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SWPBIS, behavior patterns, and the discipline gap

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SWPBIS, BEHAVIOR PATTERNS, AND THE DISCIPLINE GAP

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Educational Specialist

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ABSTRACT

The goal of this study was to examine to what extent the discipline gap is present in a school implementing school-wide positive behavior interventions and supports (SWPBIS) and to examine whether students of different ethnicities are reported disproportionately for different types of behavior. Eight years of reported problem behavior (RPB) data from one elementary school were collected and analyzed both descriptively and statistically. In order to reflect the population proportionately, the presence of the discipline gap was examined using the average number of RPBs per student per year by ethnicity. Results indicate that there was no statistically significant difference between white and African American students, but that Latino students were referred significantly less frequently than African American students. Also, students were not reported differentially by ethnicity for specific types of problem behaviors. Implications of these findings for SWPBIS implementation and directions for future research are discussed.

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Entitled: SWPBIS, Behavior Patterns, and the Discipline Gap

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INTRODUCTION

Schools hold great responsibility in the development of youth in our country. They exist as a center for learning and are incredibly important in guiding the future of their students. What education entails is becoming broader and research shows that there is public support for an agenda that includes lessons not only in academics, but also social skills, health, and citizenship as well (Greenberg et al., 2003). This paper examines the prospect of School-Wide Positive Behavior Interventions and Support (SWPBIS) and its potential to produce positive change in American schools. While schools may have been originally conceived as purely academic institutions, they seem to be taking on a more intensive role in character development (Greenberg et al., 2003). SWPBIS addresses much of that development through a framework that introduces comprehensive climate change in schools and focuses on student social skills and citizenship to achieve that effect (Sugai & Horner, 2009a).

The modern school is expected to do more today than in the past, and it is expected to do so with increasingly limited resources. Economic hardship at the state and federal levels can lead to restrictions in funds for schools around the United States. The combination of depleted resources and higher expectations requires school systems to become more efficient in accomplishing objectives. One emerging approach to addressing expectations for student behavior is the SWPBIS framework.

To address academic expectations, Response to Intervention (RTI) is a popular framework utilized across the country to improve the efficiency of academic instruction

(Fuchs & Fuchs, 2006). RTI is a multi-level system in which the intensity of academic intervention increases at each tier (Fuchs & Fuchs, 2006). It is substantially different from more traditional approaches in that it molds education based on the learner's response to instruction, and is more effective in reaching a greater number of struggling students sooner (Fuchs, Mock, Morgan, & Young, 2003). RTI uses assessment and intervention in a school-wide system to maximize student achievement and diminish the occurrence of problem behaviors. The adoption of RTI has spread quickly since 2004, with 80% of schools in the United States involved in some stage of RTI implementation (ranging from pilot programs to full implementation) and 24% at full implementation (Spectrum K12 School Solutions, 2011). SWPBIS is focused on improving the behavioral aspect of schools and does so in a manner congruent with the core principles and practices of RTI (Sugai & Horner, 2009b). This congruence is based in a similar student-centered approach to education with student response being the primary guide in determining subsequent instruction. The analogous structures and the aligned philosophies of the two frameworks may enhance the likelihood of staff buy-in to SWPBIS, and its addition to an existing RTI system can serve as a complementary and intuitive behavior education component.

This paper will discuss SWPBIS as a compatible counterpart to current system-wide practices (RTI) for the purpose of aiding schools in meeting educational objectives. After that, the paper explores implications of current research on SWPBIS and outcomes with minority populations. The application of SWPBIS with diverse populations has been studied only in limited scope; in order for an intervention to be justified for wide-spread

adoption, it is important to examine effectiveness not only for general samples of students, but also for ethnically and culturally diverse samples. Evidence of generalizability may encourage lawmakers and leaders in education to push harder for appropriate implementation of SWPBIS nationwide alongside RTI.

CHAPTER 2

SCHOOL-WIDE POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS

Many schools adopt zero-tolerance policies as a disciplinary mantra in hopes of dispelling violence (Nickerson & Martens, 2008). This reactionary style is still employed in schools today and is criticized due to the lack of research supporting its effectiveness as a school-wide policy (Nickerson & Martens, 2008; Olley, Cohn, & Cowan, 2010). In addition, extensive utilization of suspension and expulsion, common forms of discipline enacted with the policy, contributes to lower academic performance and a worsened school climate (Olley et al., 2010). SWPBIS serves as a positive system-wide alternative to this approach.

SWPBIS is a relatively new development in the field of school psychology and focuses on establishing behavioral supports based on individual school culture (Sugai & Horner, 2009a). In order to be effective, this framework relies on implementers to establish and maintain "contextual fit" within the school setting (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010, p. 11). This means that the features of the framework must match the institutional needs as well as social environment of the school. This is not an issue of focus solely in initial implementation, but requires a constant re-evaluation as school social landscapes shift and change (McIntosh et al., 2010). Sugai and Horner (2009a) state that implementation at the school level is also about creating a culture in which the interventions and practices central to the framework can be successful. Thus, SWPBIS is designed to be flexible to student and staff needs, but in order to be

successful, still requires a culture encouraging school-wide effort to meet those needs through evidence-based practices.

SWPBIS extends the reach of applied behavior analysis (ABA) to the school setting (Sailor, Stowe, Turnbull, & Kleinhammer-Tramill, 2007; Tincani, 2007). The core of SWPBIS lies in applied behavioral analysis and aims to simultaneously encourage positive behaviors while reducing the occurrence of problem behaviors. Although SWPBIS does include many other considerations from areas like cultural and community psychology, the literature on SWPBIS emphasizes behavior analysis to a greater degree than these other areas (Sugai & Horner, 2009a, Tincani, 2007). While some argue that SWPBIS may be harmful to the concept of ABA and will dilute its core principles (Johnston, Foxx, Jacobson, Green, & Mulick, 2006), Tincani (2007) sees this framework as making ABA and evidence-based practices more accessible to practitioners and parents without making expert training a necessity. Tincani argues that, while expert training in ABA would be ideal for those who seek to become experts in SWPBIS, such a requirement would alienate a large portion of potential consumers of SWPBIS. He articulates further that SWPBIS actually provides an accessible framework for those unfamiliar with the more technical aspects of ABA (Tincani, 2007).

In accordance with its roots in ABA, SWPBIS requires thorough data collection (Sugai & Horner, 2009a). The collection of data informs the decisions made inside this framework and is used to determine implementation fidelity and effectives of school practices. Functional behavioral assessment (FBA) is one tool used within the SWPBIS framework as a means of assessing the reason for problematic/disruptive behavior.

Information from the FBA is used to identify viable strategies for replacing the problem behavior with socially acceptable alternatives (Sailor et al., 2007). The formal FBA is usually reserved for the more intensive cases and can involve techniques such as interviews and direct observations in order to identify the most salient reinforcer of a behavior (Horner, Sugai, & Anderson, 2010). Throughout the framework of SWPBIS, teachers are often encouraged, through the use of structured behavioral referral forms, to identify possible motivations for student behavior. These forms often require teachers to think about and identify events preceding and following student behavior as a means to inform future classroom strategies. These habitual informal assessments in the classroom lead to the formal FBA as a natural extension of daily practice. Additionally, the informal functional data gathered by teachers also can contribute to later formal FBAs, enabling the possibility of more time-efficient assessment and efficacious interventions. In all cases, this informal FBA mentality can be helpful in matching the appropriate intervention to a student's need without utilizing additional resources (i.e. expert personnel or administrator time). For example, a teacher may make note of a student's tendency to look around at his peers with a smile after engaging in inappropriate behavior. This observation can be used in conjunction with other data to identify an intervention that rewards desired behavior with attention and decreases the availability of peer attention for undesired behaviors.

In SWPBIS, data analysis guides intervention and should guide every decision made in the evaluation of the intervention (Sugai & Horner, 2008). Data-based decision-making is used not only for individual student decisions, but also classroom- and school-

wide decisions. School-wide data collection is crucial for informing the implementation of behavior supports in a school, and should be used to target larger groups of students when appropriate. Data management systems within SWPBIS frameworks often collect information on location of a behavior incident, referrals by student, and the type of behavior that occurred. In practice, this information can be used to identify a group of students with numerous referrals for aggressive behavior for a weekly group session on anger management.

