self-Assessment Survey, which is another measure of school wide behavior support systems. According to KYCID's West Region Coordinator, (K. Davis, personal communication, February 2, 2009), it is ideal that schools score at least 80% on the total assessment plus 80% on the area that measures teaching the behavior expectations. When a school is at this level they are considered to be an "80/80" school.

As popularity in SWPBS continues to grow, new methods of measuring development and success are being created. As of the 2008-2009 school year, the majority of schools in Kentucky have begun to use the Benchmarks of Qualities (BoQ) rather than the SET (K. Davis, personal communication, September 21, 2009). The BoQ was developed so that schools could have a self-assessment survey to gauge success, as opposed to someone else having to assess their program (Cohen, Kincaid, & Childs, 2007). Survey items are based on the critical elements of SWPBS that are outlined by Lewis and Sugai (1999). The BoQ consists of three different components. The

components are the *Coach Scoring Form*, *Scoring Guide*, and *Team Member Rating Form*. The *Coaches Form* is completed by the SWPBS coach and is used to provide “operational definitions of the scores for each item” (Cohen et al., 2007, p. 205) in combination with the *Scoring Guide*. The *Team Member Rating Form* is a form completed the SWPBS team. This form is similar to the *Coaches Form*, but does not require the use of the scoring guide. When team members independently complete their forms they indicate whether an area of SWPBS is in place, not in place, or partially in place. When the team member’s forms are completed the coach compares the teams form to his or her form. This is an important step because similarities and discrepancies are noted on a *Summary Report*. The completed BoQ form is scored out of 100 points. There are 10 subscales, with three to eight questions each and each question is worth up to three points (Cohen et al., 2007).

Cohen et al. (2007) piloted the BoQ in 14 Maryland schools and 91 Florida schools in collaboration with the University of Florida and the Florida School-Wide Positive Behavior Supports. Of the 105 schools, 47 schools also completed the SET. Schools included elementary schools, middle schools, and high schools. All schools were implementing SWPBS programs, and were trained on how to use the BoQ assessment. The study by Cohen et al. (2007) found strong psychometric properties including a high test-retest reliability for the total scores ( $r = .94$ ) and a high inter-rater reliability ( $r = .87$ ). The BoQ scores were also correlated with SET scores ( $r = .51$ ). These data revealed that it is possible that the BoQ scores are a better measure of fidelity and integrity than the SET because 13 schools that reached the 80% percent mark on the SET did not reach it

on the BoQ. This is likely because the BoQ measures aspects of implementation that the SET does not.

Cohen et al. (2007) noted that BoQ data cannot be the only measure used to ensure that a SWPBS program is being implemented with fidelity and integrity. When researchers closely examined the data at 24 of the Florida schools that had baseline data, they found that after two years of implementation schools with higher BoQ scores had decreased office discipline referrals (Cohen et al., 2007). It is important to note that these are preliminary data, and the BoQ has not been investigated in other states and in other SWPBS programs. However, this is another indication of the BoQ being a good measure of fidelity and implementation of a SWPBS program (Cohen et al., 2007).

The study by Cohen et al. (2007) has some important features that would encourage future use of the BoQ. First, it is easy to administer and requires very little training. Second, administration time is reduced from three to six hours with the SET instrument to 10 minutes for the team members and 60 minutes for the coach with the BoQ. This leads to another important feature which is financial resources. With training and implementation time reduced, schools may be more likely to invest time and energy to the SWPBS initiative. Although this is a new instrument, initial psychometric properties appear to be strong (Cohen et al., 2007).

The SET and BoQ are important because they aid in revising school-wide expectations as needed (Positive Behavior Supports Survey, 2007). However, there are several important differences between the SET and BoQ that emerge when evaluating each measure. The SET is a researched-based assessment that is used to identify schools that are minimally implementing a SWPBS system. The BoQ is another assessment tool



that identifies the effectiveness of SWPBS implementation and the functioning of the universal team and is completed post SWBPS implementation. The SET is completed prior to training and implementation in order to gather baseline data; and then annually in order to develop future goals and compare SWPBS implementation across school years. The BoQ is completed at the end of each school year. The SET is time consuming, and requires access to students and staff in a given building by outside evaluators. These evaluators typically spend six to eight hours on training in order to accurately implement the tool. Furthermore, schools can obtain a “passing” score of 80% without having many of critical components of SWPBS (e.g., lesson plans for teaching school-wide expectations) in place (Cohen et al., 2007). Whereas, the BoQ is a self-assessment instrument in which staff can be trained in a time-efficient manner. For these reasons, the BoQ was developed because it is a time efficient way for a school to assess the strengths and weaknesses of their individual SWPBS program (Cohen et al., 2007).

