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Addressing Disproportionality in School Discipline through Universal School-WidePositive Behavior Support

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ADDRESSING DISPROPORTIONALITY IN SCHOOL DISCIPLINE THROUGH

UNIVERSAL SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT

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By Kelly Lane

Submitted in Partial Fulfillment of the Requirements

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DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by **Kelly Beakley Lane** on the

4th day of **May, 2011,** in partial fulfillment of the requirements for the degree of Doctor

of Psychology, has been examined and is acceptable in both scholarship and literary

quality.

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Dedication

This project would not have been possible without the ceaseless encouragement and support of several people. First and most importantly, I would like to thank my husband Matt for his unending support for me as I pursued this goal. He listened tirelessly to my dreams and ideas and readily abandoned his own pursuits when I needed a sounding board or a proofreader. He never complained about my many hours of isolation and distraction, nor about all the extra responsibilities that he had to assume as a result. The completion of this dissertation is as much his diligence as it is mine.

This dissertation is also dedicated to my mother, father, mother in-law, and father in-law. Their support has made all the difference to me in completing my doctoral degree and has contributed greatly to who I am today.

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Abstract

Suspensions are the most commonly used discipline strategy in schools and in many cases these lead to poor academic and behavioral outcomes for students. Suspensions are also implemented inconsistently as a consequence of disciplinary infractions; this has resulted in the disproportionate suspension rates of minority and special education students. Recently, school-wide Positive Behavior Support (SWPBS) has emerged as an alternative model to suspension. SWPBS is a proactive, school-wide approach to discipline, which focuses on teaching and reinforcing appropriate behavior to all students. The purpose of the current study is to examine the effectiveness of SWPBS on reducing disproportionate rates of suspension. Current suspension rates of a Maryland school implementing SPWBS were compared with baseline suspension rates prior to the implementation of the program. Specifically, the suspension rates of ethnic minority students and students with disabilities were analyzed to determine if the implementation of SWPBS resulted in a decrease in the suspension rates of these populations of students. Findings from the current study indicate that although universal SWPBS strategies are effective in reducing the overall out-of-school suspension rate of the student population, they are less effective for ethnic minority students and students with disabilities. Implications for schools and future research are discussed.

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Chapter 1

Introduction

There is no question that schools need sound disciplinary systems to maintain school safety and promote academic achievement (Rose & Gallup, 2004). In the face of multiple-victim homicides in the past fifteen years, schools have become increasingly motivated to address issues of disruption and violence (Sprague & Walker, 2000). In one study, 27 percent of school personnel surveyed were concerned about their safety while at school, with 53 to 63 percent perceiving violence as increasing at all levels of public education (Peterson, et al., 1998).   Several other studies have found that school safety and the elimination of school discipline problems and disruptive behavior are among the highest ranking priorities identified by teachers and parents in the United States (Skiba & Sprague, 2008; Utley, Kozleski, Smith, & Draper, 2002).

The growing concerns regarding school safety have generated support for more punitive methods of school discipline, often under the broad rhetoric of zero tolerance (Noguera, 1995). Zero tolerance emerged from national drug policy in the 1990's and mandates severe punishments, typically out-of-school suspension and expulsion, for serious and for relatively minor disciplinary infractions (Skiba & Peterson, 1999). The rise in zero tolerance philosophy has led to the application of rigid disciplinary consequences and subsequently substantial increases in rates of out-of-school suspension and expulsion (Brady, 2002; Wald & Losen, 2003). In addition, there is concern that when practices associated with zero tolerance are implemented, certain groups of children become disproportionately impacted. Group of students specifically cited in existing literature include ethnic minority students and students with disabilities (Skiba, 2003).

Research has consistently demonstrated the fact that the use of suspension and expulsion is not effective in remediating problem behavior and is associated with a variety of negative short-term and long-term outcomes for children and adolescents (Safran & Oswald, 2003; Skiba & Peterson, 2000). Therefore, the increasing use of suspension and expulsion with these groups is concerning, especially given the fact that literature consistently indicates that ethnic minority students and students with disabilities are already at greater risk for negative academic and behavioral outcomes than their peers (Skiba, 2003).

Thus, schools face a profound dilemma. They must promote safe climates to prevent school violence and problem behavior and at the same time develop effective strategies to respond to and remediate problem behavior. Although not all incidents of school violence may be prevented, the literature is clear regarding the ineffectiveness of traditional, negative consequences for student problem behavior. The literature is also clear in its documentation of the value and successes of more positive school-wide approaches to behavioral concerns (Peterson, Larson, & Skiba, 2001; Safran & Oswald, 2003; Skiba & Peterson, 2000). One model, which shows promise for all students and particularly for students with disabilities and cultural differences, is School-Wide Positive Behavior Support (SWPBS). SWPBS is preventative, and preliminary evidence indicates that prevention of this kind not only dramatically decreases incidents of school violence and disruptive behavior, but also increases student academic achievement, especially when it is applied systematically and consistently (Cohn, 2001; Skiba & Sprague, 2008). The purpose of this study is to highlight the use of SWPBS as an effective alternative to suspension and expulsion.

Statement of the Problem

Relying primarily upon school exclusion (suspension and expulsion), zero tolerance policies tend to use punishment to respond to disciplinary infractions in order to "send a message" that certain behaviors will not be tolerated. However, there is evidence that zero tolerance policies may exacerbate school violence rather than prevent it (Hyman & Perone, 1998). For example, punitive approaches may interact with student non-compliance to generate a coercive cycle that actually increases the likelihood of disruptive behavior (Skiba et al., 1997). There is also a growing amount of evidence suggesting that these policies have increased the vulnerability for students who have historically received unequal treatment in school (Skiba et al., 2003). Specifically, significant concerns have been raised with regard to disproportionality in suspension and expulsion practices of ethnic minority students, as well as disproportionate rates of school exclusion for students with disabilities (Brantlinger, 1991; Costenbader & Markson, 1994; Leone, Mayer, Maygrem, & Meisal 2000; Skiba, Michael, Nardo, & Peterson, 2002).

The high and growing suspension rate of these students raises juvenile justice, equality, health and safety concerns (Advocates for Children and Youth, 2006). The exclusion of students from public schools may be a violation of their right to an education as guaranteed in Brown vs. the Board of Education (Morrison & D'Incau, 1997). Most students who are suspended receive no educational services for the time they are excluded from school. They may also be placed in self-contained environments. Such environments may not be comparable to a mainstream campus where students work with a variety of specially trained teachers who provide different educational activities to

stimulate learning. In addition, the failure to address students' underlying psychological, social, and learning difficulties that may contribute to their misbehavior may create the conditions for far worse infractions at a later time and actually accelerate a child's path to delinquency (Noguera, 1995).

The early application of suspension on students can contribute to a pattern of antisocial behavior that will continue into adolescence (Leone, Nelson, Skiba, Frye & Jolivette, 2003). The Center on Crime, Communities and Culture (1997) found that the groups of children most frequently suspended by schools are the same groups of individuals who are most frequently incarcerated as adults. In 2003, a joint research conference was held by the Civil Rights Project and Northeastern University's Institute on Race and Justice to explore suspension and expulsion policies. One of the outcomes of this conference was the startling realization that school-wide discipline data mirror juvenile justice and prison data in the overrepresentation of students of color and disability (Fenning & Rose, 2007; Wald & Losen, 2003).

In addition, the authors of the *Individuals with Disabilities Education Act* (IDEA; 1997), now known as the *Individuals with Disabilities Education Improvement Act* (IDEIA; 2004), acknowledged the need to reform current discipline practices for individuals with special needs as well as for individuals who do not have identified disabilities. These documents indicate that positive behavior supports are a mandated form of intervention for addressing problems in student behavior (Cohn, 2001). Specifically, the law requires that for students with disabilities whose behavior impedes their own learning or the learning of others, the Individualized Education Program (IEP) team must consider the need for a behavior intervention plan, including positive

behavioral interventions, strategies, and supports to address the behavior. As a result of an increased focus on positive behavior supports for students with disabilities, school district professionals have been encouraged to shift efforts from reactive and punitive disciplinary measures such as those characterized by zero tolerance policies to those that are proactive and preventative in nature. Such a shift is applicable to the entire student population, and is fundamental in efforts for understanding and establishing effective school-wide behavioral support programs (Skiba & Sprague, 2008).

In response, some schools have started to focus on addressing the underlying causes of disruptive behavior for all students, rather than merely seeking to punish this type of behavior (Advocates for Children and Youth, 2006). One emerging model that holds promise in addressing many of the current problems in school discipline is school-wide Positive Behavior Support (Sugai & Horner, 2002). Nersesian et al., (2000) stated, "Among the most important and exciting advances for education in the past decade is the emergence of school-wide discipline systems" (p.244).

School-Wide Positive Behavior Support (SWPBS) is a proactive, school-wide approach to discipline that focuses on teaching, promoting, and supporting positive behavior in the entire student body. SWPBS offers schools a structured approach to address children's behavior from the individual level to the school-wide level (Minke & Anderson, 2005). Attention is focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improve lifestyle results (personal, health, social, family, work, and recreation) for all children and youth by making problem behavior less effective, efficient, and relevant, and desired behavior more functional (Office of Special Education Programs, 2007).

During the past several years, consistent outcomes have documented the fact that schools implementing SWPBS at the universal level with integrity did experience reductions in their number of discipline problems (Muscott et al., 2004), increases in academic test scores (Lassen et al., 2006; Nelson et al., 2004), increases in the number and quality of interactions between students and staff (Johnson, Johnson, & Zimmerman, 1996), and a more positive shift in students' and teachers' perceptions of their school environment (Kuperminc, Leadbeater and Blatt, 2001). In addition, schools implementing SWPBS are beginning to reduce the over-reliance on punitive consequences, which is reflected in decreases in school-wide suspension rates (Eber, Upreti, & Rose, 2010).

Although initial studies examining the effectiveness of universal level SWPBS show promise in reducing the over-representation of ethnic minority students in school exclusionary practices (Southern Poverty Law Center SPLC, 2010), the efficacy of universal-level SWPBS on the suspension rates of students with disabilities has not been investigated to date. Furthermore, there is no current research which compares out-of-school suspension rates of ethnic minority students and students with disabilities before and after the implementation of a universal SWPBS program. Because of this, the effect of SWPBS with these specific populations needs to be examined.

Another important variable missing for the current SWPBS literature is the program's longitudinal efficacy with these populations. Although the longitudinal efficacy of SWPBS has been documented in two studies conducted in middle schools (Luiselli et al., 2002; Taylor-Greene & Kartub, 2000), these studies examined the effect that the program had on the behavior of the overall student population. There are

currently no multi-year SWPBS studies examining the long-term impact that the program may have on the suspension rates of ethnic minority students and students with disabilities. Therefore, the lasting effect of SWPBS, particularly with ethnic minority students and students with disabilities, needs to be examined.

Overview of the Present Study

The present study, using a single-subject case study (AB design), was conducted to examine the impact that the introduction of a SWPBS program has on out-of school suspension rates. Given the history of the disproportionate use of suspensions with ethnic minority students and students with disabilities (Skiba et al., 1997), the present study also examined the impact that the program had on these groups. Maryland State Department of Education data were used to determine the nature and frequency of disciplinary infractions resulting in out-of-school suspensions committed on a school campus. Trends in disciplinary infractions resulting in out-of-school suspensions were compared over time, with specific attention directed towards the frequency of out-of-school suspensions both before and after the implementation of a universal SWPBS program. These data were used to determine whether or not out-of-school suspensions have been applied equitably by ethnicity and educational status both before and after the implementation of the SWPBS program.

Purpose of the Study

The purpose of this study was two-fold. The first purpose was to analyze the current out-of-school suspension rates of a Maryland school implementing SPWBS, compared with baseline out-of-school suspension rates prior to the implementation of the program. The aim of this comparison was to determine if the implementation of a

universal SWPBS program was effective in reducing the out-of-school suspension rates for the general school population, as well as for ethnic minority students and students with disabilities.   From a problem solving, prevention, and intervention perspective, it is important to evaluate the outcomes of an intervention or program in order to determine if it is effective in achieving its goals (Tobin, Sugai, & Colvin, 1996). It is also important to know whether or not demographic trends exist within data in order to determine if the program is equally effective for all students receiving the intervention or program (Eber, Upreti, & Rose, 2010).   Finally, it is important to evaluate current data in order to determine if further intervention or program modifications are warranted (Lewis, Sugai, & Larson, 1999).

The second purpose of the current study was to investigate whether or not SWPBS has an impact on the suspension rates of ethnic minority students and students with disabilities. The disproportionate representation of ethnic minority students is well documented, as is the overrepresentation of students with a special education status (Costenbader & Markson, 1998; McFadden, Mark, Price & Hwang, 1992; Skiba & Rausch, 2006). It is also known that students with repeated suspensions are more likely to use illegal drugs, have poor academic outcomes, experience grade retention, become incarcerated, and drop out of school than are students who have not been suspended (Costenbader & Markson, 1998). Given the history of disproportionate exclusion of ethnic minority students and students with disabilities, it is reasonable to investigate whether or not universal SWPBS practices have an impact on the use of out-of-school suspension with these groups.

Significance of Study

The current study is especially important (a) in light of historic and more recent trends which document the fact that minority and disabled students have been disproportionately suspended from schools across the country, (b) given the need to protect students' rights when a disability influences the behaviors that prompted the suspension, and (c) in the face of zero tolerance policy legislation that mandates certain behaviors incur an immediate suspension (Brooks et al., 1999; Skiba, Peterson & Williams, 1997; Skiba & Peterson, 1999; The Civil Rights Project, 2000). By understanding the data and their implications, schools may be able to develop and implement more positive and effective school-wide behavioral support systems (Lewis, Sugai, & Colvin, 1998; Sugai & Horner, 1999). Short-term outcomes of this study include (a) a decreased need for suspension and (b) suspension being used as a strategic intervention, rather than as a reactive response for all students. In addition, this study may help contribute to more positive life outcomes for ethnic minority students and students with disabilities.

Chapter 2

Review of the Literature

The research literature is organized into three sections. First, there is a review of the zero tolerance approach to school discipline and suspensions, along with their impact on student outcomes. Second, there is a review of factors that may contribute to the disproportionate representation of ethnic minority students and students with disabilities in suspension data. Third, literature about SWPBS, a proactive behavior program geared towards supporting positive student behavior is discussed. The purpose of this literature review is to present a rationale for the shift from reactive discipline methods to proactive and positive approaches to discipline, ultimately providing a context for the potential effectiveness of SWPBS in reducing the disproportionate representation of ethnic minority students and students with disabilities in school suspension data.

Purpose of School Discipline

Without question, the need for sound disciplinary systems is imperative to maintain school safety and promote student learning. In the face of numerous school shootings in the past fifteen years, schools have been highly and increasingly motivated to address issues of disruption and violence. Unfortunately, the fear created by these incidents has also created arguments for more punitive methods of school discipline. Although in the public mind, school discipline has become increasingly associated with the use of punishment and exclusion (Skiba & Peterson, 1999), a number of important purposes underlie schools' disciplinary systems. These purposes include (a) ensuring the safety of students and teachers, (b) creating a climate conducive to learning, (c) teaching

students skills needed for successful interaction in school and society, and (d) reducing

rates of future misbehavior (Skiba & Rausch, 2006).

Background and Definition of Zero Tolerance

Among the most common and notorious disciplinary approaches that have

emerged in the past several decades has been the philosophy of zero tolerance.

Generally, zero tolerance is based on the philosophy that increasing the severity of

punishment for both minor and major misbehavior will send a message that disruptive

behavior will not be tolerated (Skiba & Rausch, 2006). Originally designed for the U.S.