A high priority within SWPBIS is using data to informing the application of evidence-based interventions (Sugai & Horner, 2009a). In order to be considered evidence-based, an intervention must be empirically tested and associated with positive results. To continue with the previous example about anger management, the curriculum used for this group should be research-based or grounded in approaches that are supported by research (e.g. cognitive behavioral therapy). Such interventions can take place individually or even be adapted to a school-wide intervention if data indicates there is the need. While an intervention should be empirically tested before implementation in the school setting, it should also be contextualized to fit both the students and the setting for which its use is intended (McIntosh et al., 2010). An example of contextual fit in this instance would be reorganizing or changing the wording within a curriculum to accommodate local school culture or language without fundamentally changing the approach or techniques within it.

A Systems-Approach

SWPBIS is applied as a systems-approach; this requires an expansion of ABA to large-scale implementation (Tincani, 2007). Fundamentally, SWPBIS alters the environmental structure in a way that impacts the behavior of the people within it (Scott, Alter, Rosenberg, & Borgmeier, 2010). Much of the effort is directed toward addressing and remediating issues in the earliest stages by reinforcing desired behaviors. At a systems level, school-wide data about individual student office referrals should be used to identify problem areas in which each school can improve through the provision of additional behavior support to address specific needs (e.g. using information about location of referrals to inform decisions on where additional staff supervision should be allocated; Sugai & Horner, 2009a).

In addition to trouble-shooting, data collection is used for screening the effectiveness of the primary tier interventions and can help to identify individual students who demonstrate a need for more substantial support (Sugai & Horner, 2009a). This assessment of the core level of support is also essential in maintaining an effective system by enabling staff to carefully evaluate trends in types of referrals being made to higher levels of support. The kind of monitoring and adjustment can prevent the occurrence of a higher number of students seen in the tiers requiring more support. Prevention as a means of intervention is central to SWPBIS and is accomplished through conscious change of staff behavior and the other factors (e.g. visibly posted expectations, reward tickets for positive behavior) in the environment for the purpose of producing positive student outcomes (Scott et al., 2010). Combined, these efforts in prevention and problem-solving

are geared toward promoting positive student-teacher interactions and reducing negative interactions (McIntosh et al., 2010).

Structure

The organization of a SWPBIS framework is congruent with that of the RTI system; RTI and SWPBIS share similar practices such as universal screening, scientifically research-based interventions, measures of intervention integrity, and data-based decision making (Sugai & Horner, 2009b). Additionally, RTI and SWPBIS both use a three tier model, with each successive tier providing more intensive student support (Sugai & Horner, 2009a). These facets of both concepts are aimed toward building capacity for school systems to problem-solve in their respective goal areas.

Primary Tier

The primary tier is implemented for all students (Sugai & Horner, 2009a, 2009b). This level incorporates a set of interventions to form a comprehensively positive social culture in all school settings (Sugai & Horner, 2009b). The objective of the primary tier is primary prevention. If interventions at this level are executed well, there is less reliance on more structured and specific interventions in subsequent tiers (Sugai & Horner, 2009a). For example, if a school has a history of peer fighting behaviors occurring in hallways, emphasizing social skills and problem solving instruction, reinforcing students for addressing miscommunication and bullying in positive ways, and increasing adult supervision in those areas might be suggestions for fortifying the primary tier so that less resources are used remediating fights and teaching those skills on an individual basis.

One fundamental step to establishing preventative measures for problem behavior in schools is establishing universal rules that target the social development of all students (McIntosh et al., 2010). Schools usually identify three to five rules that are broad enough to serve as an umbrella for a wide range of specific student expectations (e.g. be responsible, be respectful) and are stated positively to encourage prosocial behavior. Sugai and Horner (2009a) emphasize that in order to be effective these expectations need to be contextualized to fit the culture of the school and surrounding community. These broad rules are reinforced in all settings of the school by all staff, including bus drivers, custodial staff and cafeteria workers (Horner at al., 2010). The process of implementation within the entire school must offer examples and non-examples of acceptable behavior in different settings across the school (McIntosh, Bennett, & Price, 2011). This level of detail ensures that the students have clear expectations of positive behavior throughout settings in the school. In order to be effective, this framework requires both positive expectation and positive reinforcement for the desired behaviors (Horner et al., 2010).

Another priority of the primary tier of SWPBIS is direct instruction of the expectations for social behavior (Horner et al., 2010; Sugai & Horner, 2009a). Through this instruction a common language is developed to make communication about expectations simpler after initial implementation. SWPBIS relies on teachers and administrators to explicitly teach and model expectations of behavior throughout the school (Sugai & Horner, 2009a). This approach means promoting effective, prosocial behaviors as alternatives to problem behaviors, and minimizing antecedents and consequences that maintain problem behaviors (Sugai & Horner, 2008). In the primary

tier, the broad expectations are taught directly to the students, but on the secondary tier, these expectations may need to be reinforced with social skill building activities and small group instruction while maintaining primary tier instruction (Sugai & Horner, 2009a).

Secondary Tier

While the primary tier is expected to be effective for approximately 80% of the student population (Scott et al., 2010; Sugai & Horner, 2009a), there remains 20% of the population that is not responsive at this level of support. The students in this group are found to be in violation of the school-wide rules often enough to require resources outside of those available at the primary level. The secondary tier is characterized by more supportive interventions requiring effort and frequency. Interventions in this tier often incorporate smaller group interventions with more direct instruction. These intervention decisions are made by a team of professionals and are based on behavioral and academic data collected while the student is being served in the primary tier. Efficiency is a focus of this level, making small group interventions preferable to individual interventions at this stage (Scott et al., 2010). In addition to supplemental explicit instruction, Scott and his colleagues (2010) suggest that interventions such as modeling and guided feedback can be applied within this setting. Other published evidence-based interventions that are used include the Behavior Education Program, Check In/Check Out, and Check and Connect (Sugai & Horner, 2009a). Self-management strategies, token economies, and peer-based contingency strategies have also been effective in this tier (Sugai & Horner, 2009a). The second tier does not operate

separately from the primary tier, but rather should be seen as a layer of support added to primary interventions.

Tertiary Tier

The tertiary tier serves the students who have not responded to both the primary and secondary tiers. Students at this level present with the most dangerous and/or disruptive behaviors (McKevitt & Braaksma, 2008). This tier is the most intensive and offers the most support of the three tiers. This support is very individualized and typically relies on a formal FBA in order to determine appropriate interventions most likely to succeed in reducing problem behavior (Scott et al., 2010). FBA involves careful consideration of environmental influences surrounding the problem behavior including antecedents and consequences (Sugai & Horner, 2009a). This level of specificity requires a team with substantial competence in behavior management (Sugai & Horner, 2009a). The data gathering process at this level becomes more intensive (Scott et al., 2010). The FBA process also has escalating degrees of intensity beginning with a simple consultation based strategy, then a team-based functional assessment, and then if the first two are not effective, a comprehensive functional assessment that includes as many of student's life influences as possible and considers a full range of interventions to replace or eliminate problem behavior (Scott et al., 2010). Following assessment, the results are combined with data collected as part of previous interventions in order to develop a comprehensive plan that generally includes multiple resources often from different disciplines to support the student (Horner et al., 2010).

Staff Agreement

Continuous implementation with high fidelity is very important to operating a successful program, making the autonomy of local staff crucial to successful maintenance. Sugai and Horner (2009a) recognize the importance of establishing staff agreement and commitment to an intervention; they recommend no less than 80% of staff be in agreement before the approach is implemented. Teachers are largely responsible for the management of SWPBIS and are on the front lines when referring to student interactions; their efforts are supplemented in its maintenance by administrative guidance (Luiselli, Putnam, & Sunderland, 2002). The process of establishing agreement among staff on the philosophy and steps involved in SWPBIS increases the likelihood that the framework will be implemented with high integrity (Sugai & Horner, 2009a).