#### *SWPBS Research*

It is necessary to evaluate the effectiveness of an SWPBS system in dealing with problem behavior. Several studies have been conducted involving the use of SWPBS. Although the sample size of most of the studies is small, results have been impressive in that changes in behavior have been noted in each study. As schools increasingly begin implementing a SWPBS system, more research opportunities will be increasingly available, thus making results of the studies better able to generalize onto more of the population.

Schools commonly rely on the use of Office Discipline Referrals (ODRs) to track student behavior (Scott, 2003). A study by Walker, Cheney, Stage, and Blum (2005)

supports the use of ODRs and qualitative data as a method of tracking at-risk students. The study integrated the use of ODRs, behavior rating scales, and school-wide screenings to identify students at-risk for academic failure due to behavior problems. The three schools that participated in this study had a well-established SWPBS system that had been implemented for at least three years. The first phase of this study was to identify students at-risk by using the *Systematic Screening for Behavior Disorders* (SSBD). The SSBD is completed in three stages. The first stage is based on teacher nomination, and the students move into stage two. Stage two involves the teacher completing a *Critical Events Inventory* and an adaptive and maladaptive behavior checklist. Students who exceed a pre-determined score are then moved into stage three. For this specific study, stage three of the SSBD was not completed. However, students who were moved into stage three were used for this study (Walker et al., 2005). ODRs were obtained using *School-Wide Information System*© (SWIS, 2009). SWIS allows schools to track and monitor discipline reports. This information can be tracked using individual students, classrooms, and school settings. The study found that combining these two methods, ODRs and systematically completed school-wide screenings, aid in identifying more students who could be at-risk. Because this study was purely qualitative in nature, it can not be said that these alone are effective at identifying all students. However, it does provide the groundwork for identifying at-risk students. Additionally, by identifying more students who are at-risk, more proactive and specific behavior supports can be put into place that will reduce the need for more intense interventions (Walker et al., 2005).

A study by Metzler, Biglan, Rusby, and Sprague (2001) investigated the effects of implementing positive behavior supports in the school. The study focused on Effective

Behavior Supports (EBS), the earlier name for SWPBS. The EBS system trained staff and students on rules/school expectations, taught appropriate social behavior, increased positive reinforcement for appropriate behavior, implemented consequences for rule violations, and continuously monitored the data. The study was conducted at three junior high schools in Oregon (grades six, seven, and eight) with similar populations over a three year period. It is important to note that each year there was a different group of students in each grade, but the goal of the study was to evaluate the social context of each school and not the students in each grade. The study found there was a 41% drop in office referrals from the year prior to implementation to the second year after implementation. An interrupted time series analysis was completed, but the results were not statistically significant for the number of referrals per month. Additional data analyses did show that students who had ten or more referrals had a statistically significant drop in office referrals over the three year period (Metzler et al., 2001).

A survey of students indicated an increase in positive reinforcement from teachers, a decrease in harassment amongst peers, and an increase in school safety (Metzler et al., 2001). In regard to the decrease in harassment, the authors noted that it could be related to other factors because there was also a decrease at the comparison schools. Additionally, the increase in the feelings of school safety was significantly higher at the EBS schools than at the comparison schools. Interestingly, a teacher survey indicated similar findings. Teachers agreed the school felt safer, improved student behavior, and 100% of the teachers surveyed stated that recognizing students for good behavior had a positive outcome (Metzler et al., 2001).

Although the study had several limitations, what they found provides a foundation for the use of a positive behavior supports system in schools. Of all the quantitative findings, several important qualitative factors were also identified. Metzler et al. (2001) suggested that in order to have an effective SWPBS, it is helpful to have five factors in place. First, the appropriate social behavior must be taught. Second, the desired behavior needs to be reinforced often. Third, rules need to be clearly communicated so students know and remember them daily. Fourth, educators must be consistent when dealing with rule violations. Fifth, student outcomes must be continually monitored and SWPBS procedures adjusted as needed.

A study by Mass-Galloway, Panyan, Smith, & Wessendorf (2008) evaluated Iowa's SWPBS initiative over a three-year period. The study monitored Office Discipline Referrals (ODRs) from the fall of 2002 through the spring of 2005. Schools used for this study were trained using identical SWPBS models and also had access to SWPBS coaches that aided in the implementation of the program. The study looked at three important questions: (a) is it possible to implement SWPBS with fidelity, (b) can SWPBS effectively change patterns of problem behavior, and (c) does this type of program affect a school's ability to implement more intense behavior supports. The study looked at the data from 39 schools across Iowa. There were four separate cohorts used throughout this research study. The first cohort began SWPBS in the fall of 2002 with eight schools (Cohort 1). These schools would be considered demonstration sites throughout the three years of research. In the fall of 2003, seven other sites were trained and began implementation (Cohort 2). In the fall of 2004, 24 four sites were added (Cohort 3). In order to measure the three research questions the School-Wide Evaluation Tool (SET),