Navy in 1986, zero tolerance first received attention as the title of a program developed

by U.S. attorney Peter Nunez to seize seagoing vessels that carried any amount of drugs

(Skiba & Peterson, 2000). U.S. attorney General Edwin Meese then adopted the program

as a national model in 1988 and subsequently ordered U.S. Customs officials to seize the

vehicles of anyone crossing the border with even trace amounts of drugs, and to charge

those individuals in federal court. As this model gained more attention in the late 1980's,

school districts in California, New York, and Kentucky began using the term "zero

tolerance," and mandated that students who were caught with drugs or who were fighting

be punished by expulsion (Skiba & Peterson, 2000).   By 1993, zero tolerance policies

had been adopted by school districts across the United States, and often were broadened

to include not only drugs and weapons but also smoking and school disruption (Skiba &

Rausch, 2006). In 1994, the Clinton administration signed the Gun Free Schools Act and

zero tolerance became a national discipline policy. By law, this policy mandates a 1-year

expulsion for possession of a firearm, and referral to the criminal or juvenile justice

system, as cause for expulsion of those students who violate the law (Skiba & Rausch, 2006).

Since the Clinton administration signed the Gun Free School Act into law, numerous state legislatures and local school districts, including Maryland, have broadened the mandate of zero tolerance beyond the federal mandates of weapons. This has resulted not only in the suspension and expulsion for major discipline infractions but also for minor infractions such as swearing and the use of cell phones (Eber, Upreti, & Rose, 2010). Some school boards have even started to experiment with permanent expulsion from the system for some infractions (Netzel & Eber, 2003). Others have begun to apply school suspensions and expulsions to behaviors that occur in the community (Ayers, Dohrn, & Ayers, 2001; Potts, Njie, Detch, & Walton, 2003).

Because zero tolerance is a philosophy rather than an intervention, it is subjective by nature and somewhat difficult to define objectively. The National Center on Education Statistics (NCES) report, *Violence and Discipline Problems in America's Public Schools*: 1996-1997 (Heaviside, Rowand, Williams, & Farris, 1998) defined zero tolerance as a policy that mandates predetermined consequences or punishments for specified offenses. Yet Skiba and Rausch (2006) argue that the NCES definition of zero tolerance may be unnecessarily broad, because one would expect that few disciplinary policies exist that do not mandate some predetermined consequence for specific behaviors. Skiba and Peterson (1999) proposed a more limited definition, stating zero tolerance is a disciplinary policy that is "intended primarily as a method of sending a message that certain behaviors will not be tolerated, by punishing all offenses severely, no matter how minor" (Skiba & Peterson, 1999, p. 373).

Theoretical Underpinnings of Zero Tolerance

Zero tolerance policies are based on the theory that the threat of removal will deter students from committing serious violations of school rules, or that the actual punishment will be so aversive that the inappropriate behavior will not recur. This theory has its base in B.F. Skinner's theory of operant conditioning. According to this theory, an organism is in the process of "operating" on the environment, or interacting in its world. During this "operating", the organism encounters a special kind of stimulus, called a reinforcer. This stimulus has the effect of increasing the operant – that is, the behavior occurring just before the reinforcer. This is operant conditioning: the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior in the future (Skinner, 1953). A behavior that is followed by a reinforcing stimulus results in an increased probability of that behavior occurring in the future. A behavior no longer followed by the reinforcing stimulus results in a decreased probability of that behavior occurring in the future.

In contrast, an aversive stimulus is the opposite of a reinforcing stimulus, and something one might find unpleasant or painful. Theoretically, a behavior followed by an aversive stimulus results in a decreased probability of the behavior occurring in the future (Skinner, 1953). This also describes the form of conditioning known as punishment. If a rat is shocked for doing x, it should do a lot less of x. If a student is removed from school for fighting, he or she should fight less often. The punishment, if effective, should be less necessary as time goes on.

If an already aversive stimulus is removed after an individual performs a certain behavior, this is negative reinforcement. Behavior followed by the removal of an

aversive stimulus results in an increased probability of that behavior occurring in the future. Providing a stimulus that changes a behavior does not remove the original reinforcer for inappropriate behaviors. The original reinforer has simply been masked or "covered up" with a conflicting aversive stimulus. The inappropriate behavior may stop for the moment, but it has not been extinguished. In fact, because students are sometimes able to avoid detection and/or escape punishment, the consequence itself may become an intermittent reinforcer, making it more difficult to extinguish the behavior than it had been before the current offense. This often leads to students who are chronic offenders; they continue to engage in inappropriate behaviors, despite the fact that they have been repeatedly removed from school (Skiba et al., 1997). In other words, the use of aversive stimuli may increase, rather than decrease, the frequency and intensity of student misbehavior.

Suspension and Zero Tolerance

Typically, schools utilize several methods in order to enforce zero tolerance policies. Suspension is one method that is commonly used in schools. Morrison and Skiba (2001) define suspension as a "disciplinary action that is administered as a consequence of a student's inappropriate behavior and requires that a student absent him/herself from the classroom or from the school for a specified period of time" (pp. 174). Suspensions are used for a variety of reasons. At times, they are administered because a student is severely disrupting the learning environment, and only the removal of the offending student can allow learning to continue. In other cases, threats to the physical safety of students, faculty, or school personnel lead to the use of suspension. Suspensions are often categorized by the length of time that the student is required to

leave the classroom and/or by the requirement that they leave the school premises. For

example, as defined by the *Code of Maryland Agency Regulations* (2009), out of school

suspension is defined as the removal of a student from school for disciplinary reasons by

the principal. In contrast, in-school-suspension is defined as the removal of a student

from the classroom (but not the school) for disciplinary reasons by the principal. Short-

term suspensions are those that are in effect for fewer than ten days. In contrast, long-

term suspensions are those that are in effect for longer than ten days (Code of Maryland

Agency Regulations, 2009).

Frequency of suspension. Data collected at the national level have indicated that

the number of suspensions and expulsions nationwide has doubled since the 1970's (U.S.

Department of Education, 2000; Wald & Losen, 2003). Studies of school discipline have

consistently found that suspension is one of the most frequently used discipline

techniques; however, studies also found that rates of usage vary widely (Bowsirsh, 1993;

Skiba, Peterson, & Williams, 1997). For example, suspension rates reported at the high

school level have ranged from below 9.3% of enrolled students (Kaeser, 1979) to as high

as 92% (Thorton & Trent, 1988). In addition, out of school suspension rates appear to be

the highest in urban schools, compared with schools in suburban or rural districts

(Massachusetts Advocacy Center, 1986; Wu, Pink, Crain, & Moles, 1982). Suspension

rates are also lower in elementary school compared with middle school and high school

(Raffaele Mendez & Knoff, 2003; Rausch & Skiba, 2004).

Although originally intended for only the most serious or dangerous infractions,

studies examining trends in suspension data indicate that this is not the case. Fighting

and physical aggression among students is consistently found to be among the most

common reason for suspension (Costenbader & Markson, 1994; Skiba et al., 1997). However, many of the infractions for which students are suspended are more minor, nonviolent infractions, such as insubordination, disrespect, attendance problems, and general classroom disruption (Raffaele Mendez & Knoff, 2003). For example, Rausch and Skiba (2004) conducted a study analyzing the reasons for out of school suspension and found that 5% could be categorized as weapons or drugs; the remaining 95% fell into the categories either of disruptive behavior or of "other".

Consistency of suspension. Existing literature on school suspension rates indicates that certain students are at a much greater risk for office referral and school suspension than others. These students may account for a disproportionate share of the disciplinary effort. Wu et al. (1982) reported that students who were suspended were more likely to support statements indicating antisocial attitudes. Students who demonstrate threatening or violent behaviors are also at risk for disciplinary action (Tobin, Sugai, & Colvin, 1996). Furthermore, some students demonstrate chronic misbehavior, which accounts for a disproportionate share of disciplinary efforts. For example, Skiba and his colleagues (1997) found that 6% of students were responsible for 44% of office referrals. In 2003, Tobin, Sugai, & Colvin reported that 30-50% of students are repeat offenders.

Suspension is also a function of school characteristics. Skiba et al. (1997) reported that in one middle school, 66% of all office referrals came from 25% of the school's teachers. In a multivariate analysis of factors predicting suspension, Wu and colleagues (1982) found that suspension rate was associated with teacher and administrator attitudes, quality of school administration, teacher perception of student

achievement, and racial makeup of the school. When combined, these characteristics

explained a greater proportion of the variance in school suspension than did student

behavior. In fact, Wu concluded "one could argue from this finding that if students are

interested in reducing their chances of being suspended, they will be better off by

transferring to a school with lower suspension rate than by improving their attitudes or

reducing their misbehavior" (pp. 255-256).

Disproportionate Impact of Suspension

As described previously, there is a history of inconsistent application of

suspension policies. Furthermore, district level research indicates that the use of

disciplinary removal varies as a function of school characteristics (Massachusetts

Advocacy Center, 1986; Skiba & Rausch, 2006). Some argue that this lack of

consistency is in part responsible for the disproportionate use of suspension (Civil Rights

Project, 2001). In particular, research has documented disparities with ethnic minority

youth and students with disabilities (Cooley, 1995; Leone et al., 2000; Skiba, Michael,

Nardo, & Peterson, 2002; Townsend, 2000).

Ethnic minorities. The overrepresentation of ethnic minorities is of particular

concern with regard to the consistency of school discipline. The Children's Defense

Fund (1975) released a study of national data on school discipline and reported that out of

school suspension rates for African American students were between two and three times

higher than suspension rates for Caucasian students at the elementary, middle, and high

school levels. Disproportionate rates of suspension were further illustrated by the finding

that 29 states in the study suspended more than 5% of total African American students

and only 4 states suspended 5% or more of Caucasian students (Skiba, 1997).

Since the Children's Defense fund report (1975), racial disproportionality in the use of school suspension has been a highly consistent finding (Costenbader & Markson, 1998; McFadden, et al., 1992; Skiba et al., 2006). Furthermore, not only does the frequency differ among suspension rates between minority and nonminority students but so also does the severity of the punishment. For instance, Gregory (1996) found that African American students are more often subject to corporal punishment. McFadden and colleagues (1992) found that African American students are less likely than Caucasian students to receive mild disciplinary alternatives when referred for an infraction. A report on Tennessee schools' zero tolerance policies for 1997 (Tailor & Detch, 1998), found that African American students were significantly overrepresented in the state's school system. Gordan, Piana, & Keleher, (2000) found similar results in other public school systems throughout cities in the Unites States.

Students with disabilities. Another group of students affected unfairly by zero tolerance policies are students in special education. Although fewer studies have been conducted, findings are similar to those studies which examined the suspension rates of ethnic minorities. Literature consistently demonstrates that students in special education are often more negatively impacted by zero tolerance policies as compared with their general education counterparts (Evenson et al, 2009; Krezmien, Leone, & Achilles, 2006). Leone and his colleagues (2000) reported that students with disabilities represent approximately 11% of school-age children but nearly 20% of the students who are suspended. Zhang et al. (2004) confirmed those findings in a national sample. In addition, Zhang et al. (2004) reported that students with emotional and behavioral disorders (EBD) had substantially higher rates of suspension than students with other

disabilities. In 1995, Cooley reported findings from survey research revealing even more

disproportionate rates of suspension for students with disabilities. Students with

disabilities composed 24% of students suspended but only 11% of the student population,

and students with EBD composed 11% of students suspended but only 1% of the student

population (Cooley, 1995). Skiba et al. (1997) additionally noted that students receiving

special education services had the highest rates of suspension.

Suspension Data in Maryland

Unfortunately, suspension statistics in Maryland are illustrative of the disparities

in the administration of suspensions. In the 2006-2007 school year, 61% of all suspended

students were African American, even though African Americans composed only 38% of

Maryland's student body. Meanwhile, Caucasian students accounted for 31% of those

suspended but composed 48% of Maryland's student body. Students with disabilities

composed 12.5% of the total student enrollment, but made up 20% of all students

suspended (MSDE, 2007). In the 2007-2008 school year, this trend continued, with

African Americans being 2.46 times more likely to be suspended than Caucasian students

(MSDE, 2008). Students with disabilities were 3.31 times more likely to be suspended.

The disparity narrowed somewhat during the 2008-2009 school year, during which

African American students were 2.3 times more likely than Caucasian students to be

suspended and students with disabilities were 2.6 times more likely to be suspended than

students in general education (MSDE, 2009).

Possible Explanations of Disproportionality

One hypothesis for the overrepresentation in school suspension outlined above is

that this overuse of suspension for disabled and minority students does not represent bias

but is rather a result of disproportionate discipline for students from lower socioeconomic backgrounds. Although research does indicate that socioeconomic status is a risk factor for school suspension, it continues to demonstrate the fact that minority and disabled students are disproportionately represented in the data, even after statistically controlling for socioeconomic status (Skiba et al., 2002; Wu et al., 1982). For example, Wu et al. (1982) reported that nonwhite students received higher rates of suspension than did white students in all schools, except rural senior high schools, after controlling for socioeconomic status. Therefore, these disparities cannot be fully accounted for by the lower economic status of disabled and minority students (Skiba et al, 2003).

Furthermore, no studies to date show that disabled or minority students display higher rates of misbehavior that would result in disproportionate rates of discipline. However, studies have shown that minority students have been punished for less severe rule violations than Caucasian students (Shaw & Braden, 1990) or have been punished more severely than others who committed the same offense (McFadden et al., 1992). In a study devoted specifically to African American disproportionality in school discipline, Skiba et al., (2002) tested alternate hypotheses for racial disparities in an urban school setting. Findings indicated that Caucasian students were referred to the office significantly more frequently for infractions that were more objective such as smoking, vandalism, leaving without permission, and obscene language. In contrast, African American students were referred more often than not for disrespect, excessive noise, and loitering.

Factors related to Disproportionate use of Suspension

It is not the argument of this review that responsibility for the ongoing problem of disproportionate exclusionary discipline practices can be attributed to zero-tolerance policies alone. Drakeford (2006) wrote that the disproportionate exclusion of some students is the result of a complex interplay of procedural, practical, and perceptual factors. Although zero-tolerance is often an extensively utilized policy in dealing with school discipline, the procedural aspects of zero tolerance are very broadly defined, leaving them open to widely varying interpretations. Skiba and colleagues (1997) demonstrated this ambiguity in an examination of disciplinary referrals within a school system in which little agreement was found among administrators on a definition of aggressive behavior. Moreover, Verdugo (2002) reported that zero-tolerance policies tended to be general in nature and failed to account for the context or intent of behaviors, which may make the application of the policy even more ambiguous. Because many zero tolerance policies are so ambiguously defined, they are highly associated with subjectivity when determining their use.

The inconsistent application of suspension strategies is further supported by findings suggesting that the disproportionate representation of certain students for out-of-school suspension originates at the classroom level. For example, Skiba et al. (2002) found that racial disparities in the rate of out-of-school suspension could be almost entirely accounted for by the fact that African American students were twice as likely as white students to be referred to the office by classroom teachers. In an ethnographic observational study, Vavrus and Cole (2002) found that many office referrals leading to

school suspension were not the result of serious classroom disruptions. Rather, the

authors concluded:

> Suspensions are results of a complex sequence of events that
>
> together form a disciplinary moment, a moment when one
>
> disruptive act among many is singled out for action by a teacher.
>
> This singling out process, we contend, disproportionately affects
>
> students whose race and gender distance them from their teachers,
>
> and this subtle, often unconscious process may be one of the
>
> reasons why students of color often experience suspension in the
>
> absence of violent behavior (p. 109).