Effects of SWPBIS on Behavioral Outcomes

Undesired Behaviors

SWPBIS is an effective tool for reducing undesired behavior in schools (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009; Lassen, Steele, & Sailor, 2006; McIntosh et al., 2011; Sailor et al., 2006). Much of the research on problem behavior reduction relies on data from office disciplinary referrals (ODRs). ODR frequency is analyzed because they are readily documented and a very common form of discipline. ODRs are empirically valid measures of effectiveness because they are regularly used for data-based decision making (Irvin et al., 2006). SWPBIS has led to significant reductions in ODRs and suspensions for three to five years after implementation (Bohanon et al., 2006; Bradshaw et al., 2010; Lassen et al., 2006). Horner and his colleagues (2009) found

similar results, but due to lack of experimental control, they were unable to officially attribute changes to SWPBIS. McIntosh and colleagues (2011) compared behavior rates from low implementing schools and non-implementing schools to high SWPBIS implementing schools using the average number of ODRs per 100 students and found that not only were levels of problem behaviors lower in SWPBIS schools, but the number of students at-risk for significant behavioral problems decreased. In another study, disciplinary detentions for antisocial behavior, substance use, and vandalism decreased over a 4 year period while SWPBIS was implemented (Luiselli et al., 2002). One study also noted a decline in proportion of students requiring high levels of support at the secondary and tertiary levels (Bohanon et al., 2006).

In a quasi-experimental study, positive behavior support in conjunction with functional assessment resulted in fewer negative behaviors (Stoiber & Gettinger, 2011). In this study, researchers compared teachers trained in both functional assessment and positive behavior support with a control group of teachers finding that at-risk students in the experimental group also exhibited increased levels of resilience. Although this is not a direct result of a SWPBIS framework, this study is included because it supports two integral components simultaneously on a micro-level. Additionally, research on the effect of SWPBIS on bullying behavior indicates that students who were coached into the SWPBIS system experienced significantly less bullying post-intervention (Ross & Horner, 2009).

Desired Behaviors

In a school-wide approach, it is informative to focus not only on the reduction of problem behaviors, but also on the increased frequency of positive behaviors. Despite its usefulness, the occurrence of positive behavior does not appear to be as well documented in scientific literature. The few studies that have tracked it have found that SWPBIS is associated with increases in positive behavior. Stoiber and Gettinger (2011) reported more positive behaviors based on a within-students analysis of interval time sampling observations. Luiselli and his colleagues (2002) conducted a study that tracked data from a middle school implementing a school-wide positive behavior support program over a four year period. They used percentage of total student attendance and the percentage of students who qualified for a positive behavior lottery drawing. The researchers found an increase in the number of students who received positive reinforcement for desired behavior, as well as student attendance each year progressively over the four years. With such limited evidence in this area, it seems that more research needs to be done to measure positive behavior outcomes associated with SWPBIS.

Systems Indicators

Behavior data is usually readily available through school databases, but it is not the only indicator of school well-being. Results suggest SWPBIS has significant effects on student perceptions of school safety after years of SWPBIS maintenance (Horner et al., 2009; McIntosh et al., 2011). Perceived school safety was also strongly associated with academic achievement (Milam, Furr-Holden, & Leaf, 2010) and school climate (MacNeil, Prater, & Busch, 2009; Tubbs & Garner, 2008; Uline & Tschannen-Moran,

2008). This gain should not be overlooked, as it can serve as a measure of overall school health. Changes in perception of the school by students and staff reflect changes in expectations and interactions. When controlling for socioeconomic status, statistical analysis showed organizational health was related to academic achievement as well (Hoy & Hannum, 1997). Significant positive changes in organizational health are associated with SWPBIS implementation, and schools with lower health at baseline showed the most improvement (Bradshaw, Koth, Thornton, & Leaf, 2009).

Settings

There are some settings in which SWPBIS has been researched in less depth. Elementary schools have received the most attention in this regard (Bohanon, Flannery, Malloy, & Fenning, 2009). At the high school level, there is limited application of SWPBIS, making it more difficult to study. High school settings require a different set of considerations for implementation of SWPBIS. Some question the use of acknowledgment of prosocial behavior as reinforcement with older students, but data seemed to suggest a positive effect nonetheless (Bohanon et al., 2006). The high school setting offers other challenges as well. High schools are often segregated by content area and have denser populations (Bohanon et al., 2009). These two factors make communication among staff from different areas less frequent. Students are also less likely to form strong personal relationships with teachers when classes are spread across so many educators. Despite these obstacles, preliminary results for SWPBIS implementation in high schools indicate a reduction in problem behaviors (Bohanon et al., 2006).

SWPBIS on the other end of the age spectrum also lacks a solid research base. With an estimated 10-20% of students in preschool exhibiting significant problem behaviors (Carter & Van Norman, 2010), there is room for improvement. One study examined the effect of consultation on positive behavior support implementation in the preschool setting (Carter & Van Norman, 2010). Results showed that positive behavior support consultation with preschool teachers yielded high academic engagement. Unfortunately, this study did not examine the frequency of problem behavior, leaving information about the efficacy of the program unknown.

CHAPTER 3

BRINGING TOGETHER SWPBIS AND RTI

SWPBIS is shown to be associated with reduced problem behaviors in schools (Bradshaw, Koth et al., 2009; Horner et al., 2009; Lassen et al., 2006; McIntosh et al., 2011) and an overall more positively perceived environment (Horner et al., 2009; McIntosh et al., 2011; Milam et al., 2010). It has also been associated with positive academic outcomes (Bradshaw, Zmuda, Kellam, & Ialongo, 2009; Horner et al., 2009; Lassen et al., 2006; McIntosh et al., 2011), raising exciting questions about the interaction of academic achievement and behavior. Investing in the behavioral supports necessary for schools has the capacity to improve social competence and academic outcomes of students, as well as improve resource allocation within schools (Horner et al., 2009). For example, Scott and Barrett (2004) build on the idea of administrator time being influential for students and schools in multiple ways. Following two years of SWPBIS implementation, researchers found that administrator time savings due directly to reduction in ODRs and suspensions was 15.75 school days per year. They then made further calculations, equating time to money using administrator salary, and found that the school had saved an average of $6,478. Lassen and his colleagues (2006) also submit that ODRs take time from administrators' schedules, expanding further by suggesting freeing up this administrator time allows for potentially greater focus on preventative measures and instructional support.

As stated earlier, RTI framework is already in place in a significant number of schools around the United States (Zirkel, 2011; Spectrum K12 School Solutions, 2011).

The foci of RTI and SWPBIS are aligned on many principles including universal screening and prevention (Berkeley, Bender, Peaster, & Saunders, 2009; Fuchs & Fuchs, 2006), escalating tiers of support (Sugai & Horner, 2009a, 2009b), data-based decision making (Tincani, 2007), and research-based interventions. Both of these approaches provide frameworks for academic and behavioral interventions and together form a system aimed at the improving the intellectual and social well-being of its students. Sugai and Horner (2009b) stress that integration of the SWPBIS into an RTI framework is not simple and requires careful consideration of programs that are already producing desired results as well as the removal of less effective programs. The integration of SWPBIS with an established framework of RTI appears promising in addressing two key functions of modern schools: academics and positive socialization.

Sugai and Horner (2009b) also suggest that there may be a tendency to view both approaches as special education-driven initiatives; this cannot be the case if it is to be effective for all students. Isolating system approaches inherently limits the availability of potential resources. While there would likely be benefits to smaller-scale implementation, the effect would not be seen school-wide if efforts were restricted to special education.

Limitations of Current Research

Much of the current research focuses solely on elementary schools and may not readily generalize to other settings. As mentioned earlier, more research needs to be done in order to determine the validity of this framework in preschool and secondary school settings. Future research in this area should also include a greater focus on the improvement of positive behaviors. Much of the research presented here offers evidence

for the association of SWPBIS with reduction of problem behaviors, but does not track the progress of desired behavior. The nature of the interaction between behavior and academic achievement is another area warranting further attention. If we can understand this relationship, we will be better equipped to effectively direct resources earlier in a student's education. While these limitations all deserve attention, they are beyond the scope of the current project.

The principles of SWPBIS are broad, but its effectiveness in more diverse school settings, and specifically among diverse populations, requires further investigation. One case study examines the utilization of SWPBIS in an 'urban' setting, but the demographic information of the student sample is not listed (Bohanon et al., 2006). Lassen and colleagues (2006) offer demographic information in a longitudinal study of SWPBIS implementation in an urban setting while seeing improvements for the overall student population, but do not break down effectiveness of the intervention by ethnicity.