the Team Implementation Checklist (TIC), and ODRs were used. The SET data showed that when schools implement SWPBS with fidelity and integrity (80% or better) positive outcomes occurred. Furthermore, the study showed that when given the needed tools, schools can reliably implement such a program (Mass-Galloway et al., 2008). ODRs indicated that in Cohorts 1 and 3, 75% of the schools demonstrated a 42% decrease in ODRs. In Cohort 2, ODRs increased. The authors stated that this could be due to administrators and teachers being more aware of problem behaviors which led to writing up the behaviors more often. The current research did not provide enough data for researchers to identify whether schools with SWPBS were better able to address individuals with specific behavior problems. SWPBS provides a positive alternative to reactive approaches to discipline (Warren et al., 2006)

SWPBS is also effective at increasing academic outcomes of students because of increased time on task. A study by Luiselli, Putnam, Handler, and Feinberg (2005) found that when schools implemented a universal system of positive behavior supports, academic performance increased. The study was conducted using an urban elementary school, grades K-5, over a three year period of time. The student population ranged from 666 at the beginning of the first year to 550 at the end of the third year. Most (90%) of these students qualified for free and reduced lunch, and 11% received special education services. In order to track discipline, the research study used ODRs and suspensions. To monitor academic performance, the Metropolitan Achievement Test-Seventh Edition (MAT-7) was used. After the first year of universal supports being implemented, ODRs decreased from the pre-intervention year, and continued to decrease during the follow-up year. The average ODRs per day, per 100 students, during pre-intervention was 1.3, and

decrease to .73 during the initial intervention year, and .54 in the follow-up year. However, the universal system of positive supports did not have a significant impact on suspensions. Although a decrease was initially noted, by the end of the follow-up year suspensions returned to their pre-intervention rate. In regards to the MAP-7, the percentile ranks in reading comprehension increased 18 percentage points and mathematics increased 25 percentage points from the pre-intervention year to the intervention year. These data suggest that positive behavior supports did have an impact on academic performance as measured by ODRs and MAP-7 scores (Luiselli et al., 2005).

#### *Purpose of Present Study*

Lewis and Sugai (1999) suggested that the traditional discipline practices that typical schools use are only making behavior problems worse. In fact, several studies done by Mayer in 1979, 1981, 1987, and 1995 (as cited in Lewis & Sugai, 1999) found that increasing rates of misbehavior are correlated with ineffective disciplinary practices and lack of behavior expectations for students. This indicates that in order for students to be successful in school settings and display socially appropriate behavior, something must change within the system itself. It is important that schools look within and not outward. Discipline problems are not always a problem residing within the children, but a systems problem. Schools that move to a SWPBS model are realizing the importance of this systems change, and are implementing proactive strategies that are designed to reinforce pro-social behavior and deal effectively with misbehavior.

Sugai and Horner (2006) raised a couple of important questions that need to be further studied in order to gain an accurate assessment of SWPBS. The first issue is the

number of years a school needs to have SWPBS implemented in order for sustainable and accurate implementation to be in place. Schools are told it takes roughly one to three years for full implementation to take place; however, the question of sustainability raises another set of issues that would be important to be answered. In order for any program to be a success, sustainability is vital. Without sustainability schools will slowly lose fidelity and integrity, and might eventually drop the program all together.

The purpose of this study is to analyze data from schools that are currently implementing SWPBS. ODRs will be analyzed based on the years of SWPBS implementation. Knowing whether continued implementation of SWPBS over time results in continued decreases in ODRs is an important issue, and one that is seemingly absent from the literature. Previous research usually just compared the number of ODRs during implementation of SWPBS to a pre-SWPBS period of time. Another variable that will be looked at are schools' BoQ scores and the years of implementation. An examination of BoQ scores is important because it will indicate whether perceived fidelity and integrity of SWPBS implementation improves as a school continues to practice SWPBS. Two other variables of interest with the present study include determining what types of problem behaviors are occurring most frequently and in what location in the school. Specifically, the present study will be conducted in order to answer the following research questions:

Research Question 1: Do schools with more years of SWPBS implementation have higher BoQ scores than schools with fewer years of implementation?

Hypothesis: Schools that have been implementing SWPBS for four or more years will have higher BoQ scores than schools with fewer years of implementation.

Research Question 2: Do schools with more years of SWPBS implementation have fewer ODRs than schools with fewer years of implementation?

Hypothesis: Schools with four or more years of SWPBS implementation will have a fewer number of ODRs, on a per pupil basis, than other schools with fewer years of implementation.

Research Question 3: What locations in the schools result in the most referrals?

Research Question 4: What are the most common problem behaviors that lead to ODRs?