The lack of cultural knowledge may create interactional patterns that increase the

likelihood that minority students will be suspended. Townsend (2000) suggested that

many teachers, especially those of European American origin, may be unfamiliar or

uncomfortable with the more active and boisterous style of interaction that characterizes

minority students (Skiba & Rausch, 2006). Fear may also play a contributing role in

over-referral. For example, teachers who are prone to accepting stereotypes regarding

minority students may react more quickly to relatively minor threats to authority,

especially if such fear is paired with a misunderstanding of cultural norms and social

interactions (Skiba et al., 1997; Skiba & Peterson, 2000, Skiba & Rausch, 2006).

Effects of Disciplinary Removal

Unfortunately, there appears to be little evidence, direct or indirect, supporting the

effectiveness of suspension for improving student behavior, for school safety, and for

reducing misbehavior (Skiba, 2000). Although existing literature does not cite any

investigations that have directly studied the effects of school exclusion on student

behavior or school safety in general, indirect data suggest that suspension is an

ineffective strategy (Skiba, 2000). This is especially true for those students most often

targeted for disciplinary consequences. As noted previously, studies have consistently

found that up to 40% of school suspensions are due to repeat offenders (Bowditch, 1993;

Costenbader & Markson, 1994; Massachusetts Advocacy Center, 1986).

    The assumption underlying this statement is that removal from school functions is

an effective punishment for these students. As defined by behavioral psychology, an

effective punishment is one that reduces the future probability of responding (Skinner,

1953).   The belief behind suspension is that when students are removed from school they

are punished and therefore they will no longer engage in disruptive behavior (Tobin,

Sugai, & Colvin, 1996). However, the data examining repeat offenders and chronic

misbehavior suggest otherwise. Tobin et al. (1996) found that for some students,

suspension is a significant predictor for future suspension, concluding that for these

students "suspension functions as a reinforcer rather than as a punisher" (p. 91). This

disconnect often leaves any punitive disciplinary approach ineffective with children and

youth who display chronic patterns of problem behavior (Skiba & Peterson, 2000). This

point was further illustrated when Atkins et al. (2002) examined students' responses to

discipline in an inner-city public school; they found that when suspensions were

consistently used as punishment for one group of students, the overall number of such

punishments for that group increased. By contrast, when suspension for a second group

of students was no longer used as a behavioral consequence, the misbehavior of students

in the second group decreased.

Literature on the long-term outcomes associated with suspension indicates a plethora of evidence on the negative consequences it has on children and youth. Numerous studies have found that suspension often contributes to a gradual process of academic and social disengagement that increases the probability of additional disciplinary exclusions, academic failure and, eventually, drop-outs (Leone et al., 2003). Analysis of data from the national High School and Beyond survey revealed that 31% of sophomores who dropped out of school had been suspended, as compared with a suspension rate of only 10% for their peers who had stayed in school (Ekstrom, Goertz, Pollack, & Rock, 1986). In a similar study conducted by Wehlage and Rutter (1986), discipline, poor academics, and low SES were found to be predictors of school dropout. In a more recent analysis, Balfanz and Boccanfuso (2007) found that students who received an out-of school suspension in middle school were half as likely to graduate on time as students who did not. The authors concluded that this increased likelihood of academic failure and dropout is partially attributable to the disruption in students' education during periods of disciplinary exclusion (Balfanz & Boccanfuso, 2007).

In addition to higher dropout rates, students who have been suspended are significantly more likely to become involved in the juvenile justice system than their peers (Leone et al, 2003; Skiba & Rausch, 2006). As the Task Force on the Education of Maryland's African American Males wrote in its December 2006 report:

> There is considerable evidence that a history of school suspension does one of two things – either it puts a child on the path toward delinquency or accelerates his journey there. Suspension, then, is

not only an ineffective deterrent for misbehavior, it's – at best – an

accelerant and – at worst – a catalyst for it (p. 23).

Criminal justice researchers have described gang involvement as a gradual

process, starting with school alienation and requiring the availability of time to associate

with youth already in gangs (Patterson, 1992). Students who are not in school have this

time. Therefore, suspension may accelerate the course of delinquency by providing at-

risk and alienated youth extra time to associate with deviant peers (Patterson, 1992).

The application of school discipline policies also mirrors those of the juvenile

justice system. Males, African Americans, and students with disabilities are more likely

to be court-involved and detained (Leone, et al., 2003). A study conducted by Skiba et

al. (2003) examined data from 37 states and found a strong relationship between rates of

suspension and juvenile incarceration, as well as a correlation between racial disparities

in school discipline and juvenile incarceration. According to the Center for Disease

Control (1994), when students are removed from school, they become significantly more

likely to engage in a variety of high-risk or illegal behaviors than students who are

attending school. These behaviors include: physical fighting; carrying a weapon;

smoking; using alcohol, marijuana, and other drugs, and engaging in sexual intercourse

(Center for Disease Control, 1994).

In addition to the correlation between the use of suspension and delinquency,

suspension rates also are associated with poor health and safety outcomes. In a 2003

Policy Statement, the American Academy of Pediatrics (AAP) expressed significant

concerns about the mental health impacts of suspension and expulsion on students,

reporting behavioral problems among school-age youth are associated with high rates of

depression, drug addiction, and familial stressors. For students already at-risk, suspension can significantly increase stress for them and for their families (Patterson, 1992). This additional stress may predispose them to antisocial behavior and even suicidal ideation (AAP, 2003). Despite the clear association of mental illness, familial risk factors, and school disciplinary problems, referral to a mental health provider is considered to be the exception rather than the norm when a student is suspended. Likewise, the American Psychological Association (APA), in its Zero Tolerance Task Force Report (2006), found little evidence that suspension and expulsion benefited students or their communities, and expressed concern that disciplinary exclusion policies could increase "student shame, alienation, rejection, and breaking of healthy adult bonds, thereby exacerbating negative mental health outcomes for young people" (p. 12).

When children and youth are not in school, they are more likely to be involved in violent crimes (Sundius & Farneth, 2008). Despite several high profile incidents of school shootings across the country, severe violence in schools is decreasing and schools continue to be safer for children and youth than allowing them to move about, unsupervised, in the community (Dinkes et al., 2006). According to data published by the US Departments of Justice and Education from the 2003-2004 school year, rates of serious violent crime against school age children and adolescents including rape, sexual assault, robbery, and aggravated assault, are more than twice as high outside of school as they are in school (Dinkes et al., 2006). During this time period in which the survey was conducted, only 1.3 percent of all homicides of school-age youth were committed in a school building, on school property, in a school bus, or on the way to or from school, and the remaining 98.7 percent were committed outside of school (Dinkes et al., 2006).

Summary: The Failure of Zero Tolerance and Suspension

Schools must use all the effective resources at their disposal to prevent violence and to ensure a school climate that is maximally conducive to learning (Skiba & Peterson, 1999). In the climate of fear generated by real and perceived threats to the safety of schools, many districts have adopted "get tough" policies to send a message to students that any disruption will not be tolerated (Skiba et al, 2003). However, data on zero tolerance and out of school suspension have not supported the assumptions that underlie the zero tolerance philosophy (Leone et al., 2003). These policies are used too inconsistently and with too much variation to ensure that they are applied to all students equally (Skiba, 2000). Decades of data on the overrepresentation of ethnic minority and disabled students in suspension rates indicate disciplinary school exclusion may carry inherent risks for creating or exacerbating the difficulties that these students already face (Patterson, 1992; AAP, 2003). To date, no evidence shows that zero tolerance contributes to school safety or improves student behavior; rather, the evidence indicates that increased levels of out-of-school suspension are related to lower levels of achievement, higher probabilities of future student misbehavior, and lower levels of school completion (Skiba, 2000).

Evidence-Based Alternatives to Suspension

One myth underlying the use of suspension is that it is used primarily because nothing else works (Rausch & Mienke, 2006). Many schools that use suspension believe they have no viable alternative (Leone et al., 2003). However, effective alternatives for reducing the threat of school violence and disruption have begun to be identified. Within the past 10 years, the U.S government has sponsored numerous research efforts and

panels on school-based prevention of violence. These include a report to Congress on

youth violence (Sherman et al, 1997), the Department of Education/Juvenile Justice

response to school shootings (Dwyer, Osher, & Wagner, 1998), and the report of the U.S.

Surgeon General on violence prevention (Elliot, Hator, Sirovatka, & Potter, 2001). These

panels have used highly rigorous, scientific standards and methodological criteria in the

selection of effective and promising programs. Furthermore, their recommendations have

been extremely consistent, both with each other and with other scholarly studies (Gangon

& Leone, 2001) in outlining and identifying effective programs.

Definition of School-Wide Positive Behavior Support

One emerging model that holds promise as an alternative to zero tolerance is

School-Wide Positive Behavior Support (SWPBS; Sugai & Horner, 2002). First

described by Horner and his colleagues in 1990, SWPBS is a proactive, school-wide

approach to discipline (Crone & Horner, 2003; Crone, Horner, & Hawkin, 2004), which

focuses on teaching and supporting positive behavior and minimizing problem behaviors

in the entire student body (Frey, Lingo & Nelson, 2008). School-Wide Positive Behavior

Support (SWPBS) has been defined as "a general term that refers to the application of

positive behavioral interventions and systems to achieve socially important behavior

change" (Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson et al., 2000). Positive

behaviors are skills which increase one's chances of being successful across a variety of

contexts and settings, including school, work, home, and the community (Carr et al.,

2002). The term "support" in SWPBS refers to the variety of educational, therapeutic,

and system-wide strategies that can be used to help students build their repertoire of

positive behaviors (Carr et al., 2002). The "systems" referred to in the definition of

SWPBS implies a critical vision of human behavior and its intervention on a larger scale. Although it is true that human behavior is directly linked with environmental contingencies, it is difficult to argue that a behavior problem can be understood by a single cause and effect relationship. Human behavior is, rather, an outcome of complex personal and environmental factors and their interrelationships (Bronfrenbrenner, 1980). Therefore, SWPBS focuses on fixing problem contexts rather than the problem behavior itself (Carr et al., 2002).

Theoretical Underpinnings of SWPBS

In contrast to the philosophy of zero tolerance, which focuses on remediating a specific problem within the student through the use of punishment, SWPBS attempts to focus on the assessment and remediation of context (Emerson, McGill, & Mansell, 1994; Luiselli & Cameron, 1998). The underlying purpose of this methodology is to create and sustain environments that improve educational results for all students. Consequently, the decrease of problem behaviors allows students' quality of life in other areas to increase (Hendley & Lock, 2007).

SWPBS is derived from basic principles of learning that directly stem from research gathered over the past century. SWPBS's origins can be traced back to a continuum of research beginning in the early 1900's with research conducted by Pavlov: Classical Conditioning (1927); Thorndike: Associationism (as cited in Alberto & Troutman, 1999); Watson: Behaviorism (as cited in Alberto & Troutman); Skinner: Operant Conditioning (1953); and Baer, Wolf, and Risley: Applied Behavior Analysis (1968).

SWPBS is rooted in the field of behaviorism originally developed by John Watson (Kendler, 1990; Singer & Wang, 2009). However, research on the actual manipulation of behavior began much earlier, with Ivan Pavlov's (1927) work, which demonstrated the idea that behavioral responses might be conditioned through the presence and absence of reinforcement (Slavin, 2003). E.L. Thorndike (1910) further expanded upon Pavlov's findings with his stimulus-response theory, positing the notion that stimuli can prompt changes in behavior. B.F. Skinner (1953) added both to Pavlov's and to Thorndike's work by defining the role of appropriate reinforcement contingencies and schedules of reinforcement (Kendler, 1990).

The work of Pavlov, Thorndike, and Skinner was extremely critical to the development of Applied Behavioral Analysis (ABA). Developed in the 1960's, ABA is the basis for SWPBS (Sugai & Horner, 2002). ABA is the science in which tactics derived from the principles of behavior are applied systematically to improve socially significant behavior (Cooper, Heron, & Heward, 2007). It is defined as "a science of studying how we can arrange our environment so they make likely the behaviors we want to be probable enough and they make unlikely the behaviors we want to be improbable" (Cooper et al., 2007, p. 15). ABA is important in the theoretical foundation of SWPBS, because "The practices of SWPBS are based on the conceptual logic of behavioral theory and the empirical foundations of ABA, which had its debut in 1968, when Baer, Wolf, and Risley published their paper in the *Journal of Applied Behavior Analysis"* (Sugai & Horner, 2002, p. 131).

ABA uses four primary principles of reinforcement when implementing interventions; these are as follows: (a) positive reinforcement (the introduction of a

positive stimulus following a behavior in an effort to increase the occurrence of that

behavior); (b) negative reinforcement (the removal of a negative stimulus following a

behavior in an effort to increase the occurrence of that behavior); (c) positive punishment

(the introduction of a negative stimulus following a behavior in an effort to decrease the

occurrence of that behavior), and (d) negative punishment (the removal of a positive

stimulus following a behavior in an effort to decrease the occurrence of that behavior

(Alberto & Troutman, 2002). Although both ABA and SWPBS use positive

reinforcement strategies as the primary method of reinforcement, other reinforcement

contingencies may be used as well (Singer & Wang, 2009). Both ABA and SWPBS

highly encourage the appropriate use of reinforcement strategies (Anderson & Kindcaid,

2005). The function and context of behavior are carefully accounted for and play a large

role in reinforcement selection (Alberto & Troutman, 2002).

       According to Safran and Oswald (2003), "Positive Behavior Support was

developed in the late 1980's and early 1990's as a general strategy of intervention and

support, which employs concepts and methods from ABA and other disciplines" (p. 362).

This approach enhances an individual's quality of life and reduces problem behavior

(Dunlap, 2006). Although Positive Behavior Supports have traditionally been targeted

toward individuals with challenging and aberrant behaviors, they have been expanded

during the past fifteen years to include school-wide practices as well as individualized

prevention (Horner et al., 2004).

SWPBS Prevention Framework

       The SWPBS model adopts a three-tiered prevention framework originally

conceptualized and used in the field of mental health by Caplan (1964). This model is

similar to the findings released by American Psychological Association (APA) in their

report, *Violence and Youth: Psychology's Response* (APA, 1993), which also organized

effective strategies in terms of a three-tiered prevention model. Figure 1 represents the

three levels of this model.

Figure 1. Integration of SWPBS Interventions Framework
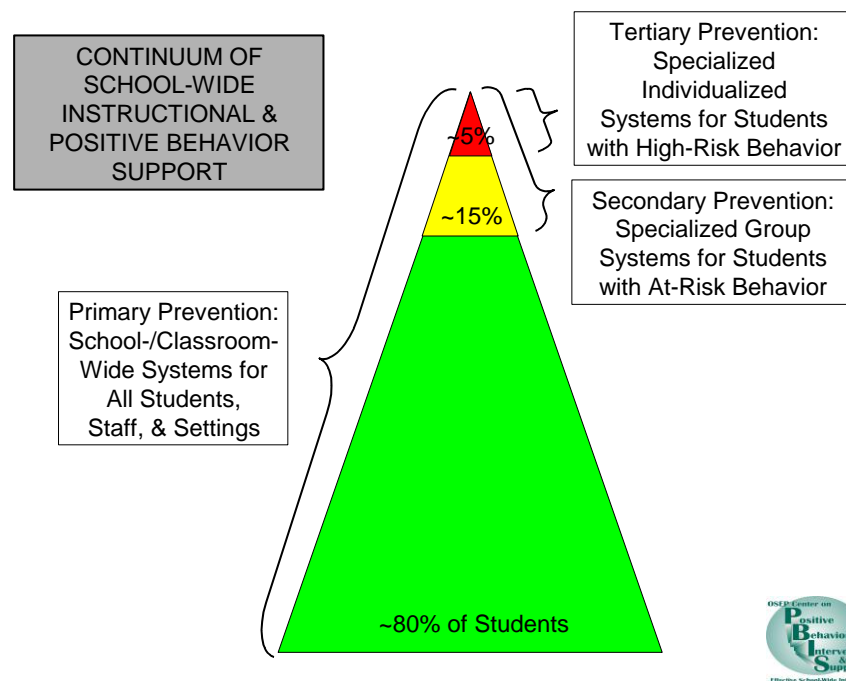
Source adapted from School-Wide Positive Behavior Support Implementers' Blueprint
and Self-Assessment, Office of Special Education (OSEP) Center on Positive Behavioral
Intervention and Supports. Copyright 2005 by U.S. Department of Education.