One study has done well to more closely investigate SWPBIS effectiveness for minority populations (Vincent, Swain-Bradway, Tobin, & May, 2011). Vincent and colleagues (2011) looked at the behavioral outcomes for students from diverse backgrounds compared to their white peers, comparing SWPBIS-implementing schools and non-implementing schools. Results showed that African Americans are over-represented in number of office referrals compared to white students, who were under-represented. They also noted that the discrepancy was significantly smaller in SWPBIS-implementing schools versus non-implementing schools. Though this study is an excellent step toward understanding the differential effectiveness of SWPBIS, it stops

short of answering many important questions surrounding this topic. Why are we seeing this gap in referrals between ethnicities? What does the gap look like in a school implementing SWPBIS in terms of types of behaviors and disparity among different ethnicities? Is it the same or different from a non-implementing school? The 'discipline gap,' as it is referred to, is a well-documented case of disproportionality in school discipline over the past few decades.

The Discipline Gap

For the purposes of this paper, the discipline gap is defined as the disproportional representation of minority students in school disciplinary infractions and consequences. Recent findings indicate a pattern of minorities being over-represented in discipline is present in today's schools (Raffaele Mendez, & Knoff, 2003; Skiba, Michael, Nardo, & Peterson, 2002; Kinsler, 2011). Researchers found that disproportionate representation by race/ethnicity is consistent when examining disciplinary referrals (Kinsler, 2011), school suspensions, length of suspension, and proportion of office referrals (Kinsler, 2011; Skiba et al., 2002). Another study shows that black males in particular are over-represented from elementary school through high school and are much more likely than their white peers to receive out-of-school suspensions (Raffaele Mendez, & Knoff, 2003). Additionally, Skiba and colleagues (2002) found that the disparities exist despite controlling for socioeconomic status (SES), diminishing the argument suggesting that SES is the causal factor in these outcomes and that race is just a related variable. Raffaele Mendez, and Knoff (2003) noted that Latino students did not experience the same rate of disciplinary problems despite having a high percentage of students eligible for free and

reduced lunch. Discriminant analysis also found that the gap in disciplinary measures could not be explained by higher rates of more severe (e.g. more disruptive or violent) undesired behavior by African Americans (Skiba et al., 2002).

Examining the gap even further, Skiba and colleagues (2002) looked at what specific behaviors students were being referred for, breaking the results down both by race and by gender. The researchers concluded that while boys, in general, engage more in a span of disruptive behavior, African American students are referred for rule infractions that depend on more subjective interpretations. This list of more subjective referral reasons includes disrespect, excessive noise, threat, and loitering. The most predictive reasons for white referral were smoking, leaving school without permission, vandalism, and obscene language. Similarly, Gregory and Weinstein (2008) found that African Americans were over-represented in referrals for defiant behavior. These analyses are particularly informative, offering more insight into what leads to the discrepant rates of disciplinary sanction for African American students.

CHAPTER 4

STATEMENT OF PURPOSE

SWPBIS is a relatively new development in the field of behavior management and modification in schools. Researchers have determined that it can be effective in culturally diverse settings (Lassen et al., 2006). While researchers have examined the effectiveness of SWPBIS on diverse and urban populations, research has not investigated further to identify differential effectiveness across ethnic groups. Breaking samples down into subsections (in this case, specific ethnicities such as Latino, White, and African American) can aid in identifying specific need areas and populations that require additional support. Vincent and her colleagues (2011) made a significant contribution to this area by analyzing relative effectiveness of SWPBIS in reducing the discipline gap among implementers and non-implementers of SWPBIS. Though this is a step forward, examining the differences in frequency of referrals and identifying what type of behaviors we are failing to prevent is the next step; such analyses provide advantages over broader statistics by offering an opportunity for refinement of practices to address increasingly specific concerns like cultural sensitivity or systematic bias toward certain ethnicities. While this may be considered a best practice in the field, published research has yet to explore SWPBIS effectiveness to this depth. The purpose of this study is to add to the body of research observing the distribution and nature of the disciplinary referrals among ethnicities within an SWPBIS framework. Referral data for African American and Latino students will be compared to that of white students in order to identify any

disproportionate representation as well as trends by ethnicity in specific types of behavior.

Research Questions

This study seeks to examine the following questions:

1. To what extent is the discipline gap present in a school utilizing a SWPBIS system?
2. What disciplinary infractions are African American and Latino students referred for compared to white students within a SWPBIS system?
3. To what extent are African Americans and Latinos referred for more subjective infractions (i.e. disrespect, disruption) than White students?

This study also examines this question as a secondary analysis:

4. What trends in behavior referrals are present in a school with a diverse student population that is implementing SWPBIS?

CHAPTER 5

METHOD

Participants and Setting

The data from this study were collected from a public elementary school located in the Midwest. The student population data included the years 2004-2011. The students at the school are ethnically diverse. On average across the eight years, the students in the population were 46.25% Caucasian, 30.9% African American, 20.4% Latino, and 2.5% Asian or Native American. The total student population grew from 380 to 524 students from Year 1 to Year 8. The population of the school shifted during the eighth year period from being a predominantly white school (54% of total population) to be a relatively diverse school, with white students comprising only 38% of the population by Year 8 (displayed in Table 1). The African American student population remained relatively stable moving from 32% to 34% of the total population. The Latino student population grew substantially from 12% to 26% of the total population. In order to determine if any significant changes in population occurred, a Chi square test of independence was calculated comparing the proportions of student ethnicity populations. No significant relationship was found ($\chi^2(112) = .482$, $p > .05$). The student populations appear to be independent by year, indicating they are not significantly different. This means that the shifts in population were subtle enough to occur by chance alone and were not substantial over this 8-year period.

Table 1
School Demographic Data by Year

		White	African American	Latino
Year 1	# of Students	205	122	46
	% of Population	54%	32%	12%
Year 2	# of Students	196	128	45
	% of Population	52%	34%	12%
Year 3	# of Students	209	124	45
	% of Population	49%	29%	21%
Year 4	# of Students	226	125	89
	% of Population	47%	26%	25%
Year 5	# of Students	199	151	118
	% of Population	42%	32%	25%
Year 6	# of Students	242	131	77
	% of Population	50%	27%	16%
Year 7	# of Students	182	158	125
	% of Population	38%	33%	26%
Year 8	# of Students	199	178	136
	% of Population	38%	34%	26%

The school also transitioned to a newly constructed building in 2009 (Year 6) to accommodate the increased enrollment. On average across the eight years, 77.2% of the student population qualified for free and reduced lunch, indicating a large proportion of students from a lower socioeconomic status background. Student mobility, the percentage of students who entered school after August 31st or left the school before May 30th, was at an average of 24.29% between 2004 and 2011. The average student to teacher ratio was 10.28 students for every one teacher, with an average of 44 teachers in the building between 2004 and 2011. The school has maintained the same principal over the entire period of data collection.

The school piloted the SWPBIS program in 2004 after planning for its implementation during the previous school year. The data from this school includes the first year of SWPBIS implementation and the subsequent seven years of implementation. This school was selected as a convenience sample based on the ease of access for the researcher.

From the available data set, the first two years (59% and 37%, respectively) of the reported problem behaviors (RPBs) logged into the data system were not appropriately classified by ethnicity, but were entered as "Not Listed" in the ethnicity field. Because of this, those years reflected a significantly lower number of RPBs per student in each ethnicity than actually occurred. The "Not Listed" ethnicity designation was used much less frequently in the subsequent years accounting for under 4.1% of RPBs after the first two years and, for three of the six years, accounting for .1% or less of the total RPBs in each year. Two chi-square tests of independence were calculated comparing the frequency of the RPBs across nine behavior categories in the "Not Listed" population and the remaining three ethnicities combined for Years 1 and 2. Significant interactions were found for Year 1 ($\chi^2(7)= 46.146$, $p < .05$) and Year 2 ($\chi^2(8)= 17.468$, $p < .05$). This indicates that the two samples for both years are not independent, meaning that the number of RPBs found in each behavior category is dependent on being in either the Not Listed group or the Listed group. Due to this finding that the groups were significantly different in composition based on the behavior category factor, the Not Listed data is not included in the analyses of proportionality of referrals among ethnicities in any year. However, this data will still be used in the analysis of RPBs looking at the general trends

that do not include ethnicity as a factor (e.g. RPBs over time, RPBs by behavior category over time).