## Method

### *Participants*

The participants in this study were 25 elementary schools in the West Region of Kentucky that are partnered with the Kentucky Center for Instructional Discipline (KYCID). The West Region has two KYCID coordinators. All of the schools participating in this study were assigned to one of those two coordinators. When schools began working with KYCID, they were initially trained on how to effectively implement and utilize SWPBS by the coordinators. Little descriptive information was available on the schools, but the schools' size, by number of students, can be found in Table 1. When analyzing BoQ scores and years of implementation (1<sup>st</sup> research question), one school could not be included because they did not complete the BoQ survey, but completed the SET instead. Two schools were excluded from the analysis of the ODRs (2<sup>nd</sup> research question) due to a lack of ODRs reported for their schools. On the third and fourth research questions, four schools had to be excluded from the sample due to insufficient data regarding the type and location of behavioral concerns reported by the schools.

### *Materials*

School-Wide Information Systems (SWIS, 2009) is a computer-based system that is used to track Office Discipline Referrals (ODRs). SWIS can be used to (a) monitor the average number of ODRs per month, (b) identify the behavior that led to the referral, (c) track the location of the occurrence, and (d) pinpoint the time of day it happened. These data can be used to find information about individual students, groups of students, and the entire school. Exact time periods can also be specified. This is important because data can be looked at in regards to weeks, quarters, or semesters. All data are presented

Table 1

*Descriptive Information of Participating Schools*

School Identifier	Number of Students	Number of ODRs	Average Number of ODRs Per Student	Number of Years Implementing SWPBS
1	600	263	0.44	6
2	556	304	0.55	4
3	393	95	0.24	4
4	523	403	0.77	2
5	687	265	0.39	9
6	454	548	1.21	2
7	238	123	0.52	3
8	440	181	0.41	4
9	700	26	0.04	3
10	325	-	-	3
11	613	212	0.35	6
12	445	180	0.40	3
13	559	365	0.65	3
14	580	122	0.21	4
15	470	177	0.38	6
16	408	263	0.64	6
17	240	143	0.60	9
18	373	377	1.01	3
19	310	159	0.51	2
20	431	181	0.42	3
21	450	159	0.35	6
22	458	377	0.82	2
23	510	498	0.98	3
24	210	-	-	2
25	560	180	0.32	6

numerically and visually, through the use of histograms. This information can be used at decision-making meetings or to make school-wide planning decisions (SWIS, 2009).

Each school's BoQ data were collected. BoQ scores were used because schools in Kentucky are primarily relying on the BoQ instead of the SET (K. Davis, personal communication, September 21, 2009). The number of students per school was also collected in order to accurately compare SWPBS results. The number of years of SWPBS implementation, total number of ODRs, and mean ODRs per student can be found in Table 1.

### *Procedure*

In collaboration with KYCID, SWIS information was obtained from 25 elementary schools in the West Region of Kentucky that implemented SWPBS and used SWIS for monitoring the number of ODRs. The KYCID West Region Coordinator removed all identifying information related to the schools prior to providing the data to the researcher.

In order to evaluate the hypotheses, independent samples *t*-tests were used to compare the groups with four or more years of implementation to groups with fewer than four years of implementation. When comparing the number of years of implementation, four years was determined to be the cut-off point because it typically takes one to three years for proper SWPBS implementation (K. Davis, personal communication, November 30, 2009). The fourth year then would signify complete SWPBS implementation. To answer the third and fourth research questions, the location of where the ODRs occurred, as well as the types of problem behaviors that led to the ODRs, was determined through a descriptive analysis.

## Results

### *Years of Implementation and BoQ Scores*

The first research question addressed the effect that the number of years of SWPBS implementation had on a school's BoQ score. It was hypothesized that schools that had four or more years of implementation would have significantly higher BoQ scores than schools that have had SWPBS implemented for fewer years. Of the 25 schools, one (School #25) did not provide BoQ scores and was excluded from this analysis. Of the remaining schools, 11 had implemented SWPBS for four or more years ( $M = 5.8$  years) and 13 had implemented the program for one to three years ( $M = 2.6$  years). An independent samples  $t$ -test was completed in order to evaluate the differences between the two groups of schools. Schools that had four or more years of implementation had significantly higher BoQ scores ( $M = 83.72$ ,  $SD = 6.53$ ) than schools that had fewer than four years of implementation ( $M = 72.92$ ,  $SD = 13.73$ ),  $t(22) = 2.29$ ,  $p = .026$ . These results support the hypothesis that longer implementation of SWPBS results in higher indicators of the program's fidelity and integrity (i.e., BoQ scores).