Within the framework of the model, the bottom of the triangle represents

universal or primary prevention interventions. These interventions are estimated to be

effective with 80% to 90% of a typical school population (Sugai et al., 2000).

Interventions at this level are directed towards the entire school population (Turnbull, et

al., 2002). They are designed to enhance protective factors within the environment to decrease students' risks for behavior problems. Universal-level intervention activities might include posting clear behavioral expectations across the school, training all students in desired school entrance and exit procedures, and designing reinforcers for students displaying desired behavior (Sugai et al., 2000; Todd, Horner, Sugai, & Sprague, 1999).

The second or selected level targets the estimated 5 % to 10% of students who have not responded to universal intervention and are displaying problem behaviors and/or academic and behavioral skill deficiencies (Office of Special Education Programs (OSEP: 2005; Sugai et al, 2000). Intervention strategies at this level attempt to identify and intervene with students who may be at-risk for disruptive or antisocial behavior (Crone, Horner & Hawken, 2004; Walker, et al, 2005). These students are typically identified by the number of office referrals (i.e. two or more), and require more intensive interventions and supports (Sugai et al., 2000; Tobin, Sugai, & Colvin, 2000). After these students have been identified, effective schools also have targeted programs that can help reconnect students with their schools. Interventions at this level are designed to decrease student risk and may include remedial reading, behavioral skill groups, and/or self-monitoring strategies (Gresham, 2004; Martella & Nelson, 2003).

At the top of the triangle is the estimated 1% to 5% of the student population requiring tertiary levels of intervention. These students display chronic and persistent behavioral (and/or) academic difficulties that have been resistant to prior universal or selected level interventions (OSEP, 2005; Sugai, Horner, et al., 2001; Sugai, Sprague, et al. 2000). It is estimated that this small population of students are responsible for 40% to

50% of behavioral infractions in schools and place a significant drain on classroom, administrative, and building resources (Gresham, 2004; Sugai et al., 2000). Interventions provided at this level are typically individualized, intense, and comprehensive (e.g. involving other relevant systems).

The goals of tertiary level interventions are to (a) diminish the frequency and intensity of problem behavior and (b) increase the student's adaptive skills. In order to achieve this, it is necessary to utilize a "function based" approach to behavioral assessment (Fairbanks, Sugai, Guardino, & Lathrop, 2007; Ingram, Lewis-Palmer & Sugai, 2005). The information gathered during this process should be used to develop a behavior support plan that identifies (a) the changes that will be made to the setting and antecedent events to prevent problem behaviors, (b) the new behavioral skills to be taught, (c) how those skills will be reinforced, and (d) the behavior reduction strategies that will be implemented to reduce the frequency of the problem behavior (Crone & Horner, 2003).

Core Components of SWPBS

Given this framework, SWPBS can be operationalized by the integration of four key elements that facilitate the linkage between the school environment and research-validated practices. These include: outcomes, data, practices, and systems (Turnbull et al., 2002). Although typically broken down into separate elements for descriptive purposes, they interact dynamically as part of the SWPBS model (see Figure 2).

Figure 2. The Interaction of Key Elements of SWPBS
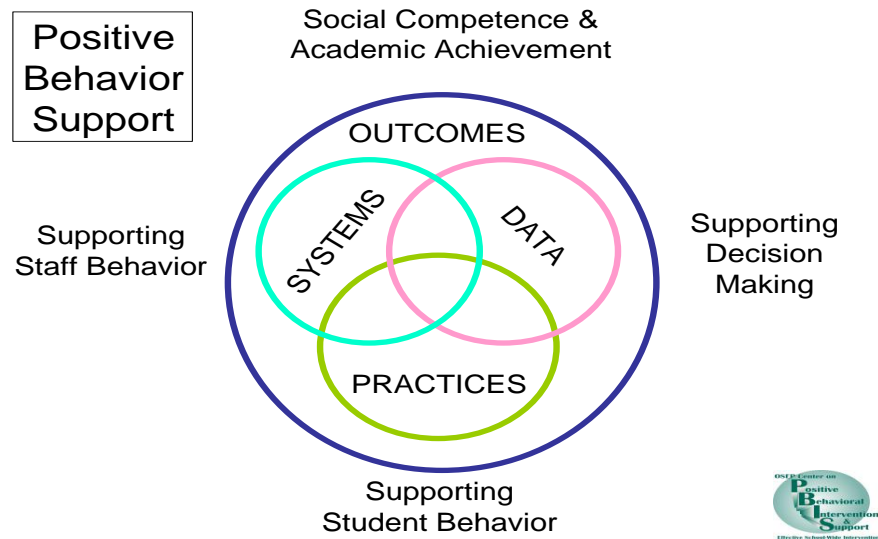
Source adapted from School-Wide Positive Behavior Support Implementers' Blueprint and Self-Assessment, Office of Special Education (OSEP) Center on Positive Behavioral Intervention and Supports. Copyright 2005 by U.S. Department of Education.

First, SWPBS is guided by a careful consideration of outcomes (e.g. academic achievement, social competence) that are valued by significant stakeholders such as students, family members, and teachers. Schools must be able to articulate these outcomes in observable, measurable terms. Outcomes are closely related to data; this is the second key element of the SWPBS framework. Data are used to guide decision-making regarding the selection of new practices and the modification and evaluation of current practices (Lewis-Palmer, Sugai, & Larson, 1999; Sugai et al., 2000). Data-based decision making is applied at many levels (i.e. individual, classroom, school) with multiple individuals (i.e. student, teacher, administrator, parent), and across multiple contexts (e.g., school and home). This is related to the third element, which is the adoption and sustained use of research-validated practices that maximize student

achievement. Consideration of practices should be guided by questions of trustworthiness, effectiveness, efficiency, and relevance (Sugai & Horner, 1999). Finally, SWPBS considers the systems (e.g. processes, routines, working structures, administrative supports) that are needed to ensure valued outcomes, data-based decision making, and research-validated practices related to the primary, secondary, and tertiary tiers of interventions (Turnbull et al., 2002).

Best Practices for Implementing Universal SWPBS

A review of the published research describes six critical features that are considered constant and essential elements for SWPBS implementation (a) statement of purpose (b) establishing and defining school-wide expectations, (c) teaching school-wide expectations to students, (d) establishing a continuum of procedures for encouraging school-wide expectations, (e) developing a continuum of procedures for discouraging problem behavior, and (f) using data to evaluate the impact of interventions (Lewis & Sugai, 1999; McKevitt & Braaksma, 2008; Sugai et al., 2005). These elements should represent an integrated continuum in which the intensity of support increases, relative to increases in the behavioral needs and challenges of the student (Walker et al., 1996). In addition, decision-making rules for determining movement along the continuum that are based on student performance should exist (Sugai et al., 2000).

Cultural Factors of Relevance to the Implementation of SWPBS

United States Census data from the year 2000 indicated one-third of all people living in the country were African-American, Native American, or Hispanic. One in ten people currently living in the U.S. was born in another country, and one in seven people living in the U.S. has spoken a language other than English (Chen, Downing, &

Peckham-Hardin, 2002). This evidence holds clear implications for designing and implementing appropriate school-wide positive behavior support programs. If prevention and intervention efforts are not ecologically valid for students and their families, they will likely be ineffective (Singer & Wang; Chen, et al., 2002).

Designing ecologically valid programs for students and their families may prove challenging for schools. For example, African American culture accepts a level of assertiveness that is often viewed as overly aggressive in the mainstream culture (Chen et al., 2002). If educators do not account for culture when implementing a SWPBS program, a disconnection in the continuum of primary, secondary, and tertiary levels of support will emerge (Hawken & O'Neill, 2006). Consequently, SWPBS will not be effective for the students who can potentially derive the greatest benefits from the program (Lewis & Sugai, 1999).

Cultures may also have differing beliefs regarding discipline practices. For example, Chen and colleagues (2002) reported that certain Asian cultures believe in harsh discipline, which can include hitting or slapping. Parents from these cultures may not agree with the relatively less harsh forms of discipline being used by the school, or students may not respond to such discipline. In addition, cultures differ in the value that they place on disciplinary activities, and therefore students from some cultures may not be as highly invested in participating in SWPBS as are students from other cultures (Singer & Wang, 2009). Although the basic principles of human learning and behavior are thought to be universal across all cultures (Carr, 1978), cultural values may have an effect on the selection of reinforcers (Carr, 2002). Therefore, in order to implement culturally responsive practices successfully, it is essential for educators to understand that

culture, which is an indispensable component of human development, inevitably has a

profound impact on human behavior (Singer & Wang, 2009).

Effectiveness of SWPBS

The efficacy of SWPBS as a method for addressing the behavioral needs of

students has been demonstrated in multiple states (Horner, Sugai, Lewis-Palmer &Todd,

2001; Lewis & Sugai, 1999; Taylor-Greene et al., 1997; Todd, Haugen, Anderson, &

Spriggs 2002; Turnbull et al., 2002; Warren et al., 2003). As a result of these

demonstrations, SWPBS has been validated as an effective method to reduce and prevent

students' disruptive behaviors. In addition, SWPBS has been cited as a model program in

helping schools to reduce their overreliance on punitive consequences for all students

(Eber, Upreti, & Rose, 2010).

According to Netzel and Eber (2003), application of SWPBS has resulted in a

22% reduction in overall suspensions after a year of implementation in an urban city

elementary school. McCurdy, Mannella, &Eldridge (2003) reported a reduction of office

discipline referrals (ODRs) in urban city elementary schools, with significant differences

between year 1 and year 3 of school-wide implementation. Eber (2005) also reported a

20-60% of reduction in office discipline referrals for students with and for those without

Individualized Education Programs (IEPs) with statewide PBS application in Illinois.

According to the Families and Advocates Partnership for Education (2001), one school in

New Hampshire has been using a school-wide program for 4 years. It has worked so well

that approximately 8 of 10 students with significant emotional disabilities were included

in the regular classroom for most of the day, and approximately 9 of 10 were included at

least part of the day. Turnbull et al. (2002), in a study at Central Middle School in Kansas

City, Kansas, found very positive results during the first 2 years after implementing a

SWPBS program. In a similar study, Metzler, Biglan, Rusby, and Sprague (2001) showed

an increase in the level of praise, rewards, and recognition given by teachers to students

and also showed a decrease in the rate of discipline referrals. McCurdy, Mannella, and

Eldridge (2003) examined several urban schools that had adopted a SWPBS program.

Data from the schools' pre-SWPBS year compared with data collected after the first 2

years of implementation showed that both school disruption (calling out, out of seat,

noncompliant, etc.) and fighting decreased by approximately 50%.

The Southern Poverty Law Center (SPLC) cited SWPBS as the critical first step

in addressing the over-representation of ethnic minority students in school exclusionary

practices (SPLC, 2010). Eber, Upreti, & Rose (2010) reported that in the state of Illinois,

the effectiveness of a school's disciplinary system, as it impacts ethnic minority students,

was significantly enhanced by full implementation of SWPBS (Eber, Upreti, & Rose,

2010). Another recent analysis in Illinois studying student ethnicity and SWPBS

revealed that schools experienced different outcomes based on levels of implementation,

with lower and more proportionate rates of out-of-school suspension, on average, for

schools with higher levels of implementation (Eber, 2009). School districts in

Connecticut and Maryland have also demonstrated lower and more proportionate

representation in out-of-school suspension rates, as compared with non-implementing

SWPBS schools (Dolan, 2009; State Education Resource Center, 2009).

Recently, research has focused on the impact of SWPBS on academic

achievement of students. Horner and his colleagues (2005) found that SWPBS

maximizes the overall effectiveness of the academic program. For example, when a

behavior support system is in place in conjunction with SWPBS, schools achieve higher

changes in percentages of students meeting state standards in reading assessment. Lassen

et al. (2006) studied the effectiveness of SWPBS implementation on students' academic

achievements in an urban middle school and found that reduction of office discipline

referrals and suspensions could be significant predictors of math and reading score

improvement for all students. Similarly, Scott (2001) demonstrated 65% to 75%

reductions in out-of-school suspensions and in-school detentions, which allowed students

to be more successful in class to the point of increased standardized test scores.

Evaluating the Implementation of SWPBS

Data about the implementation of the universal school- wide PBS system and its

effects on student outcomes should be collected. The School-Wide Evaluation Tool

(SET; Sugai et al., 2001) is an instrument that measures the integrity of implementation

of the universal level of SWPBS. The SET was originally designed as a research

instrument to evaluate the level of implementation of the key features of a SWPBS

program (Horner et al., 2004). The SET measures the level of implementation in seven

areas (a) behavioral expectations defined, (b) behavioral expectations taught, (c)

behavioral expectations rewarded, (d) systematic response to rule violations, (e)

information gathered to monitor student behavior, (f) local management support for

school-wide procedures, subscale score of ''expectations taught.'' Research indicates that

when schools are able to reach and maintain this level of implementation during

consecutive school years, they tend to experience the benefits of PBS that have been

reported in the effectiveness research (Horner et al., 2004).

Using Archival Data to Evaluate the Effectiveness of SWPBS

A comprehensive plan to evaluate the effectiveness of evaluating a SWPBS program should include the use of school-wide data to determine the impact of SWPBS on student behavior (Sugai et al., 2005). One way to achieve this is by collecting behavioral incidents or office referral data. Collecting this type of data is an efficient and convenient way to monitor the impact of the universal PBS system on student performances (McKevitt & Braaksma, 2010). For example, Skiba, Peterson, and Williams (1997) gathered information from disciplinary consequences, administrative measures, and other actions taken prior to referral to special education. In a similar study, Sugai, Sprague, Horner, and Walker (2000) included descriptions of referrals that were reported by grade levels, the total referrals per school year, and the total number of students with more than 1, 5, or 10 office referrals. Wright and Dusek (1998) argued that office referrals are an unobtrusive measure of student behavior, and may help minimize the extensive time commitment connected with direct observations and the subjectivity of behavior rating scales. In their study, the authors compared disciplinary referrals in two elementary schools and contrasted the annual number of referrals, the number of general and special education students receiving referrals, and gender differences.

Behavioral incident data can also be used as a summative evaluation tool at the end of each school year (McKevitt & Braaksma, 2010).   End of the year office referral data can be used to determine the overall impact of the SWPBS system for the current year and can be compared with previous years. For example, the total number of office referrals could be compared across multiple years to determine if SWPBS is affecting the overall demonstration of problem behaviors in the school building. (Sugai et al, 2005).