Dependent Measure

Behavior data were collected and organized based on classifications into two categories: Minor behavioral infraction (referred to as "minor") and Major behavioral infraction (referred to as "major"). The school defined a minor as "behaviors that do not require administrator involvement, do not significantly violate the rights of others, do not put others at risk or harm, or are not chronic." These issues are processed with staff members following the incident. A major is defined as "behaviors that require administrator involvement…, significantly violate rights of others, put others at risk or harm, or are chronic." An administrator processes these issues. A more detailed behavior matrix can be found in the Appendix. Behavior data were only tracked electronically for students who had at least 15 minor issues in one school year or at least one major incident in the school year. Minor behavioral incidents were not logged into the electronic data system for a student if he/she had less than 15 "minors," even if one major behavior incident occurred in the same school year; however, all major behavior incidents were logged into the electronic system. The current sample catalogs the behavior reports (both majors and minors) from 2004-2011. Unfortunately the logs do not differentiate between majors and minors, making separate analysis of the behavior reports based on severity within categories impossible. For this reason, individual instances of problem behavior logged in this system will not be termed ODR, as is frequently the measure for school behavior data, but will be referred to as reported problem behaviors (RPBs).

Both major and minor reports require the staff members to log the location of the behavior, the problem behavior category, possible motivation, and any action(s) taken by the teacher. The behavior categories include inappropriate language, fighting/physical aggression, defiance/disrespect/noncompliance, disruption, harassment/teasing/taunting/bullying, property damage, lying/cheating/theft, racial remarks, possession of a controlled item, and an "other" category designated for write-ins. In order to garner more straightforward analyses, the data were coded based on the nature of the behavior, as the raw data actually included more categories than listed on their referral forms. Due to this large number of categories, this author combined them based on commonalities in the nature of the behavior and abided by the original referral categories to the extent relevant for this study. The problem behavior categories are Physical Aggression (includes entries for physical action taken both against peers and property), Disruption (includes entries for behavior interfering with the learning environment of others), Dishonesty (includes entries for forgery, theft, and lying), Possession of a controlled substance/item (includes entries for possession of tobacco, drugs, weapons, and explosives), Verbal/Emotional actions taken against peers and adults (includes harassment, inappropriate affection, racial remarks, and displays of gang signs), Attendance problems (including truancy and tardiness), and Other (includes entries of elopement, dress code infraction, "unknown," and "other"). The remaining categories of Disruption, Inappropriate Language, and Disrespect remained true to the original entries.

Data Analysis

A one-way analysis of variance (ANOVA) was utilized to answer the first research question and a descriptive analysis provides topography of the data. This analysis compared the rate of RPBs per student per year by student ethnicity. Rate of RPBs per student per year was calculated by taking the total number of referrals for one ethnicity in one year, and dividing it by the number of students enrolled with that listed ethnicity in the same year (e.g. # of Year 1White student RPBs/ Year 1 White student population). The second research question is answered through a descriptive analysis breaking down the distribution of referrals among nine aggregated behavior categories. A one-way ANOVA was used to answer the third research question, comparing rates of specific problem behaviors across ethnicities. For the fourth and secondary research question, another descriptive analysis was conducted in order to identify patterns of referrals in the SWPBIS system.

CHAPTER 6

RESULTS

The first year of implementation had the highest number of RPBs overall (6389), followed by the second year which observed an 89% reduction in RPBs (729) and the lowest number of referrals overall. With the exception of the transition from Year 5 to Year 6, every year beyond Year 2 saw an increase in number of RPBs. All years that increased did so by between 14-68% with the exception of Years 4-5, which saw an increase of 105%. In particular the large spike from Year 4 to Year 5 (an increase in total RPBs from 1367 to 2809) indicates some significant change in environment, school-students interaction, or data collection procedure/sensitivity. These data points are reported in order to give context to subsequent descriptions of specific problem behaviors and fluctuations in the rate of RPBs by ethnicity. A one-way ANOVA was utilized to compare the rate of total RPBs per student per year across the eight years of SWPBIS implementation. No significant difference was found (F (7,16) = 1.512, $p > .05$). The total number of RPBs per student per year did not significantly differ over the period of data collection. This analysis allows the elimination of the factor of time as a confounding variable in subsequent analyses.

Research Question 1

In a descriptive analysis, this author compared the proportionality of RPBs distributed across years based on ethnicity. The first year of SWPBIS implementation showed substantially higher rates of referral for African Americans, with an average student receiving 10.78 RPBs per year in Year 1, white students 5.99 RPBs, and Latino

students 2.11 RPBs. Rates for Year 2 dropped to 1.55, 1.32, and .16 RPBs for African Americans, White students, and Latino students respectively. This drop in RPBs per student was also evident in the reduction in total RPBs by 88.6% (Not Listed data are included because overall RPBs are not affected by incomplete ethnicity assignment). The overall trend of RPBs appears to increases gradually every year beyond Year 2, warranting concerns about implementation integrity and maintenance of SWPBIS. Unfortunately without implementation integrity data, this will remain mere speculation.

With these significant reductions, Years 2-5 observed a much closer rate of RBPs between white and African Americans students; rates during this time were within 26% of each other. However, in Years 6-8 the disparity between white and African American student RPBs grows, with White students receiving 52%, 67% and 40% fewer RPBs per student per year than African American students in those years respectively. African American students had the highest rate of RPBs in seven of the eight years of data collection. Latino students received fewer referrals than both African American and white students in all but two years of data collection, accounting for less than 10% of the total RPBs in six out of the eight years; however, Latino students comprised 20% of the student population during that period. The trend of increased RPBs from Year 2 to Year 8 is most apparent for Latino students, with an unparalleled increase of 3284% over that time. While the Latino population grew by 200% in that time, that number still reflects the rate of RPBs and is sensitive to population change.

The most substantial increases in RPB frequency occurred between Years 4 and 5, when the rate of RPBs for both White students and African American students increased

by 94% and 115% respectively. The most substantial increases in RPBs for Latino students were between Years 2-3 (7 RPBs to 123 RPBs) and Years 7-8 (126 RPBs to 981 RPBs), where rate of RPBs increased 1183% and 616% respectively. These increases resulted in Latino RPBs per student surpassing African Americans in Year 3 and white students in Year 8. In Year 8, Latino students were referred more frequently than white students both in terms of total RPBs and RPBs per student. Latino students had substantially fewer RPBs per student than the other two ethnicities in every other year (Years 1-2 and 4-7) of data collection.

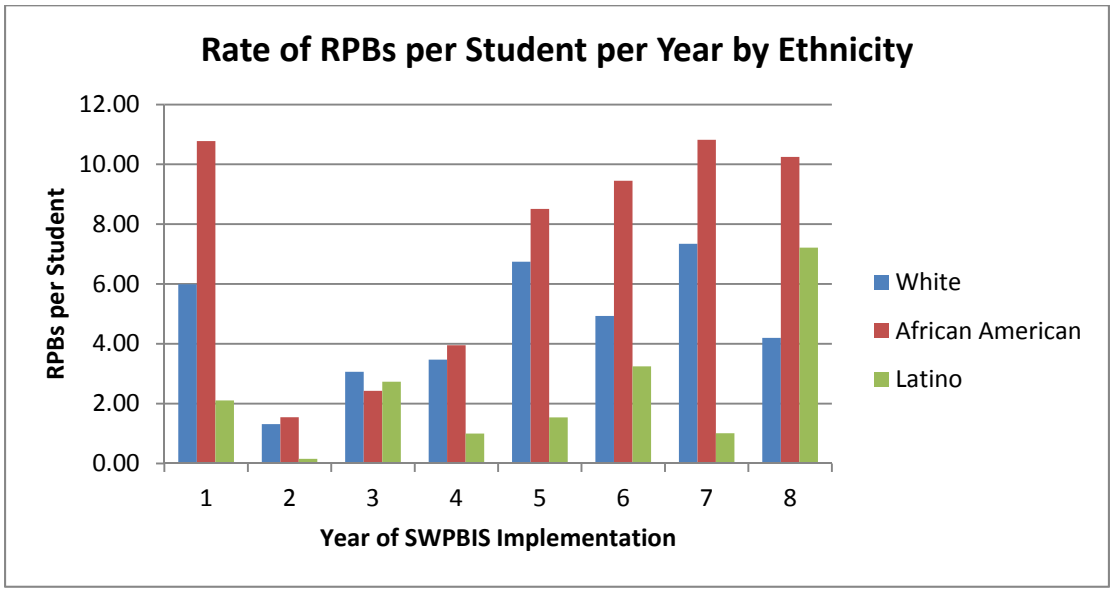

Figure 1. Rate of RPBs per Student per Year by Ethnicity.