### *Years of Implementation and ODRs*

The second research question addressed the relationship between the number of years of SWPBS implementation and a school's number of ODRs for the previous school year. It was hypothesized that schools with four or more years of implementation would have significantly less ODRs than schools with fewer years of implementation. The raw number of ODRs could not be used, because schools with larger populations of students would likely have a higher number of ODRs. In order to make facilitate equitable comparisons across schools with different numbers of students, the data were first

converted to an average number of referrals per student. Data from two schools (Schools #10 and #24) were excluded from this analysis because they did not provide ODR data. Of the remaining schools, 12 had implemented SWPBS for four or more years ( $M = 5.8$  years) and 11 had implemented the program for one to three years ( $M = 2.6$  years). An independent samples  $t$ -test was completed in order to evaluate the differences between the two groups of schools. Schools that had four or more years of implementation had significantly fewer mean ODRs ( $M = .41$ ,  $SD = .13$ ) than schools with fewer years of implementation ( $M = .71$ ),  $t(21) = -3.13$ ,  $p = .005$ . These results support the hypothesis that longer implementation of SWPBS results in fewer ODRs.

#### *Location of Referrals*

The third research question sought to provide descriptive information on the locations in a school that result in the most referrals. The SWIS data were analyzed to see where referred behaviors occurred that led to ODRs. The results for referral location can be found in Table 2. The classroom, by far, was the most common location for behavioral concerns leading to an ODR. On the bus was the second most frequent location.

#### *Types of Referrals*

To address the fourth research question, SWIS data from the participating schools were analyzed to see what type of behaviors led to an office discipline referral. The mean number of referrals per school for each type of behavioral concern was determined. The results from this analysis can be found in Table 3. These data indicate that the most common behavior problems within this sample of schools were defiance, fighting, and disruption.

Table 2

*Location of Referrals (n = 21)*

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Location	<i>M</i>	<i>SD</i>
Classroom	120.38	75.30
Bus	55.95	51.78
Playground	16.95	11.30
Cafeteria	15.42	9.63
Hallway	13.95	10.87
Gym	8.90	9.52
Bathroom	8.19	6.52
Assembly	6.86	3.47
Library	3.42	4.20
Bus Loading	1.47	3.97
Music Room	0.00	0.00

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Table 3

*Mean Number of Referrals for Specific Types of Behavior (n = 21)*


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Behavior	<i>M</i>	<i>SD</i>
Defiance	83.14	64.27
Fighting	67.42	34.85
Disruptive	30.23	25.40
Bullying	18.57	9.05
Abusive Language	18.09	13.28
Theft	7.61	5.07
Lying	4.47	5.31
Vandalism	3.38	3.00
Weapons	1.52	2.22

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## Discussion

This purpose of this study was to examine SWIS data from schools that are currently implementing School-Wide Positive Behavior Supports (SWPBS). Data were examined based on several different factors. First a school's Benchmark of Quality Scores (BoQs) were compared with the number of years a school had implemented SWPBS. Second, the average number of Office Discipline Referrals (ODRs) per pupil was also compared to the number of years a school implemented SWPBS. Lastly, descriptive information was obtained in order to identify the location and type of problem behavior that led to the most ODRs.

It was hypothesized that schools that had implemented SWPBS for a longer period of time (four years or more) would have higher BoQ scores than schools with fewer years of implementation. Data analysis revealed that schools that implemented SWPBS for four years or longer did have statistically significantly higher BoQ scores than schools with three or less years of implementation. Because BoQ scores are an indication of a school's perception of their fidelity and integrity of SWPBS, it would be expected that their scores would be higher the longer SWPBS was implemented in their school. Furthermore, as schools continue to implement SWPBS, their practices should also be refined, which would in turn lead to a better sense of pure or correct SWPBS implementation. During the initial implementation of SWPBS, schools are frequently modifying their practices. These changes in practice could come from changing school-wide expectations, revising the reinforcement system, adapting the definitions of what constitutes an ODR, or any number of other changes that are embedded in the SWPBS process. However, after these changes have been made, and SWPBS is fully



implemented, BoQ scores should increase. This would be due to the very nature of redefining SWPBS and ensuring that all teachers and staff understand and are correctly implementing all components with fidelity and integrity.

This study also examined if multiple years of SWPBS implementation continued to decrease the number of ODRs per year. Results showed that schools with four or more years of implementation did in fact have fewer ODRs on a per pupil basis. These results indicate that when a school consistently implements SWPBS procedures, ODRs will continue to decrease. It is important that statistically significant differences were found because the overall goal of SWPBS is to decrease problem behavior through the use of proactive procedures. Because the results were found to be significant, even with such a small sample of schools, there is strong support that such a program does continue to reduce these types of behavior. These results also support the idea that it takes several years in order to have SWPBS fully implemented and running efficiently. This information is vital because schools are often reluctant to continue a program if results are not immediately apparent after one or two years. However, if schools are aware up front of the possible time frame for proper implementation, any expectations for rapid reduction of problem behavior will be put into a more reasonable perspective.