Summary: SWPBS

Initial evaluations investigating the effectiveness of SWPBS demonstrate that the implementation of the SWPBS framework may result in positive academic and social outcomes for students (Horner, Sugai, Lewis-Palmer &Todd, 2001; Lewis & Sugai, 1999; Taylor-Greene et al., 1997; Todd, Haugen, Anderson, & Spriggs 2002; Turnbull et al., 2002; Warren et al., 2003). Specifically, when SWPBS is applied with fidelity, and cultural sensitivity, schools implementing the program may experience a decrease in office discipline referrals and suspensions as well as an increase in performance on statewide assessments (Upreti & Rose, 2010). In addition, some studies have cited SWPBS as the first critical step in addressing the disproportionate representation of populations such as ethnic minority students (SPLC, 2010). However, more research in this area, as well as initial research to examine whether or not SWPBS is effective in improving outcomes for students with disabilities needs to be conducted. One useful, convenient, and noninvasive way to measure the potential effectiveness of a SWPBS program is to examine archival records, such as data that are recorded when a student receives an out-of-school suspension (Skiba et al., 1997). This method is especially useful in determining if all students are benefiting equally from SWPBS (Lewis-Palmer et al. 1999)

Research Questions

Given the critical need to address the over-representation of ethnic minority students and students with disabilities in school exclusionary practices, and to provide all students with equal access to an education, the purpose of the proposed study was to examine how suspension rates of minority students and students with disabilities are

affected by the implementation of SWPBS. Based on current legislation and recent

research, it is predicted that the implementation of SWPBS will have a positive impact on

the suspension rates of ethnic minority students and students with disabilities. This study

will specifically address the following research questions:

1. Research Question 1: Does the implementation of a universal SWPBS program result

in a decrease of a school's overall out-of-school suspension rate and/or the rate of out-of-

school suspensions related to mild, moderate, and severe infractions?

> Hypothesis 1: Implementation of a universal SWPBS program will result in a
>
> reduction in mild, moderate, and severe types of disciplinary infractions that
>
> students commit, resulting in a lower overall rate of out-of-school suspension.

2. Research Question 2: Does the implementation of a universal SWPBS program

decrease the overall percent of out-of-school suspensions or out-of-school suspensions

for specific categories (i.e. mild, moderate, and severe) of infractions involving (a) ethnic

minority students and (b) students with disabilities?

> Hypothesis 2: Implementation of a universal SWPBS program will result in a
>
> decrease of the overall percent of out-of-school suspension for ethnic minority
>
> students and students with disabilities.

3. Research Question 3: Is there a more proportionate representation of ethnic minority

students and students with disabilities in out-out-school suspensions, relative their own

enrollment during baseline data collection years, as compared with SWPBS years?

> Hypothesis 3: Successful implementation of a universal SWPBS program will
>
> result in a more proportionate rate of out-of-school suspension when compared
>
> with baseline data collected prior to implementing the model.

4. Research Question 4: Is the probability equal that a disciplinary incident resulting in an out-of-school suspension will involve an ethnic minority, Caucasian, general education, or special education student during each school year?

> Hypothesis 4: The probability that a disciplinary incident resulting in an out-of-school suspension involving an ethnic minority, Caucasia, general education, or special education student during each school year is not equal. The probability that a disciplinary incident resulting in an out-of-school suspension involving an ethnic minority student and special education student will be a more likely occurrence than a disciplinary incident resulting in an out-of-school suspension involving a Caucasian or general education student.

Research Question 5: Are out-of-school suspensions resulting from mild, moderate, and severe disciplinary infractions equally divided across ethnic minority, Caucasian, special education, and general education students?

> Hypothesis 5: Out-of-school suspensions resulting from mild, moderate, and severe disciplinary infractions are not equally divided across ethnic minority, Caucasian, special education, and general education students.

Chapter 3

Methods

The present study investigated the impact that the implementation of a SWPBS program had on out-of-school suspension rates. The present study utilized a single subject case study (AB design). Archival data from the Maryland State Department of Education was used to complete the analysis. It is therefore considered a convenience sampling. The following section presents the specific methodology chosen for this investigation. First, the setting and participating school will be introduced. Next, the data source and procedures will be discussed. Finally, the independent and dependent variables will be described.

Setting and Participants

The setting for the study was a rural school district in Maryland with an enrollment of approximately 4,500 students. According to data collected and reported to the State Department of Education, the overall ethnic composition of the student body at the time the study was conducted was as follows: 70.4% Caucasian, 19.9% African American, 7.4% Hispanic, 1.86% Asian American, and .35% Native American. The district consisted of one high school, one middle/high school, one middle school and four elementary schools. Of the eight schools, four had fewer than 400 students, two had student bodies ranging from 400-800, and two had a school population greater than 800.

Data for the study were collected from the suspension records of one middle school in the district over a period of six years. Throughout the course of data collection, the school had an average enrollment of 816 students. On average, 31% of the student body was classified as an ethnic minority, and 69% were classified as non-minority,

Caucasian students. An average of 8% of students were classified as needing special

education services, and the remaining 92% were, on average, classified as general

education students.

The school utilized in the current study had been implementing SWPBS with

fidelity and had obtained a SET score of 80/80 since the 2007-2008 school year;

however, the school had implemented district-wide disciplinary policies prior to the

implementation of the program. These policies included the following: (a) corporal

punishment was not used, (b) a principal or vice principal assumed responsibility for

managing discipline problems that classroom teachers could not manage, (c) a record-

keeping system was in place for documenting discipline referrals, and (d) the school had

a statement of purpose. Both before and after the implementation of the SWPBS

program, the school had also adhered to district wide procedures for responding to

disciplinary infractions according to Section 7-306 of the Education Article of the

Annotated Code of Maryland, "*Corporal Punishment; State Code of Discipline*". To

view the discipline policy flowchart, please refer to the Appendix A.

The impetus for the school's implementation of SWPBS grew out of the district's

concern regarding the growing suspension rates of its students. Subsequently, a SWPBS

team was developed and participated in a statewide training institute during the summer

of 2007. New faculty members were also trained during subsequent workshops held each

year.   During each year of the three years of SWPBS implementation, the student body

was informed about SWPBS and taught the school's behavioral expectations in a school-

wide assembly. School-wide expectations were reintroduced throughout the school-year

in a number of different ways, some of which included, posters displays, verbal reminders, and booster sessions delivered on the morning announcements.

Data Sources

The Maryland State Department of Education (MSDE) annually collects data from each school in the state regarding the types of disruptive behavior encountered and the subsequent disciplinary actions. By law, school districts in Maryland are required to report these data to the federal government in a number of formats, as mandated by the following acts: Individuals with Disabilities Education Improvement (IDIEA, 2004), Gun-Free Schools (1994), Safe and Drug-Free Schools and Communities (1994), and No Child Left Behind (2008). These data included in the proposed study were drawn from MSDE's collection of out-of-school suspension data from 2004-2009.

As defined by the *Code of Maryland Agency Regulations* (2009), out-of-school suspension is the removal of a student from school for disciplinary reasons by the principal. Short-term suspensions are those that last for fewer than ten days. In contrast, long-term suspensions are greater than ten days (COMAR, 2009). Both short-term and long-term suspensions were included in the analysis.

All data used in the analysis for the current study were based on the number of disciplinary incidents resulting in out-of-school suspensions for any reason during the school year ending that year (MSDE, 2010). MSDE releases these data on its website on an annual basis; therefore, the data used in this study were in the public domain. The study did not involve any direct participants, and only archival school-wide data were utilized. Information on individual students was not procured at any time during the study.

The raw data obtained from MSDE were listed each school year, separately, and contained the following: (a) number of out-of-school suspensions by ethnicity and educational classification (in accordance to definitions from IDIEA), (b) the total number of each type of disciplinary incident that resulted in out-of-school suspension, by ethnicity and educational classification, (c) the number of students by ethnicity and educational classification, based on the September 30 enrollment, and (d) the total number of students, based on the September 30 enrollment.

Ethical Issues

The current study protected the rights of the participants through two conditions, anonymity and confidentiality (Kazdin, 2003). Both conditions were maintained in the study by avoiding the use of procedures in which participants' identities could be discerned. In addition, data were kept private and in a secured location. There is also the issue of informed consent by which the participant agrees to participate in research with full knowledge about the nature of the research, the risks, the benefits, the expected outcomes and the alternatives. This study was an exception because archival records were recorded and reported in a way that participants could not be identified; this is called minimal risk research. Minimal risk research indicates that the study poses the minimal invasion of privacy and psychological or physical harm as a result of participation in the study (Kazdin, 2003). Therefore, there was no obligation to obtain informed consent from the participants themselves or from their parents. Moreover, research conducted in educational settings involving normal educational practices is exempt from informed consent requirements (Jacobs & Hartshorne, 2003).

Procedures

The disciplinary data that were used in this study originated from an existing record-keeping system for documenting discipline referrals. Currently, when a formal referral is made to the office of any of the schools, the administrator receiving the referral fills out a standardized coding form. The form includes information regarding the nature of the incident that triggered the referral and the resulting action taken by the administrator. Other general information recorded on the coding form includes the referral time and date, by whom and to whom the referral is made, previous actions taken, date of administrative action, and whether or not parents are contacted.

Information about the nature of the incident triggering the referral is based on the *Maryland Student Records System Manual* (2008). Currently, MSDE has defined and listed fifty disciplinary infractions that may result in a formal office discipline referral. These reasons are listed on the coding form that the administrator who receives the referral is required to complete. When data are subsequently submitted to and published by MSDE on an annual basis each year, discipline referrals that result in out-of-school suspensions are separated into eight major categories of infractions. These include the following: (a) attendance, (b) dangerous substances, (c) weapons, (d) attack/threat/fight, (e) arson/fire/explosives, (f) disrespect/insubordination/disruption, (g) sex infractions, and (h) other. Definitions of each of the fifty infractions that make up each of these eight categories are provided in Appendix B. For the purposes of the current study, these eight categories were further grouped into mild, moderate, and severe categories, based on the severity of the offense. These levels were determined by the district's recommended penalties for disciplinary infractions (See Appendix A) for each of the eight categories of

disciplinary infractions (See Appendix B).   Mild infractions included the categories of

attendance, disrespect/insubordination/disruption, and other. Moderate infractions

included the categories of attack/threat/fight, arson/fire/explosives, and sex infractions.

Severe infractions included the categories of dangerous substances and weapons.

Measures

Measures used in analyses of schools' suspension rates will include the following

dependent variables:

1. **Mild, Moderate, and Severe Disciplinary Infractions.** The total numbers of

   mild, moderate, and severe disciplinary infractions resulting in an out-of-school

   suspension were calculated for each school year.   These levels were determined

   by the district's recommended penalties for disciplinary infractions for each of the

   eight categories of disciplinary infractions reported on an annual basis by MSDE.

   Mild infractions included the categories of attendance,

   disrespect/insubordination/disruption, and other. Moderate infractions included

   the categories of attack/threat/fight, arson/fire/explosives, and sex infractions.

   Severe infractions included the categories of dangerous substances and weapons.

2. **Overall Out-of-School Suspension Rate.**   The out-of-school suspension rate

   was calculated by adding the total number of out-of-school suspension incidents,

   and dividing that number by the total number of students enrolled. This number

   was then multiplied by 100 to obtain a rate of suspension. This rate was obtained

   for each of the six school years included in the analyses.

3. **Percentage of Out-of-School Suspensions Involving Ethnic Minority Students.** The percentage of out-of-school suspensions involving ethnic minority students was calculated by adding the total number of out-of-school suspension incidents involving ethnic minority students and dividing that by the total number of out-of-school suspension incidents that occurred throughout the school year. That number was multiplied by 100 to yield the number of suspensions that occurred per 100 students in that group.

4. **Percent of Out of School Suspensions Involving Students with Disabilities.** The percentage of out-of-school suspensions involving students with disabilities was calculated by adding the total number of out-of-school suspension incidents involving students with disabilities and dividing that by the total number of out-of-school suspension incidents that occurred throughout the school year. That number was multiplied by 100 to yield the number of suspensions that occurred per 100 students in that group.

A measure used to determine the implementation for SWPBS included the following independent variable:

1. **Implementation of SWPBS**. The implementation of SWPBS was determined by The Schoolwide Evaluation Tool (Horner et al., 2002). The SET is an instrument that measures the integrity of implementation of the universal level of SWPBS. The SET is conducted by an independent objective observer and is used to evaluate how well the key elements of SWPBS have been implemented in the general student population (Horner, et al., 2002). The SET produces a summary score (%), and a score for each of seven domains of SWPBS, which are as

follows: (a) behavioral expectations defined, (b) behavioral expectations taught, (c) behavioral expectations rewarded, (d) systematic response to rule violations, (e) information gathered to monitor student behavior, (f) local management support for school-wide procedures, and (g) district-level support for school-wide procedures. Research indicates schools scoring at least an 80/80 (80% on the general index of school-wide implementation, and 80% on the specific index for teaching behavioral expectations) are implementing SWPBS at the universal level with integrity (Horner, et al., 2002). As discussed previously, the school utilized in the current study has obtained an 80% both on the general index of school-wide implementation and an 80% on the specific index for teaching behavioral expectations for the previous three years, indicating that they are implementing the universal SWPBS program with integrity.

Chapter 4

Results

The purpose of this study was to examine out-of-school suspension rates before and after the implementation of SWPBS. Out-of-school suspension data from 2004 to 2010 were examined for all students attending one rural middle school in Maryland. Descriptive comparisons of the overall out-of-school suspensions rates as well as suspensions by the level of severity were included in the analyses. Additionally, descriptive comparisons of suspension rates of students with disabilities, general education students, Caucasian students, and ethnic minority students were compared. Because the existing literature indicates that ethnic minority students and students with disabilities are disproportionately represented in school discipline data (Skiba et al, 2003) when compared with the percentage of their enrollment, disparities across these groups were explored.

All data used in the analysis for the current study were based on the number of disciplinary incidents resulting in suspension for any reason during the school year, ending that year (MSDE, 2010). The raw data obtained from MSDE listed each school year separately and contained (a) the number of out-of-school suspensions by ethnicity and educational classification, (b) the total number of each type of disciplinary incident that resulted in out-of-school suspension by ethnicity and educational classification, and (c) the number of students by ethnicity and educational classification based on the September 30 enrollment. All data presented in the following tables and figures are based on the duplicated count of suspensions, and therefore focus on the absolute number of suspension incidents (i.e. students who were suspended multiple times are counted

multiple times). These data do not account for individual students receiving multiple out-of-school suspensions (MSDE, 2010).

As discussed in the previous paragraph, data for the study were collected from the suspension records of one middle school in the district over a period of six years. Table 1 represents current census and enrollment statistics from each school year that data were collected.

Table 1
Demographic and Enrollment Statistics by Year

Year	Total Enrollment	% Minority	% Caucasian	% Special Education	% General Education	% Ethnic Minority Students in Special Education
2004/05	876	29.91	70.1	8.90	91.10	33.33
2005/06	852	31.10	68.90	8.45	91.55	38.88
2006/07	822	30.54	69.46	7.54	92.46	44.44
2007/08	794	30.60	69.40	8.25	92.07	44.44
2008/09	800	31.13	68.88	6.88	93.13	52.72
2009/10	765	30.07	69.93	7.58	94.42	28.58

Research Question 1

Does the implementation of a universal SWPBS program result in a decrease of a school's overall out-of-school suspension rate and/or the rate of out-of-school suspensions related to mild, moderate, and severe infractions?

The first part of research question 1 was addressed by dividing the total number of out-of school suspensions during each school year by the total number of students enrolled at the school during the same year. This number was then multiplied by 100 to represent the number of out-of-school suspensions per 100 students enrolled in the school. This number resulted in an out-of school suspension rate for each school year (Mendez & Knoff, 2003; Skiba, 2008).

The second part of research question 1 was addressed by grouping the 33 types of infractions resulting in out-of-school suspensions for each school year into three categories (mild, moderate, and severe) to indicate the level of severity. Subsequently, the total number of infractions resulting in suspensions in each category was calculated. Each of these figures was divided by the total number of out-of-school suspensions during that school year and then multiplied by 100.