A one-way ANOVA was utilized to compare the rate of total RPBs per student per year across the three ethnicities. Rate by year was used in order to accommodate the fluctuations in populations that occurred each year, and time itself was not used as an

independent variable here. A significant difference was found among the ethnicities $F(2,21) = 5.810$, $p = .01$). Tukey's HSD was used for post-hoc analysis to determine the nature of the differences between ethnicities. This analysis revealed that African American students ($m = 7.22$, $sd = 3.91$) had significantly more RPBs per student per year ($p < .01$) than Latino students ($m = 2.38$, $sd = 2.19$). White students ($m = 4.63$, $sd = 2.03$) did not have significantly different rates of RPBs per student from either African American students or Latino students.

Research Question 2

Figure 2 displays the percentage of total RPBs accounted for by each behavior category within each ethnicity category over the eight-year span. Disrespect, at 44% of RPBs, accounted for more RPBs over the eight years of data collection than the next two highest categories combined. Disruption accounted for the second highest number of RBPs with 24% over the same period. White students received a slightly higher percentage RPBs than African American and Latino students for Disrespect (2.8% and 1.4% respectively) and Disruption (2.2% and 2.1% respectively). Also, African Americans received a slightly higher percentage of RPBs for Physical Aggression than white students and Latino Students (2.5% and 1.1% respectively). Overall, the data appears to display relatively consistent trends for specific problem behaviors across ethnicity.

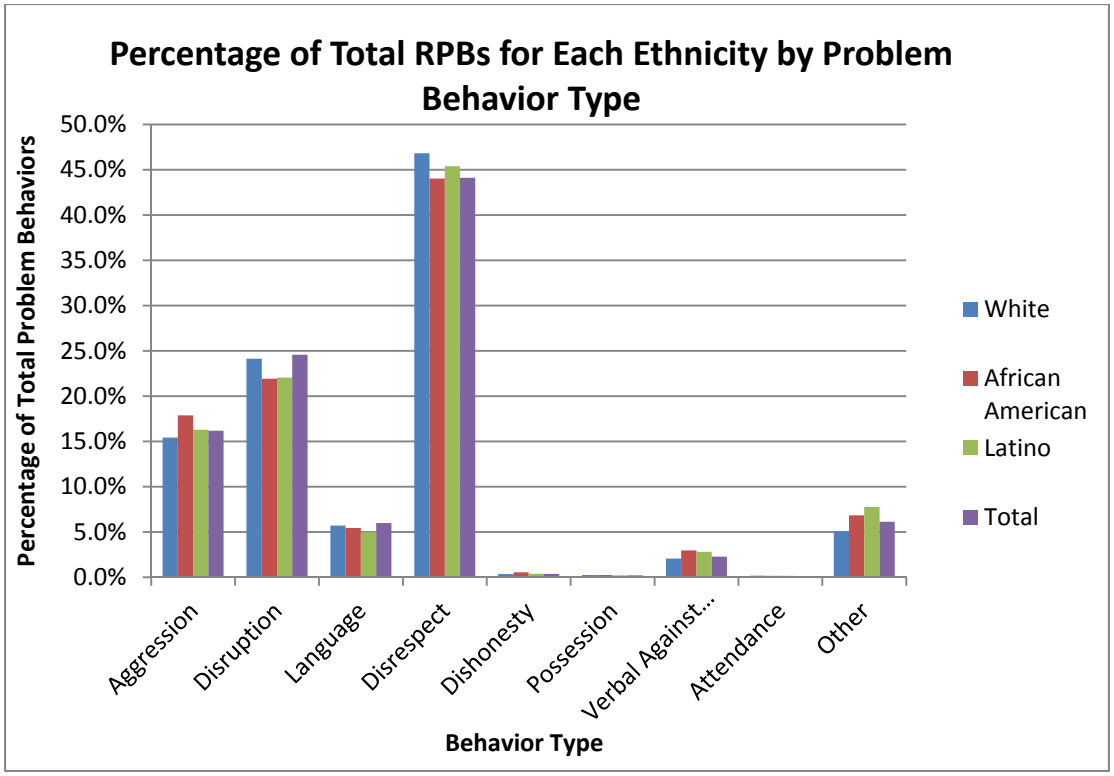

Figure 2. Percentage of Total RPBs for Each Ethnicity by Problem Behavior Type.

Research Question 3

A one-way ANOVA was utilized to compare the rate of RPBs per student per ethnicity over the eight-year period between the nine behavior categories of RPBs. Rate by year was again used in order to accommodate the fluctuations in populations that occurred each year. No significant difference was found (F (2, 24) = 1.016, p > .05). This indicates that the distribution of RPBs is not significantly different from ethnicity to ethnicity. This finding is consistent with the descriptive analysis, indicating that students of different ethnicities were not disproportionately reported for different problem behaviors.

Research Question 4

Figure 3 displays the fluctuation in percentage of RPBs by behavior type over time. These numbers disguise the dramatic drop in RPBs observed after Year 1, but display how the composition of RPBs shifts from year to year. As seen in Figure 2, the three most observed RPB categories were Disrespect, Aggression, and Disruption, together accounting for the majority of RPBs every year. Following the initial implementation, a proportionally sharp drop (20%) in Disruption RBPs and a sharp increase (23%) in Physical Aggression RPBs simultaneously occurred. It should be noted that the sharp increase in percentage of RPBs accounted for by Physical Aggression does not reflect that the number of RBPs for Physical Aggression dropped from 900 to 268 from Year 1 to Year 2. Nevertheless, Physical Aggression and Disruption appear to have an inverse relationship over the eight-year period. One explanation of this observed relationship may be the re-categorization of behavior data, but these two categories remained largely unaltered in this process. The ambiguity of the Disruption category and its potential for overlap with the Aggression category as defined by the school's behavior definitions appear the more likely reason for the phenomenon. How the behaviors were coded internally might have shifted from year to year, resulting in decreases in one leading to increases in the other. Overall, the representation of Physical Aggression appears to decline slightly over the eight-year period, moving from 14% to 12% of RPBs.

RPBs for Disrespect gradually increased over the eight-year period, displaying a 15% increase in percentage of total referrals from Year 1 to Year 8, and accounted for the largest percentage of RPBs among problem behavior types in every year except Year 2

(Aggression). Only two other behavior types also increased in percentage in this time: Verbal/Emotional actions against peers (from .8% to 3.7%) and Dishonesty (.1% to .5%). Disrespect accounts for the relative drop in other problem behavior types in terms of percentage. All other behavior types accounted for a relatively stable proportion of total RPBs, all remaining below 10% of the total and all declining over the eight-year period.

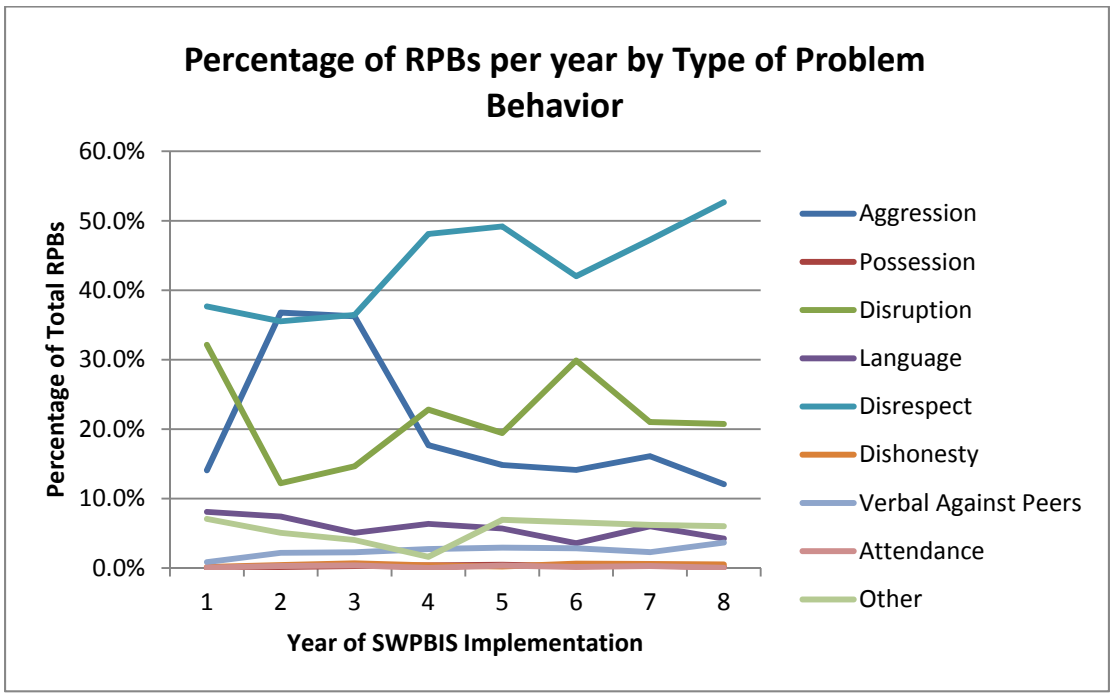

Figure 3. Percentage of RPBs per year by Type of Problem Behavior.