Knowing common locations of problem behavior is valuable information because a critical feature of a SWPBS program is creating behavior expectations explicitly for classroom and non-classroom areas. Although SWPBS does incorporate classroom management, a major feature is creating appropriate behavioral expectations for non-classroom areas. These data indicated that more referrals came from within a classroom setting than from any other setting. In one sense, this finding is not surprising considering

the amount of time students spend in a classroom setting versus the amount of time in non-classroom settings during a school day. It is encouraging to see that non-classroom areas see few referrals across multiple areas. However, because data were not obtained for a pre-SWPBS implementation period of time, it is unknown if a significant drop in referrals from non-classroom areas occurred after SWPBS implementation. The current results indicated that most non-classroom ODRs came from the bus. It is important to note that while bus behavior can be addressed using SWPBS, it is typically not addressed until much later in the SWPBS process. This is because SWPBS that addresses bus behavior must include training bus staff as well as bus supervisors. It is typical practice to establish a solid SWPBS foundation within a school setting prior to bringing SWPBS to bus drivers and staff.

The SWIS data were analyzed in order to see what type of problem behaviors most commonly led to office referrals. The data indicated the top three referrals were for defiance, fighting, and disruption. Interestingly, these three behaviors alone result in an average of almost 181 referrals per school per year. Given that the length of the school year in Kentucky is 177 instructional days, these data indicate that schools, in essence, respond to defiance, fighting, and disruptive behavior on a daily basis. If school districts have this information, they can target these common behavioral problems and specifically address them when creating school-wide expectations. If these types of behaviors could be reduced, then the number of ODRs would decrease dramatically.

Given the fact that this study only examined behaviors from elementary school students, such a high level of defiance, fighting, and disruptive behaviors was unexpectedly high, especially for fighting. However, because behavior definitions were

not provided with the raw data, it is unknown how each school defined an incidence of fighting. The results also presented an interesting finding in that referrals for use of weapons occurred on more than one instance in more than one school. The raw data did not indicate what the weapon violation was or how it was defined, but it is still worthy of noting that weapon violations are occurring across the West Region on multiple occasions in elementary school settings.

This study was conducted under the assumption that schools involved with KYCID and SWPBS were in search of better ways of managing misbehaviors. Thus, schools wanted to not only change the climate of their schools and make improvements where necessary, but were also motivated to make these changes last. The schools involved in this study received, and continue to receive, support as necessary from their regional coordinator. Therefore, ODRs showed a significant decrease and BoQs showed a significant increase while the schools receive continued training and support. The level of support is always contingent upon what the school asks for and/or needs. This type of support is a vital part of the effective implementation and should be taken into consideration when analyzing any type of SWPBS data.

#### *Implications for Practice*

Overall, the results of this study indicate that when implemented effectively, SWPBS is a research-based intervention that will reduce problem behavior in an elementary school setting. Furthermore, perceived fidelity and integrity increased the longer a school had a SWPBS in place. It is important for schools beginning the initial phases of SWPBS implementation to be aware of the time span necessary for effective implementation. Drastic results may or may not be seen early, but it is important to know

that decreases in ODRs will continue to occur with longer implementation periods. It is possible that significant reductions in ODRs may not be apparent for some time.

Furthermore, schools may not perceive they are effectively implementing SWPBS with fidelity and integrity the first or second year of implementation. Thus, BoQ scores would not be as high as a school may originally anticipate.

Most importantly, as laws shift to mandating research-based interventions across academic and behavioral areas, the current study provides additional support for SWPBS as a behavioral intervention. The current study adds to, and expands, the research supporting the use of SWPBS. With Response to Intervention (RtI) at the forefront of education reform, it is going to be necessary for schools to implement SWPBS within their school system in order to meet educational mandates.

### *Limitations*

This study only included schools from the West Region of Kentucky that were collaborating with Kentucky Center of Instructional Discipline (KYCID). The sample size was small, with only 25 schools participating. It is important to note that a larger sample size, even outside of the West Region, would have been difficult to obtain due to the fact the SWPBS is a fairly new initiative within the state of Kentucky. Additionally, some schools that are implementing SWPBS are not using SWIS to keep track of their data. Some schools have opted to use a created spreadsheet to maintain their data, and other schools have opted to not collect this type of data. Therefore, with those two factors being necessary for inclusion in the study, several schools were automatically excluded.

Another possible limitation of this study is the lack of consistency in the definition for each of the problem behaviors. This was evident through the large standard

deviations obtained when analyzing the data. Each school operates on their own interpretation of the problem behavior definitions provided by SWIS. For example, talking in class may be coded as disruption in one school, but as defiance in another school. Some schools even classified some behaviors as unknown. Although this limits this research study, it may not have that significant of an impact on an individual school's data as long as the school is consistently reporting and coding the behaviors as ODRs.