Figure 3 represents the incident rates of out-of-school suspensions at the school level for three years of baseline data collection and three years of SWPBS implementation.
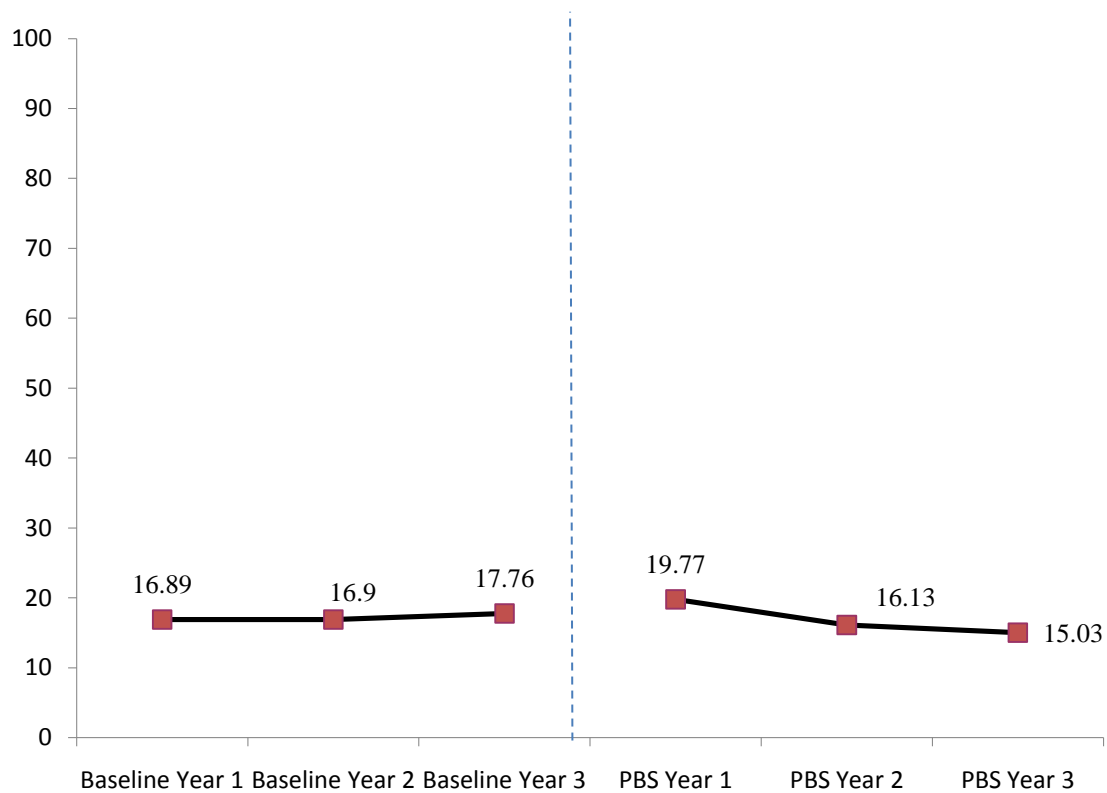
Figure 3. Out-of-School Suspension Rates: 2004-2010

Figure 3 indicates a 4.74% reduction in the number of disciplinary incidences resulting in out-of-school suspensions since SWPBS was implemented during the 2007-2008 school year. Although data reflect an initial increase in the overall out-of-school suspension rate (19.77%) after the first year of SWPBS implementation, as compared with the suspension rate of the third year of baseline data collection (17.76 %), the school's suspension rate indicates a decline in the number of disciplinary incidences resulting in out-of-school suspensions since that time, with the percentage of out-of-school suspensions during SWPBS years two and three being 16.13% and 15.03%, respectively.

These trends represent a contrast when compared with out-of-school suspension rates during the three years of baseline data. Data indicate that during the three school

years prior to the implementation of SWPBS, out-of-school suspension rates increased

consistently; 16.89% of students received out-of-school suspensions during the first year

of data collection (baseline year one); 16.90% of students received out-of-school

suspensions during the second year of data collection (baseline year two), and 17.76% of

students received out-of-school suspensions during baseline year three.

Figure 4 presents the incident rates of out-of-school suspension by level of

severity for the previous six school years. The data indicate that the majority of

infractions that result in out-of-school suspensions are for mild and moderate incidents.

The percentage of out-of-school suspensions that were for mild and moderate incidents

has also remained fairly stable during the six years that data were collected. The

percentage of suspensions in each of these categories does not appear to show a specific

or consistent trend either before or after the implementation of SWPBS. The percentage

of severe infractions that have resulted in out-of-school suspensions is much smaller in

comparison with the percentage of out-of-school suspensions for mild and moderate

disciplinary infractions. In addition, the percentage of severe infractions that have

resulted in out-of-school suspensions since the implementation of SWPBS has decreased.
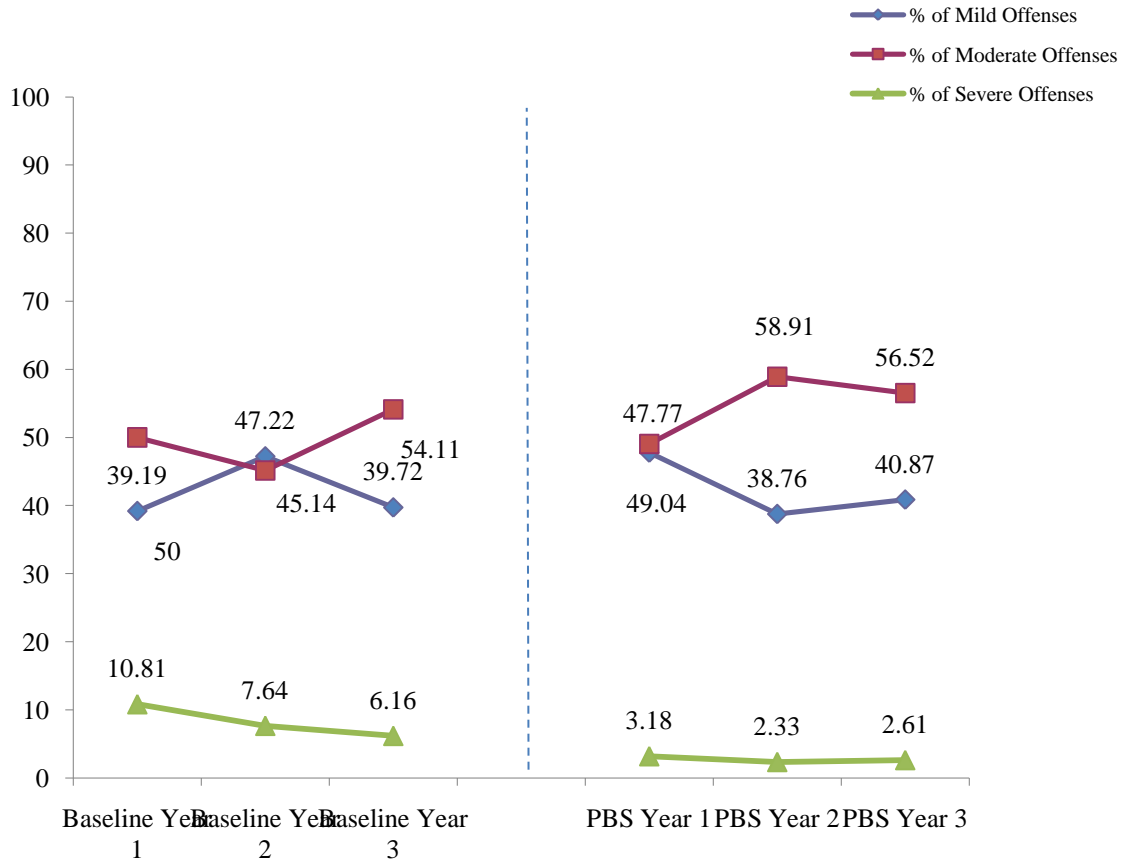
Figure 4. Out-of-School Suspension Rates by Severity Category: 2004-2010.

Research Question 2

Does the implementation of a universal SWPBS program decrease the overall

percent of out-of-school suspensions or the out-of-school suspensions for specific

categories (i.e. mild, moderate, and severe) of infractions involving (a) ethnic minority

students and (b) students with disabilities?

The first part of research question 2 was addressed by dividing the total number of

out-of-school suspensions for ethnic minority students and students with disabilities

during each school year by the total number of out-of-school suspensions that occurred

during the same school year. That number was multiplied by 100 to yield the number of suspensions that occurred per 100 students in that group.

The second part of research question 2 was addressed by grouping the 33 types of infractions resulting in out-of-school suspensions for each school year into three categories (mild, moderate, and severe).   Next, the total number of infractions resulting in suspensions in each category was calculated. This number was divided by the total number of out-of-school suspension incidents in each group (ethnic minority students and students with disabilities).
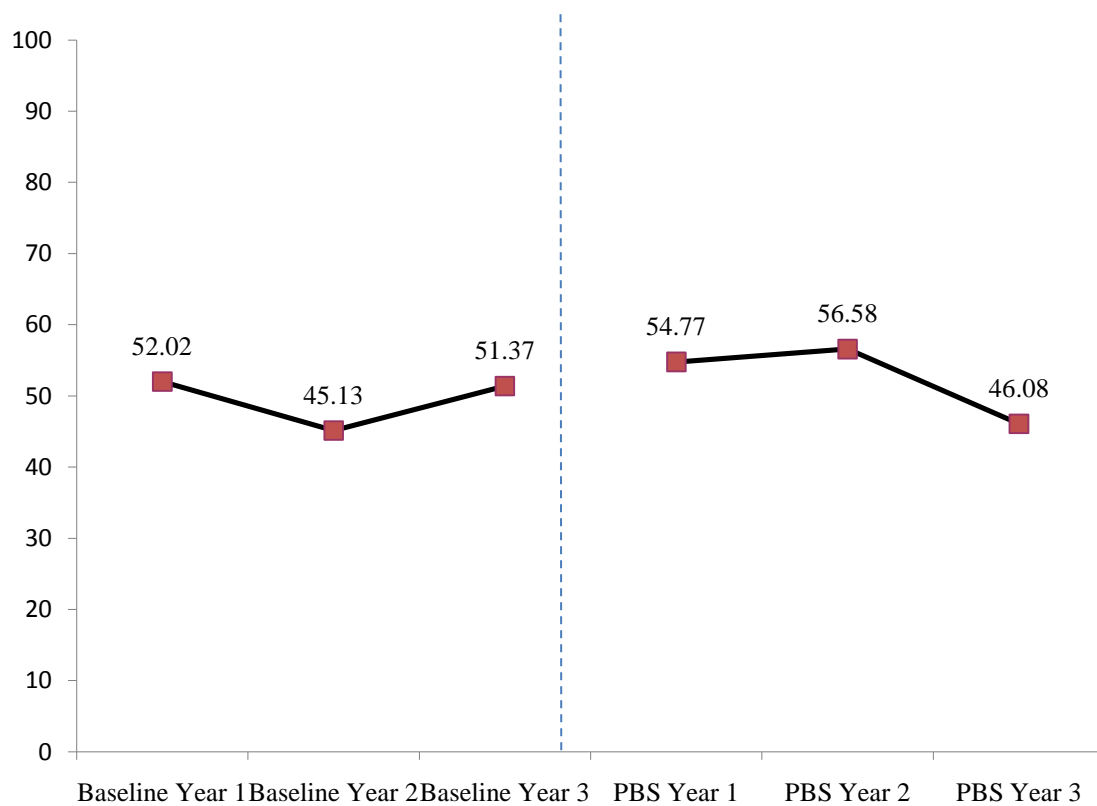
Figure 5. Percentage of Out-of-School Suspensions Involving Ethnic Minority Students

Figure 5 shows the percentage of out-of-school suspensions involving ethnic minority students for the previous six school years. Figure 5 indicates that the percentage of out-of-school suspensions involving ethnic minority students has decreased slightly since the implementation of SWPBS three years ago. However, the school experienced this decrease only during the last school year (PBS Year 3). During PBS years one and two, the percent of out-of-school suspensions involving ethnic minority students increased slightly.
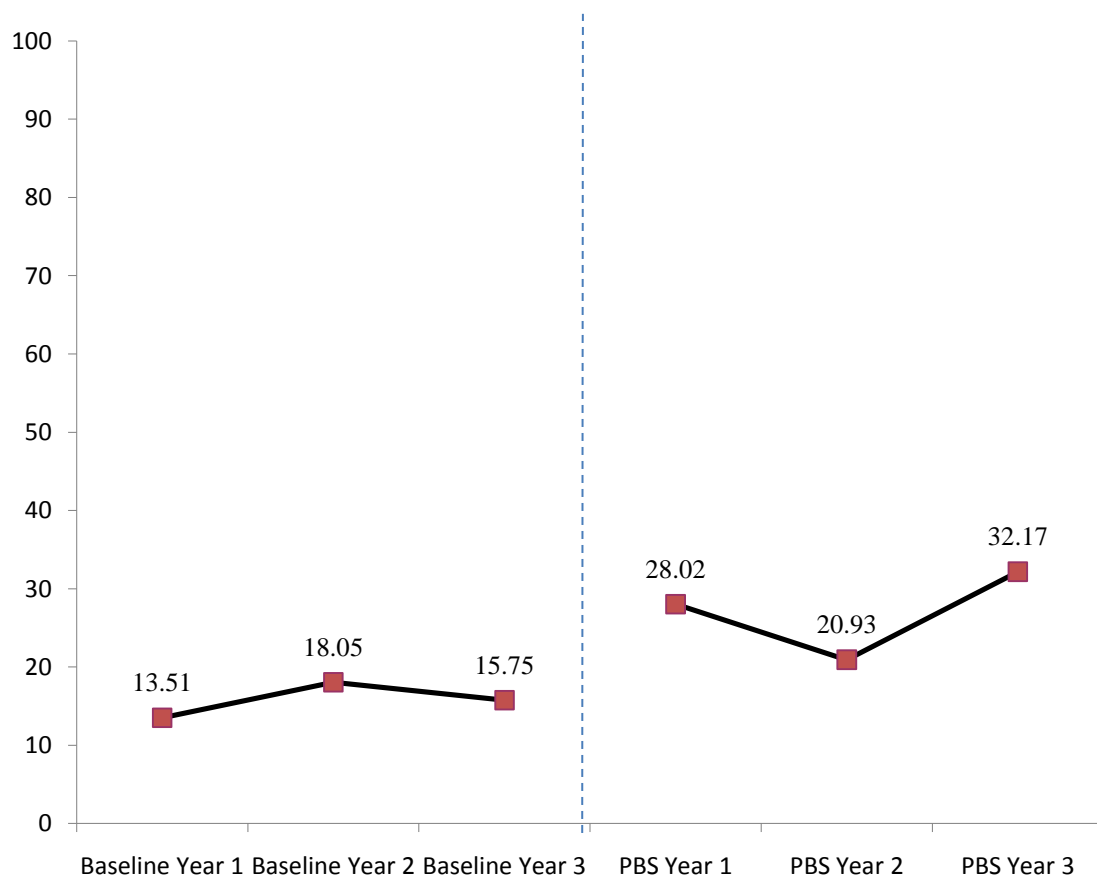
Figure 6. Percentage of Out-of-School Suspensions Involving Students with Disabilities

Figure 6 shows the percentage of out-of-school suspensions involving students with disabilities for the previous six school years. The percentage of out-of-school suspensions involving students with disabilities is not reflective of a decreasing trend since the implementation of SWPBS three years ago. Rather, the data shown in Figure 6 reflect an increase in the percent of out-of-school suspensions during SWPBS year three, as compared with SWPBS years one and two. In addition, the percentage of out-of-school suspensions involving students with disabilities has increased since the implementation of SWPBS.