CHAPTER 7

DISCUSSION

The Discipline Gap

The results of this study offer insight into the distribution of student behavior in a SWPBIS system. To answer the first research question, the 'discipline gap' was not present in this sample over the eight-year period; African American nor Latino students received RPBs at a rate significantly higher than white students. On the contrary, Latino students were referred significantly less than African Americans and at a lower rate than that of white students (although not significantly lower). This outcome contradicts the findings of Vincent and colleagues (2011), where SWPBIS schools still exhibited a discipline gap with African American students disproportionately referred for disciplinary problems, albeit to a lesser degree than schools not implementing SWPBIS. Without a baseline establishing a prior established discipline gap, the results of the present study do not inform on the effect of SWPBIS to impact it; however, the results are encouraging because of the absence of the discipline gap in this SWPBIS school over an eight-year period.

Implementation

While the first year cannot be taken as a true baseline because it was the first year of SWPBIS implementation, large-scale interventions like SWPBIS are not easily implemented all together in one year. Often the implementation process requires multiple steps and substantial infrastructure and capacity building. The second year saw a dramatic decrease in number of total referrals across ethnicities followed by a gradual

rise in problem behaviors in subsequent years. While speculating about the sharp decrease in problem behaviors is relatively straightforward with the first year taken as a pseudo-baseline, it is difficult to attribute this slow rise to any one factor, especially given a lack of key contextual information (i.e. implementation fidelity data, teacher/staff turnover).

Bradshaw and Pas (2011) found that number of years since training in SWPBIS was associated with higher implementation rates, and higher implementation is associated with improved behavioral outcomes (Bradshaw, Koth et al., 2009), appearing to contradict the observed trend in this study. While we find that the drop in RPBs from the first year to the second year of implementation is in line with the findings from Bradshaw and Pas (2011), the slow increase in problem behaviors after Year 2 are not consistent with them. It appears reasonable to suggest that while the SWPBIS framework was considered implemented in the first year, there may have been crucial elements still in development that were not fully utilized until Year 2. One possible hypothesis for this counterintuitive finding is that the subsequent increase in RPBs could have occurred as trained staff gradually left the school; no staff turnover data were available for this study, so this hypothesis is only speculation and cannot be tested. The spike from Years 4-5 may indicate some abrupt shift in school environment or data collection, but when looking at abrupt changes specific to one ethnicity it is difficult to make that assertion based on demographic shifts. The large increase in RPBs for Latino students in Year 8 compared to Year 7 is also difficult to interpret. The shifts in student population over this period may contribute to a change in school climate, but when examining the data closer, the

school population barely shifted from Year 7 to Year 8. More qualitative methods of investigation would be beneficial for identifying other potential variables influencing outcomes (e.g. administration interview, staff interviews, student interviews).

Population Shifts and Cultural Responsiveness

This author was unable to identify any literature examining the effectiveness of SWPBIS with schools that experience significant shifts in student population. As mentioned earlier, SWPBIS relies on consistent data collection and analysis to identify trends as they occur and then making adjustments to the system based on those findings (McIntosh et al., 2010), meaning that these population shifts should be adjusted for in the routine maintenance of SWPBIS. McIntosh and colleagues highlight this concept as "maximiz[ing] contextual fit," (2010, pg. 11), indicating that school practices must fit the school culture in order to maintain effectiveness. The shift in student population to include a larger proportion of Latino students and a 38% increase in total student population are points that would warrant investigation by school staff in order to gauge any change in climate. Monitoring of demographic shifts, academic performance, and behavior indicators should be on-going in order to inform changes necessary to improve educational outcomes. Programmatic adjustments informed by these factors are the hallmark of culturally responsive systems. An example of an adjustment in this context is utilizing sensitivity to local language, dialect, or culture in order to establish expectations (or the wording of those expectations) that are relatable and aligned with parent and community values.

With the relative newness of SWPBIS intervention, there is no published research this author found observing the implementation of SWPBIS in a school with substantial population shift. Substantial population shifts warrant rethinking of key intervention components to match a potentially transforming school culture, and a study examining how a school recognizes and successfully accommodates those shifts would contribute greatly to future SWPBIS implementation.

Referral Behaviors and Ethnicity

Another finding of this study is that rates for specific problem behaviors were not significantly different across ethnicity, indicating that ethnicity is not a predictor of patterns of referral for particular behaviors. This finding is in contradiction to Skiba and colleagues (2002), who found that middle school African American students were more frequently referred for more subjective behavioral infractions than their white peers; however, Skiba and colleagues (2002) relied on only one year of data, limiting their ability to assess trends over time. Although a few authors have explored this area (Skiba et al., 2002; Kinsler, 2011), the development of these trends in referral types by ethnicity should continue to be monitored and explored, particularly in the context of a SWPBIS framework.

Referral Behaviors in SWPBIS

An interesting finding was the inverse relationship of RPBs for physical aggression and disruption. These behaviors seem to be similar in nature, and the fluctuations could be a result of differences in the labeling of behavior from year to year. For example, a teacher, depending on his perceived intent of the action, could label

throwing a pencil across the room as either aggression or disruption. More precise operational definitions would likely prevent this confusion. For future studies, it would be helpful to investigate whether the trends observed here with regard to fluctuations in representation of specific types of problem behaviors are typical of SWPBIS-implementing schools, and whether reduction in overall number of RPBs results in an increased proportion of aggressive behavior.

A factor to consider in this analysis was the aggregation of similar behaviors into more general categories of behavior. This author attempted to combine the behavior types into the fewest yet most representative categories possible; this was done to simplify results and ultimately make them more generalizable and purposeful for future research. For the categories discussed in this paper as primary areas of concern, this aggregation did not appear to be particularly influential, but it is an action that should be considered carefully when trying to conduct precise analyses, especially with smaller samples.

Limitations

Baseline

This sample lacked a true baseline necessary to examine directly the effectiveness of SWPBIS as a quasi-experimental design. Data from the first year were discussed as a pseudo-baseline in order to engage the idea of implementation fidelity and expected rates of RPBs based on that fidelity. School-wide behavior data prior to SWPBIS implementation would have contributed greatly to the discussion of SWPBIS effectiveness for specific ethnic groups. Without this information, this author can only speak directly to what is observed in a SWPBIS system and substantially limits the

authority of this study to endorse SWPBIS as a countervailing factor in student minority overrepresentation in disciplinary measures.

Data collection. Unfortunately, RPB data from the school's database was limited by the fact that a substantial portion of the first and second year's data (59% and 35% respectively) coded the ethnicity as "Not Listed." This is a notable factor to consider when evaluating the utilization of the data in the first two years and has been a hurdle to overcome for other studies using data from the earliest implementation of SWPBIS as well (Vincent et al., 2012). Despite this issue, the "Not Listed" data were appropriately recorded for all other fields during data entry allowing the inclusion of these entries for analyses not exploring ethnicity as a factor.

Another limitation to this study was the method and threshold of data entry. As mentioned earlier, major and minor infractions were not discernible in the raw data, meaning that the data set did not only contain ODRs, but also minor infractions, of which there were likely greater number. While ODRs have been empirically validated as indicators of student problem behavior, this expansion to include minor infractions has not been investigated. Additionally, the system used at this school implemented a threshold of 15 minor referrals before any minor referrals were entered into the system. This is likely to have made the data less representative in a manner that indicates fewer RPBs than were represented in this study. This aside, one could argue that the inclusion of minor infractions (without the 15 minor infraction threshold and with the ability to separate them from major infractions) may actually be more sensitive to occurrence of problem behaviors than ODRs alone and may be a better indicator of overall school

climate due to increased sensitivity. This increased sensitivity in behavior data allows lower-level behavior (e.g. for disrespectful behavior: yelling at others, arguing with adults) to be considered in overall calculations of SWPBIS effectiveness and offers a more complete picture of school behavior outside of the principal's office.