Another factor that could have affected this study is the type of training and support that each school receives. The participants of this study were all trained and supported by the same person. Her trainings and way of supporting each school may vary from other KYCID trainers. This is important because the way a school receives training and support will impact the way in which the SWPBS program is implemented. Results of the same study may be different if schools from another area or coordinator were used.

#### *Future Research*

With SWPBS being a new initiative, there are many areas of future research. More research is going to need to be done in this area in order to assess the true effectiveness of the SWPBS program. Future research should include expanding research to middle and high schools. Furthermore, all previous research in this area was based on small samples (i.e., one to two schools). The sample size will need to be increased so that results can be generalized across many settings. Also, the research has to be expanded to include both urban and rural settings. Much of the previous research has been conducted in urban middle school settings. Only studying one particular age group in one type of setting drastically reduces the capacity to generalize the results across multiple settings.

Additionally, more research needs to be done to explore whether SWPBS has a positive impact on academic outcomes. The study by Luiselli et al. (2005) found that academic achievement increased when a universal system of behavior supports was in place. However, their study was limited by a small sample size (one school) and a single measure of academic performance. Additional research needs to be completed to see if SWPBS will, in fact, increase academic performance.

Sugai and Horner (2006) also noted some important areas of future SWPBS research. The importance of administrator support has always been noted as necessary for SWPBS implementation. However, there is little to no research that verifies the importance of administrator support. Although it seems intuitive that administrator support is vital to any program's success, the specific factors that contribute to success as it applies to an SWPBS initiative would be beneficial to know. Also, it is going to be necessary to expand SWPBS research from individual student outcomes to school, district, and state outcomes (Sugai & Horner, 2006).

### *Conclusion*

This study investigated the effectiveness of SWPBS based on several variables and found support for the use SWPBS. Most importantly, previous research failed to examine the number of years of implementation as a variable. The current results indicate that continued implementation of SWPBS over multiple years can result in positive outcomes. The other variables examined also provided valuable information about how best to address specific behaviors of concern.

## References

- Annual Report on School Safety*. (2000). Washington, DC: U.S. Department of Education and U.S. Department of Justice.
- Arnberger, K., & Shoop, R. (2008). Responding to need. *Principal Leadership*, 8, 50-54.
- Brown-Chidsey, R., & Steege, M. W. (2005). *Response to intervention: Principles and strategies for effective practice*. New York: Guilford.
- Cameron, M., & Sheppard, S. (2006). School discipline and social work practice: Application of research and theory to intervention. *Children in Schools*, 28, 15-22.
- Cohen, R., Kincaid, D., & Childs, K. (2007). Measuring school-wide positive behavior support implementation: Development and validation of the benchmarks of quality. *Journal of Positive Behavior Interventions*, 9(4), 203-213.
- Crone, D., & Horner, R. (2003) *Building positive behavior support systems in schools*. New York: The Guilford Press.
- Crone, D., Horner, R., & Hawken, L. (2004). *Responding to problem behavior in schools: The behavior education program*. New York: The Guilford Press.
- Eggen, P., & Kauchak, D. (2001). *Educational psychology: Windows on classrooms* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Fuentes, A. (2003). Discipline and punishment. *Nation*, 277(20), 17-20.
- Handler, M. W., Rey, J., Connell, J., Thier, K., Feinberg, A., & Putnam, R. (2007). Practical considerations in creating school-wide positive behavior support in public schools. *Psychology in the Schools*, 44(1), 29-39.
- Heitzman, A. J. (1983). Discipline and the use of punishment. *Education*, 104(1), 17-22.

- Horner, R. H., Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Interventions, 6*(1), 3-12.
- Jacob, S., & Hartshorne, T. (2007). *Ethics and law for school psychologists*. Hoboken, NJ: John Wiley & Sons, Inc.
- Kincaid, D., Childs, K., Blase, K. A., & Wallace, F. (2007). Identifying barriers and facilitators in implementing schoolwide positive behavior support. *Journal of Positive Behavior Interventions, 9*(3), 174-184.
- Lewis, T., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children, 31*(6), 1-24.
- Luiselli, J., Putnam, R., Handler, M., & Feinberg. (2005). Whole-school positive behaviour support: Effects on student discipline problems and academic performance. *Education Psychology, 25*, 183-198.
- Maag, J. (2001). Rewarded by punishment: Reflections on the disuse of positive reinforcement in schools. *The Council for Exceptional Children, 67*, 173-186.
- Mass-Galloway, R. L., Panyan, M. V., Smith, C. R., & Wessendorf, S. (2008). Systems change with school-wide positive behavior supports: Iowa's work in progress. *Journal of Positive Behavior Interventions, 10*(2), 129-135.
- Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive behavior management program to improve school-wide positive behavior support. *Education & Treatment of Children, 24*(4), 448.