Figure 7 presents the incident rates of out-of-school suspensions for ethnic minority students for minor, moderate, and severe infractions for the previous six school years. The data presented in this figure indicate that ethnic minority students are often suspended for incidents related to mild and moderate infractions. Prior to the implementation of SWPBS, this group was most often suspended for an incident related to a mild offense. This has changed since the implementation of the program, and ethnic minority students are now most frequently suspended for an incident related to a moderate disciplinary offense. Furthermore, the percentage of suspensions related to mild infractions for this group has continued to decline each year since the implementation of the program. The percent of suspensions for severe disciplinary infractions in this group has also continued to decline during each year of data collection.
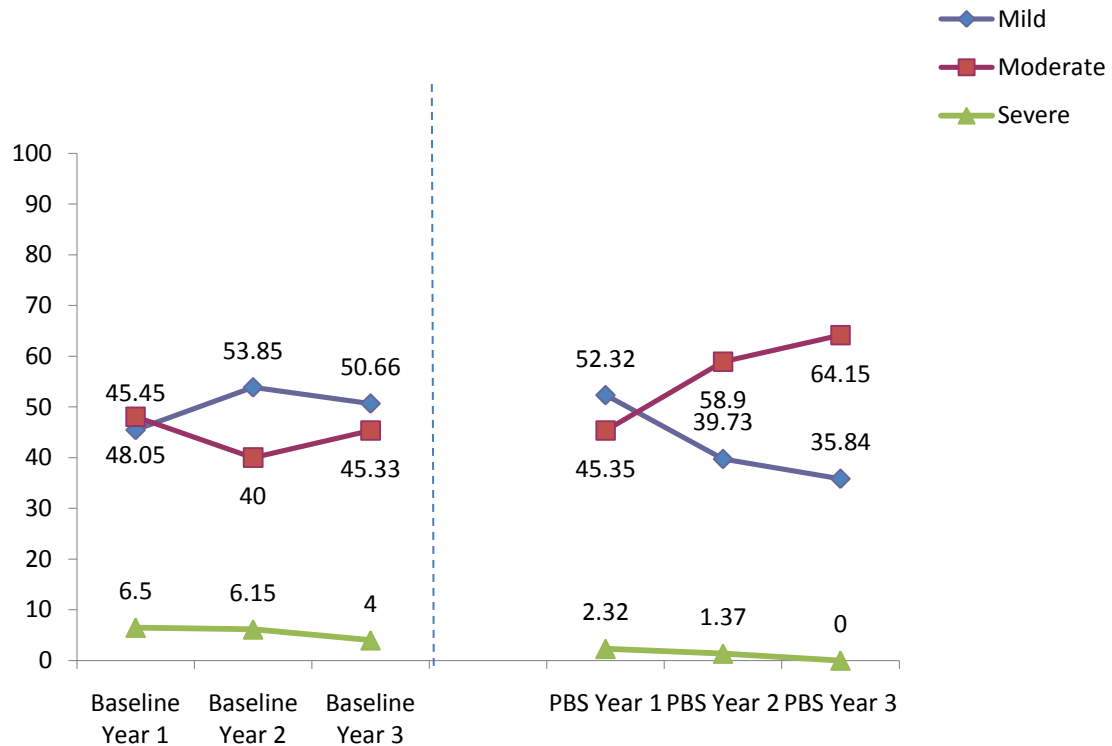
Figure 7. Distribution of Mild, Moderate, and Severe Infractions Resulting in Out-Of-School Suspensions for Ethnic Minority Students

Figure 8 presents the incident rates of out-of-school suspension for special education students for mild, moderate, and severe infractions for the previous six school years. Out-of-school suspensions of special education students are most frequently related to moderate disciplinary infractions. This is has been evidenced during each year that data were collected; however, the percent of incidents in which a special education student was suspended as the result of a moderate disciplinary offense has decreased since the implementation of the program. In contrast, the percentage of incidents in which a special education student was suspended as a result of a mild disciplinary offense has increased since the implementation of SWPBS. Additionally these data represent a contrast to the offense data of ethnic minority students that were described in the previous

figure, because this data indicated that the percentage of incidents in which an ethnic

minority student was suspended as a result of a mild disciplinary offense decreased.
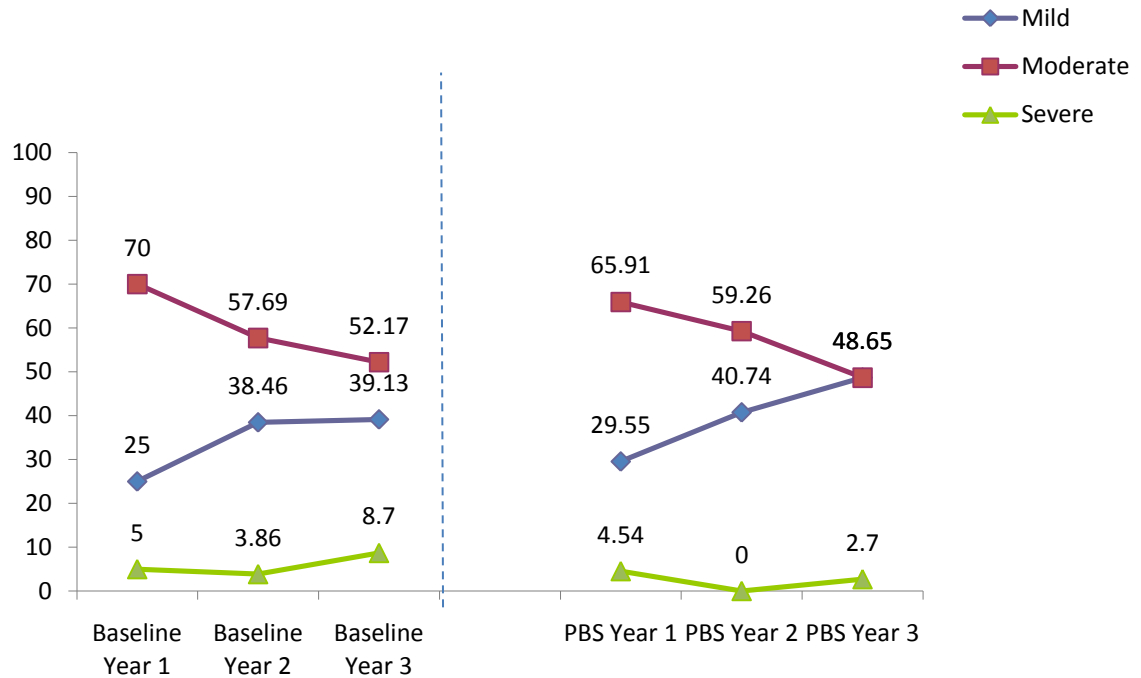
Figure 8. Distribution of Mild, Moderate, and Severe Infractions Resulting in Out-Of-School Suspensions for Special Education Students

Research Question 3

Is there a more proportionate representation of ethnic minority students and

students with disabilities in out-out-school suspensions, relative their own enrollment

during baseline data collection years as compared with SWPBS years?

Research Question 3 was addressed by calculating the percentage of suspension

incidents involving ethnic minority and special education students during each school

year and comparing it with the percentage of ethnic minority students enrolled per

academic school year.   The percentage of students enrolled was calculated by dividing

the total number of students enrolled at the school by the number of students in that group

(either ethnic minority or special education students) that were enrolled at the school

during each academic school year. The percentage of suspension incidents was

calculated by dividing the total number of suspensions for students in each group by the

total number of suspension incidents for that school year. The difference between these

two numbers was then determined by subtracting the percentage of suspension incidents

from the percentage of enrollment. A difference that is close to zero indicates

proportionality, because the percentage of suspension incidents for students in that group

is similar to the percentage of students enrolled in that group for the specific year.

Differences that reflect a higher percentage in the positive direction indicate that the

percentage of students enrolled in that group is greater than the percentage of suspension

incidents for students in that group. In contrast, a larger negative number indicates that

the percentage of suspension incidents for students in that group was greater than the

percentage of enrollment during that year. It was then determined whether or not each

group was disproportionately represented during each school year by using Reschly's

(1997) "ten percent of the population standard." This standard stipulates that a

subpopulation may be considered over or underrepresented if its proportion in the target

classification (e.g. suspension) exceeds its representation in the population by 10% of that

representation.

Table 2 and Figure 9 include information on the proportion of out-of-school

suspensions that involved ethnic minorities, compared with the proportion of ethnic

minority students accounted for in school enrollment data. These data indicate that the

percentage of ethnic minority students accounted for in school enrollment has remained

consistent for the previous six years (29-31%); however, suspensions involving ethnic

minority students are much more variable (45-56%).

Table 2
Proportion of Ethnic Minority Students Compared to the Proportion of Enrollment

Year	% of Ethnic Minority Students Enrolled	% of Suspensions Involving Ethnic Minority Students	Difference
Baseline Year 1	29.91	52.02	-22.11*
Baseline Year 2	31.10	45.13	-14.03*
Baseline Year 3	30.54	51.37	-20.83*
SWPBS Year 1	30.60	54.77	-24.17*
SWPBS Year 2	31.13	56.58	-25.45*
SWPBS Year 3	30.07	46.08	-16.01*

Note. (+) Indicates that the % of students is greater than the % of suspensions
- Indicates suspensions is greater than the % of students
* Indicates disproportionate representation

Figure 9. Proportion of Suspensions Involving Ethnic Minorities Compared to Enrollment

These data do not indicate that there are a more proportionate number of out-of-school suspensions involving ethnic minority students, as compared with their enrollment after the implementation of SWPBS. Although the difference between the number of ethnic minority students enrolled and the number of suspensions involving ethnic minority students became more proportionate during year three of SWPBS implementation as compared with year two of SWPBS implementation, minority students have continued to be disproportionately represented in suspension data. For example, in year three of SWPBS implementation, ethnic minority students represented 30.07% of the students enrolled but were involved in 46.08% of the suspensions. Furthermore, when examined as a whole, ethnic minority students have become more

disproportionately represented in the out-of-school suspension data since the

implementation of SWPBS, as compared with baseline data.

Table 3 and Figure 10 includes information on the proportion of out-of-school

suspensions that involved special education students, compared with the proportion of

special education students accounted for in school enrollment data. Again, these data

indicate that there is little variability (2.1%) in the percentage of special education

students enrolled at the school each year, but that there is a large amount of variability

(13.32%) in the percentage of suspensions involving special education students.

Table 3
Proportion of Suspensions Involving Special Education Students Compared with the Proportion of Enrollment

Year	% of Special Education Students Enrolled	% of Suspensions Involving Special Education Students	Difference
Baseline Year 1	8.90	13.51	-4.61
Baseline Year 2	8.45	18.05	-9.6
Baseline Year 3	7.54	15.75	-8.21
SWPBS Year 1	7.93	28.02	-20.09*
SWPBS Year 2	6.88	20.93	-14.05*
SWPBS Year 3	7.58	32.17	-24.59*

Note. (+) Indicates that the % of students is greater than the % of suspensions
- Indicates suspensions is greater than the % of students
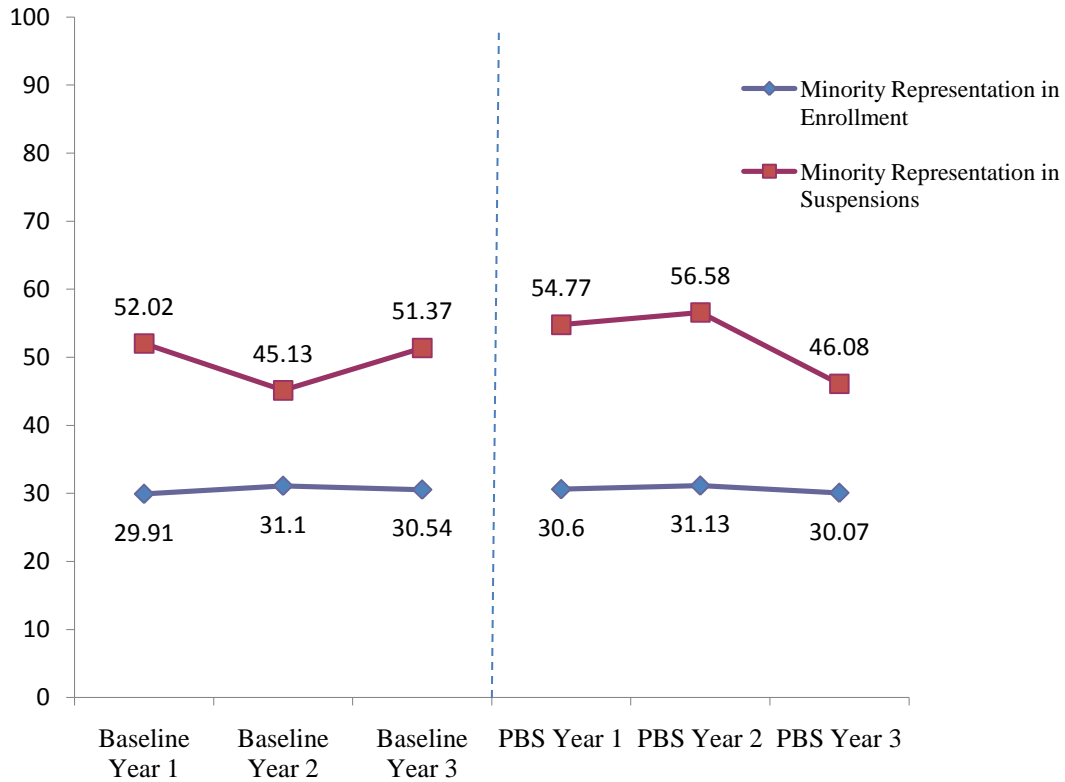* Indicates disproportionate representation
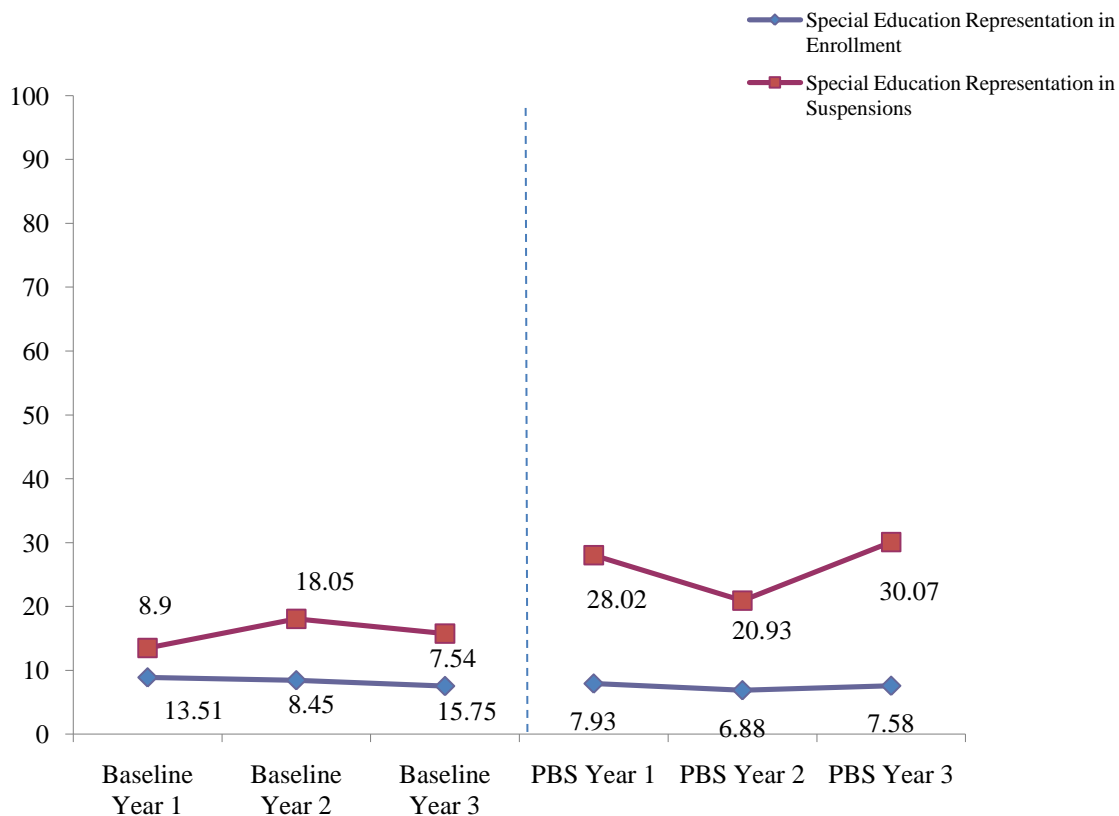
Figure 10. Proportion of Suspensions Involving Special Education Students Compared with Enrollment.