Implementation Fidelity

While SWPBIS is correlated with reduction in problem behavior in many settings, the maintenance of treatment fidelity is crucial to its success. The integrity of implementation was found to be a very significant factor on all outcomes for a number of studies (Bradshaw et al., 2010; Bradshaw, Koth et al., 2009; Horner et al., 2009; Lassen et al., 2006; McIntosh et al., 2011;). Inconsistent practice of SWPBIS leads to inconsistent results, providing evidence that "positive outcomes can only be assured with full implementation," (McIntosh et al., 2011, pg. 56). Without SWPBIS implementation fidelity data for this school, we must assume adequate fidelity. This lack of information on a factor so vital to SWPBIS success is a limitation of this study and leaves unanswered questions about how representative this study is of a typical SWPBIS system.

Another factor to consider with these results and the slow increase of RPBs is teacher mobility. Staff buy-in into the SWPBIS framework is crucial to successful implementation (Coffey & Horner, 2012; Sugai & Horner, 2009a) and staff turnover could very well affect the integrity of the intervention as committed members move out and new members who are less knowledgeable about the schools' culture and SWPBIS system move in.

CHAPTER 8

CONCLUSION

The results of this study show promise for the effectiveness of the SWPBIS framework in examining the discipline gap in schools with diverse populations. The intention of this study was to inform the extent to which the discipline gap existed in a SWPBIS school. Without the traditional gap between African American and white students being statistically significant, the analysis of the representation of behavior types by ethnicity is less informative about the nature of the gap. Despite this, it is notable that the distribution of reported problem behavior types in a SWPBIS school was similar across ethnicities, even with a significantly less represented Latino population. The effectiveness of SWPBIS for reducing problem behaviors overall is well-documented and future studies utilizing baseline data would be well-positioned to examine potential for SWPBIS to be effective in a culturally responsive manner.

As noted, further exploration of the maintenance of a culturally responsive framework is necessary in order to identify changing populations and need for adjustment within current systems. While closing the discipline gap on a school-wide scale certainly appears possible with SWPBIS, maintaining that progress is essential. It is worthwhile continue to monitor how SWPBIS affects outcomes across ethnicity, examining impact of population shifts and implementation integrity to identify the most and least effective facets of the framework.

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APPENDIX

MAJOR/MINOR BEHAVIOR MATRIX 2012-2013

Note: To be used as a guideline in assessing the category of the behavior incident and whether it is a major or minor. This document cannot cover every behavioral situation. For further clarification, refer to global definitions of "majors" and "minors" found at the end of this list

Inappropriate language: Minor	Inappropriate language: Major
Use of milder inappropriate words (i.e. shut-up, crap, sucks…) Yelling after a reminder Profanity that is not directed but "slips out" Unintended hurtful words (shows remorse) Use of sexual words (1st time, use as teaching tool)	Using profane language purposefully Repeated use of inappropriate words, sexual terms or innuendo, offensive terms Using non-verbal profanity (Preference is that such language or actions must be heard or seen by an adult)
Fighting/Physical Aggression: Minor	**Fighting/Physical Aggression: Major**
Pushing in line Pushing/shoving back toward someone who initiated contact Bumping into others intentionally "Play" fighting Slapping as a reaction (no marks or injury) Invading personal space purposefully Mild body contact Throwing small object with no intended target	Hitting (closed fist)/punching Throwing any object at someone intentionally Pushing to the ground with injury Kicking, biting, hair pulling, spitting Initiating a fight, Inciting a fight either verbally or physically (includes a food fight) Premeditated assault Assault that leaves a mark or injury Threatening gesture with dangerous object (i.e. a bat, large stick, rock)
Defiance/Disrespect/Noncompliance: Min.	**Defiance/Disrespect/Noncompliance: Maj.**
Making noises after being asked to stop. Walking away from teacher when being spoken to Running/skipping in the hall after a reminder Refusing to follow rules or directions of an adult Unresponsive even after cool-down/refuses to process	Complete refusal to follow classroom to destination (specialists, indoors from playground) Total refusal to comply/shuts down/requires removal from situation by an adult/has created an unsafe or dangerous situation for self and others Leaving building Hiding in unsafe areas of the building Purposefully running from adults in multiple areas

Yelling at others Arguing with adult Refusing to comply with adult request Pencil breaking in someone's face Leaving room briefly and within sight without permission or prior behavior plan arrangement Hiding or crawling under tables or furniture to avoid class work	of the building and requiring more than one staff member to locate and return to class or office
Disruption: Minor	Disruption: Major
Keeping others from learning through noise or action including: Talking out of turn/interrupting Unnecessary talking/blurting Burping/passing gas to gain attention Drumming to intentionally disrupt Unnecessary roaming the room, hall… Note passing Making poppers Playing in front of classroom doors Screaming in the building Slamming lockers, desks, or chairs Refusing to work in a loud manner	Throwing chairs, tables, desks… Standing on furniture or counters Closing someone in a locker or closet Threatening an unsafe action (i.e. jumping from window, putting fist through glass) Bomb Threat False fire alarm
Harassment/Teasing/Taunting: Minor	Harassment/Teasing/Taunting: Major
Name calling Threatening gesture (i.e. showing a fist) Intentionally blocking the path of others Spreading rumors Threatening to hurt others through action or words	Direct verbal or physical threats toward personal safety (i.e. threatening to kill, beat, or shoot someone, displaying a gang symbol or sign) Organized teasing toward specific victims Ostracism, Purposeful and organized emotional or social exclusion

Intentionally embarrassing someone through comments or actions Talking about someone's mom Invading someone's privacy (i.e. peeking in bathroom stall, watching someone at the urinal)	Inappropriate touching Sexual comments: written, spoken or pantomimed Exposing privates "Playing the Dozens" Serious threats to fight or "get someone" after school Actions that meet offense criteria of District Policy on Bullying and Harassment
Property Damage: Minor	Property Damage: Major
Making marks on any school property Punching/kicking lockers Misusing or destroying others property (of minor value, i.e. pencils) Misuse of glue Making a mess in the restrooms with water, paper towels, etc.	Going to the bathroom on the floor, or in an inappropriate area Putting holes in the wall Intentionally breaking desks or chairs Vandalism (Destruction of valuable property) Writing on bathroom walls or stalls/graffiti Setting fires
Racial/Ethnic Remarks: Minor	Racial/Ethnic Remarks: Major
Remarks about race, ethnicity, or religion directed at oneself or one's own race, ethnic group or religion (remarks are overheard by others and considered offensive)	Any negative racial, ethnic, or religious comments written or spoken which are directed at another person with the objective of causing embarrassment, fear, or anger (must be observed or heard by an adult) Hate crimes
Lying/Cheating/Theft: Minor	Lying/Cheating/Theft://Forgery Major
Taking another's property (minor value) Refusing to return a "borrowed" item Substituting someone else's work for your own	Taking another's property (significant sentimental or monetary value) Forgery Not telling the truth when it involves someone's personal safety, stolen items, or property damage
Possession of a Controlled Item: Minor	Possession of a Controlled Item: Major
Possessing a gun, knife, or other weapon which is obviously a toy (miniature, small colored water	Possession of a gun, knife, other weapon, (that is real or could be mistaken for real) matches, lighters, combustible items or any item capable of causing

pistol, charm, rubber, plastic, clay) Possession of a formerly combustible or dangerous item that is no longer capable of causing bodily harm or property damage (i.e. empty book of matches, lighter with no fluid, empty alcohol container, spent cartridge) when there is no evidence of recent use. Possessing picture or graphic of questionable sexual content	significant bodily harm or property damage Possession of drug paraphernalia Possession of alcohol, tobacco, drugs Possession of pornographic (XXX, adult only, X-rated) material. Note: Any dangerous and/or illegal item or weapon will be turned over to the school resource officer for further action per District policy

Minor Incident: Behaviors that do not require administrator involvement, do not significantly violate the rights of others, do not put others at risk or harm, or are not chronic. (Processed by staff.)

Major Incident: Behaviors that require administrator involvement (processed by administration), significantly violate rights of others, put others at risk or harm, or are chronic. (Preference that it be witnessed or observed by an adult)

District Incident: Behaviors that violate district, city, and or state policy or laws.