- Miltenberger, R. (2008). *Behavior modification: Principles and procedures*. Belmont, CA: Thomas Wadsworth.
- OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports. (2007). Retrieved February 26, 2008 from <http://www.pbis.org/schoolwide.htm>.
- Positive Behavior Supports Survey (2007). *School-wide evaluation tool (SET)*. Retrieved February 4, 2009, from <http://www.pbssurveys.org/pages/Home.aspx>.
- Safran, S. P., & Oswald, K. (2003). Positive behavior supports: Can schools reshape disciplinary practices? *Exceptional Children*, 69(3), 361.
- Sandomierski, T., Kincaid, D., & Algozzine, B. (2008, February). Response to intervention and positive behavior support: Brothers from different mothers or sisters with different misters? *Positive Behavioral Interventions and Supports Newsletter* 4(2). Retrieved March 3, 2008, from <http://www.pbis.org/news/New/Newsletters/Newsletter4-2.aspx>.
- School-Wide Information System (2009). Retrieved February 4, 2009 from <http://www.swis.org/>.
- Scott, T. (2003). Making behavior intervention planning decisions in a schoolwide system of positive behavior support. *Focus on Exceptional Children*, 36, 1-18.
- Shannon, P., Daly, D. C., Malatchi, A., Kvarfordt, C., & Yoder, T. (2001). Capacity for statewide implementation of positive behavior supports: A needs assessment strategy. *Journal of Positive Behavior Interventions*, 3(2), 95.
- Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy*, 24, 23-50.

- Sugai, G., & Horner, R. R. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School Psychology Review, 35*(2), 245-259.
- Todd, A., Campbell, A., Meyer, G., & Horner, R. (2008). The effects of targeted intervention to reduce problem behaviors: Elementary school implementation of check in-check out. *Journal of Positive Behavior Interventions, 10*, 46-55.
- Turnbull, A., Edmonson, H., Griggs, P., Wickham, D., Sailor, W., Freeman, R., et al. (2002). A Blueprint for schoolwide positive behavior support: Implementation of three components. *Exceptional Children, 68*(3), 377-402.
- Walker, B., Cheney, D., Stage, S., & Blum, C. (2005). Schoolwide screening and positive behavior supports: Identifying and supporting students at risk for school failure. *Journal of Positive Behavior Interventions, 7*(4), 194-204.
- Warren, J. S., Bohanon-Edmonson, H. M., Turnbull, A. P., Sailor, W., Wickham, D., Griggs, P., et al. (2006). School-wide positive behavior support: Addressing behavior problems that impede student learning. *Educational Psychology Review, 18*(2), 187-198.
- Wright, D., Mayer, C., Cook, C., Crews, S., Kraemer, B., & Gale, B. (2007). A preliminary study on the effects of training using behavior support plan quality evaluation guide (BSP-QE) to improve positive behavioral support plans. *Education & Treatment of Children, 30*(3), 89-106.

Appendix A

Human Subjects Review Approval Letter

WESTERN KENTUCKY UNIVERSITY  
Human Subjects Review Board  
Office of Sponsored Programs  
301 Potter Hall  
270-745-4652; Fax 270-745-4211  
E-mail: [Paul.Mooney@wku.edu](mailto:Paul.Mooney@wku.edu)

In future correspondence, please refer to HS09-156, March 9, 2009

Ashley Bryce McGinnis  
c/o Dr. Meyer  
Psychology  
WKU

Dear Ashley:

Your revision to the research project, *Exploring the Effectiveness of a Tier 2 Behavior Intervention: An Examination of the Behavior Education Program*, was reviewed by the HSRB and it has been determined that risks to subjects are: (1) minimized and reasonable; and that (2) research procedures are consistent with a sound research design and do not expose the subjects to unnecessary risk. Reviewers determined that: (1) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (2) selection of subjects is equitable; and (3) the purposes of the research and the research setting is amenable to subjects' welfare and producing desired outcomes; that indications of coercion or prejudice are absent, and that participation is clearly voluntary.

1. In addition, the IRB found that you need to orient participants as follows: (1) signed informed consent is not required; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data. (3) Appropriate safeguards are included to protect the rights and welfare of the subjects.

This project is therefore approved at the Exempt Review Level until May 30, 2009.

2. Please note that the institution is not responsible for any actions regarding this protocol before approval. If you expand the project at a later date to use other instruments please re-apply. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office of Sponsored Programs at the above address. Please report any changes to this approved protocol to this office. A Continuing Review protocol will be sent to you in the future to determine the status of the project. Also, please use the stamped form that accompanies this letter.

Sincerely,

Paul J. Mooney, M.S.T.M.  
Compliance Manager  
Office of Sponsored Programs  
Western Kentucky University

cc: HS file number McGinnis HS09-156