These data do not indicate that there are more proportionate numbers of out-of-school suspensions involving special education students, as compared with their enrollment after the implementation of SWPBS. Rather, data indicate that the implementation of SWPBS has resulted in a more disproportionate number of incidents of out-of-school suspensions involving special education students, as compared with their enrollment after the implementation of SWPBS. This is evidenced by the fact that the percentage of out-of-school suspension incidents involving special education students exceeds this group's percentage of enrollment by over 10 percent.

Table 4 and Figure 11 include information on the proportion of out-of-school suspensions that involved Caucasian students, compared with the proportion of

Caucasian students accounted for in school enrollment data. These data presented in this

table and figure indicate that Caucasian students have been consistently represented in

school enrollment for the previous six years. Although this group's representation in out-

of-school suspensions has varied slightly during the previous six years, data indicate that

Caucasian students have historically been underrepresented in the suspension data, given

their representation in the schools population. This is evidenced by the fact that the

percentage of out-of-school suspension incidents involving Caucasian students is lower

than this groups' percentage of enrollment by greater than 10% during every school year

that data were collected.   This is in contrast to the over-representation of ethnic minority

students that was presented above.

Table 4
Proportion of Suspensions Involving Caucasian Students Compared with Proportion of Enrollment

Year	% of Caucasian Student Enrolled	% of Suspensions Involving Caucasian Students	Difference
Baseline Year 1	70.09	47.97	+22.12*
Baseline Year 2	68.89	54.86	+14.03*
Baseline Year 3	69.46	48.63	+20.83*
SWPBS Year 1	69.40	45.22	+24.18*
SWPBS Year 2	68.86	43.41	+25.45*
SWPBS Year 3	69.93	53.91	+16.02*

Note. (+) Indicates that the % of students is greater than the % of suspensions
- Indicates % of suspensions is greater than the % of students

* Indicates disproportionate representation
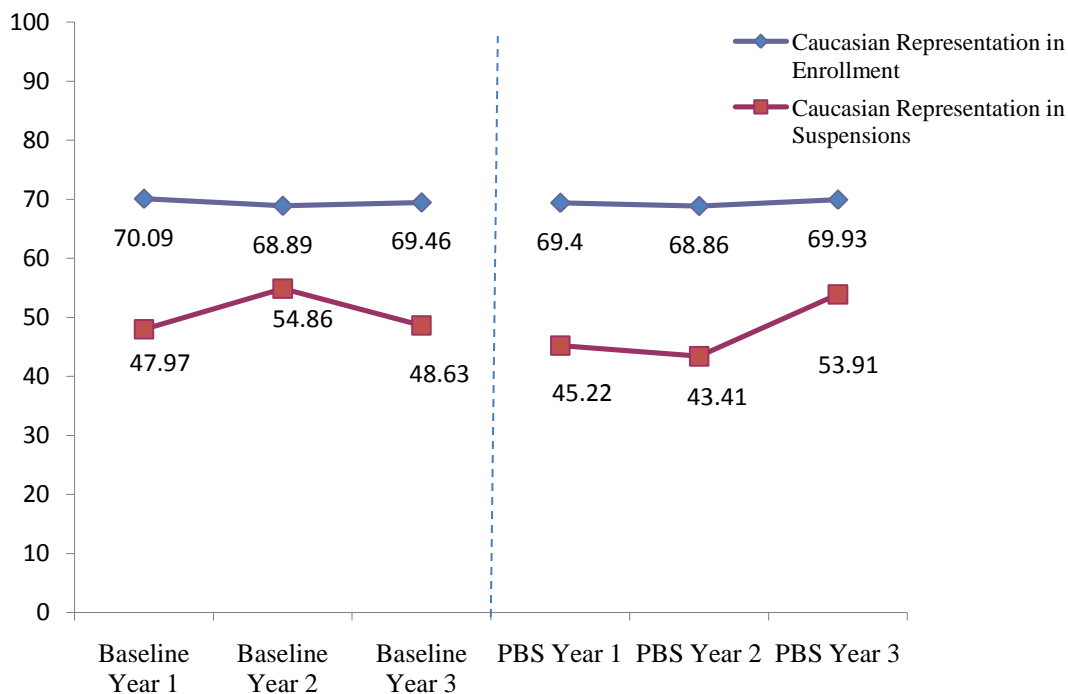
Figure 11. Proportion of Suspensions Involving Caucasian Students Compared with Enrollment

Table 5 and Figure 12 include information on the proportion of out-of-school suspensions that involved general education students, compared with the proportion of general education students accounted for in school enrollment data. These data presented in Table 5 and Figure 12 indicate that general education students were underrepresented in the suspension data during baseline year one and all three years of SWPBS implementation. This is evidenced by the fact that the percentage of out-of-school suspension incidents involving general education students is lower than this group's percentage of enrollment by at least 10% these school years. Years two and three of baseline data collection indicate that general education students were proportionately represented in suspension data, as compared with their representation in school enrollment during years two and three of baseline data collection.

Table 5
Proportion of Suspensions Involving General Education Students Compared with Proportion of Enrollment

Year	% of General Education Students Enrolled	% of Suspensions Involving General Education Students	Difference
Baseline Year 1	91.10	64.86	+26.24*
Baseline Year 2	91.55	81.94	+9.61
Baseline Year 3	92.46	84.25	+8.21
SWPBS Year 1	92.07	71.97	+20.1*
SWPBS Year 2	93.13	79.07	+14.06*
SWPBS Year 3	92.42	67.83	+24.59*

Note. (+) Indicates that the % of students is greater than the % of suspensions
- Indicates suspensions is greater than the % of students
* Indicates disproportionate representation
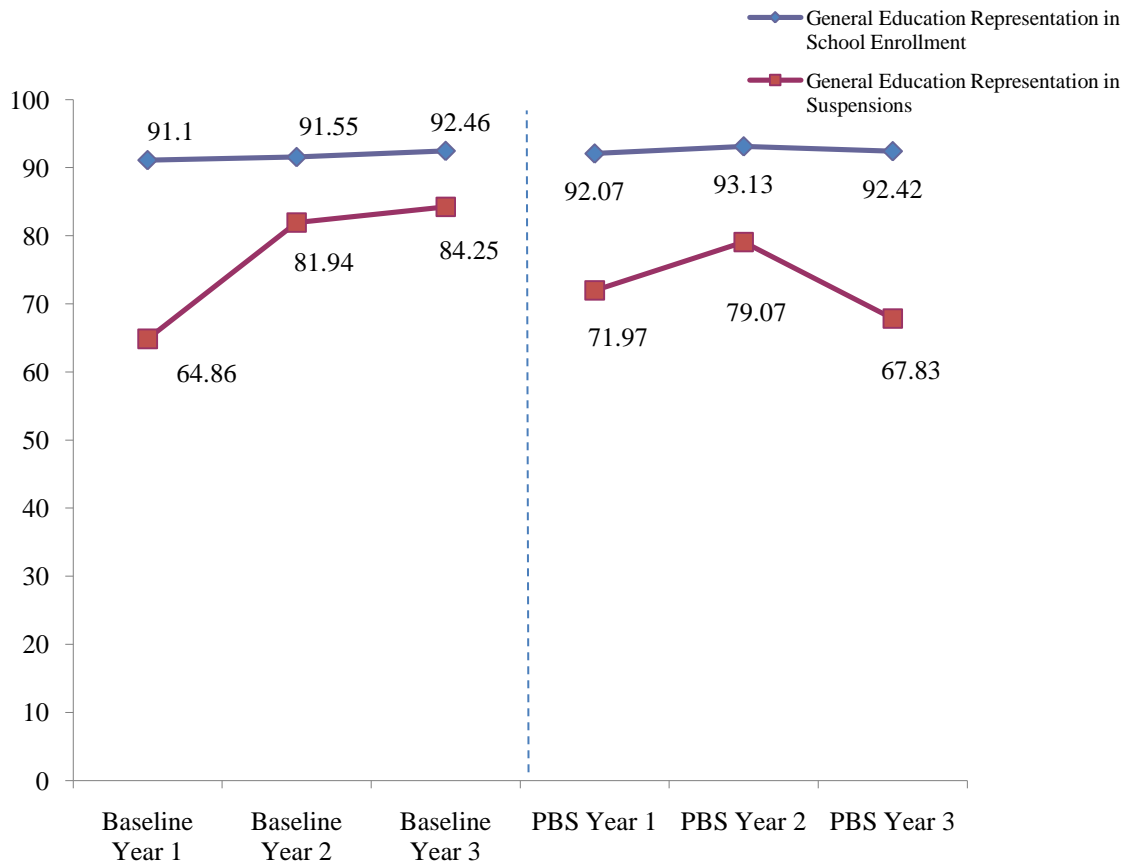
Figure 12. Proportion of Suspensions Involving General Education Students Compared with Enrollment

Figure 13 represents the differences in the percentage of each group's representation in enrollment compared with their representation in incidents of out-of-school suspensions during each school year. Caucasian students and general education students consistently have a lower out-of-school suspension rate than their rate of enrollment. In contrast, ethnic minority and special education students consistently have a higher rate of out-of-school suspension than their rate of enrollment.
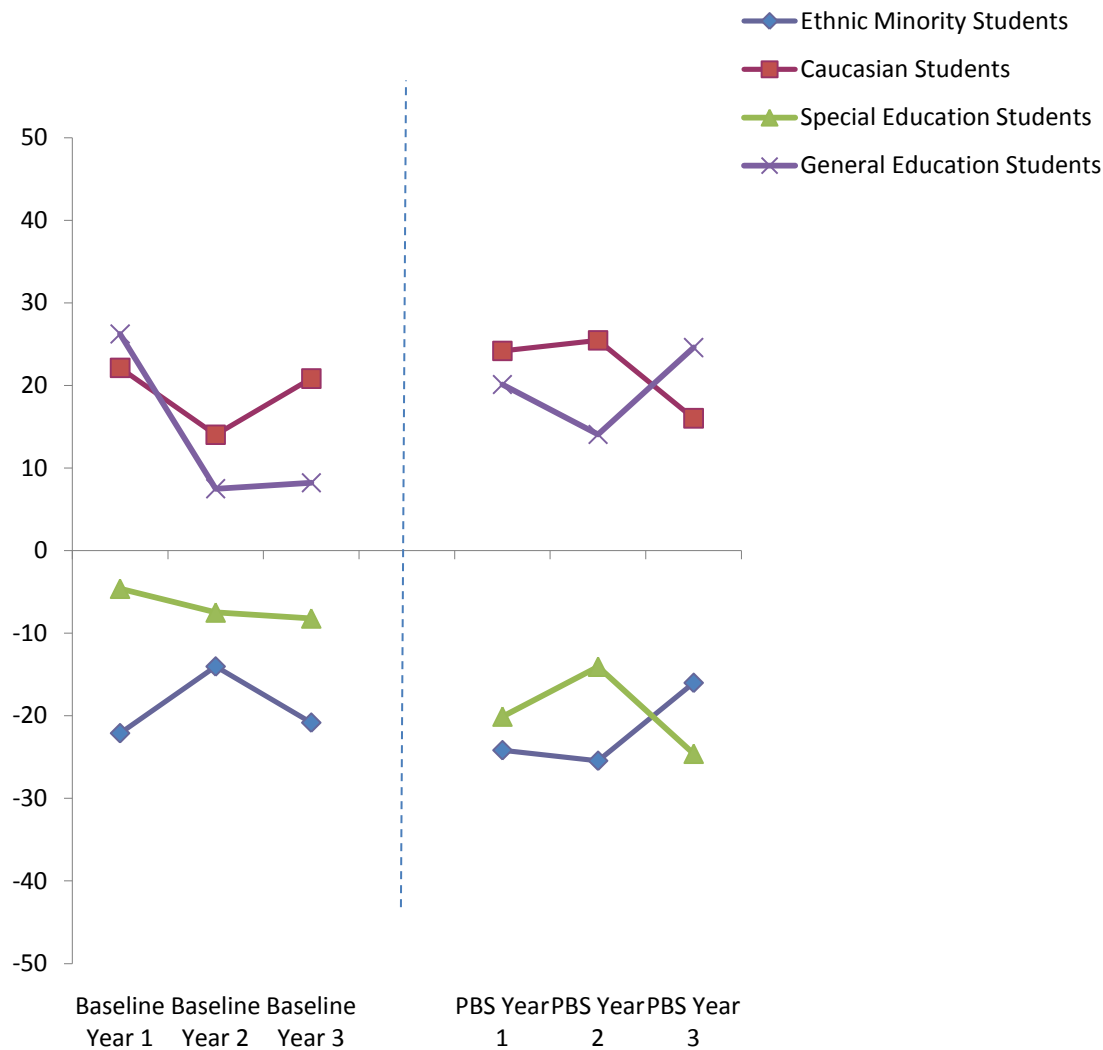
Figure 13. Comparison of Differences in Out-of-School Suspension Rates by Group

Research Question 4

Is the probability equal that a disciplinary incident resulting in an out-of-school suspension will involve an ethnic minority, Caucasian, general education, or special education students during each school year?

Research Question 4 was addressed by dividing the total number of suspensions for students in each group (ethnic minority, Caucasian, special education, and general education) for each school year by the total number of students in that group according to

each year's enrollment data. That number was multiplied by 100 to yield the number of

suspensions that occurred per 100 students in that group. This number allowed for a

standardized comparison of suspension rates across each of the groups because these

groups were not equal in size (i.e. there were far fewer ethnic minority than Caucasian

students at the school).

The data in Figure 14 shows the number of suspensions per 100 students for

ethnic minority and Caucasian students. Based on past data, ethnic minority students

have had a greater chance than Caucasian students of being involved in a disciplinary

incident resulting in an out-of-school suspension. This is true for data collected both

before and after the implementation of SWPBS. Baseline data collected during the first

three years of the study indicate an ethnic minority student was consistently more likely

than a Caucasian student to be involved with an incident of suspension.   Although the

incident rate of out-of-school suspensions involving ethnic minority students has

remained higher than the incident rate of out-of-school suspensions involving Caucasian

students since the implementation of SWPBS, data indicate that the discrepancy between

the two groups has decreased. For example, during year one of SWPBS implementation,

an ethnic minority student was 2.75 times more likely than a Caucasian student to be

involved in an out-of-school suspension. However, during years two and three of

SWPBS implementation, an ethnic minority student was 1.9 times more likely than a

Caucasian student to be involved in an incident of out-of-school suspension.

Finally, the data presented in Figure 14 indicate that the percentage of suspension

incidents involving ethnic minority students has decreased during years two and three of

SWPBS, as compared with baseline data and with year one of SWPBS implementation.

In contrast, the likelihood of a Caucasian student being involved in a suspension incident has remained relatively stable since the implementation of the program.
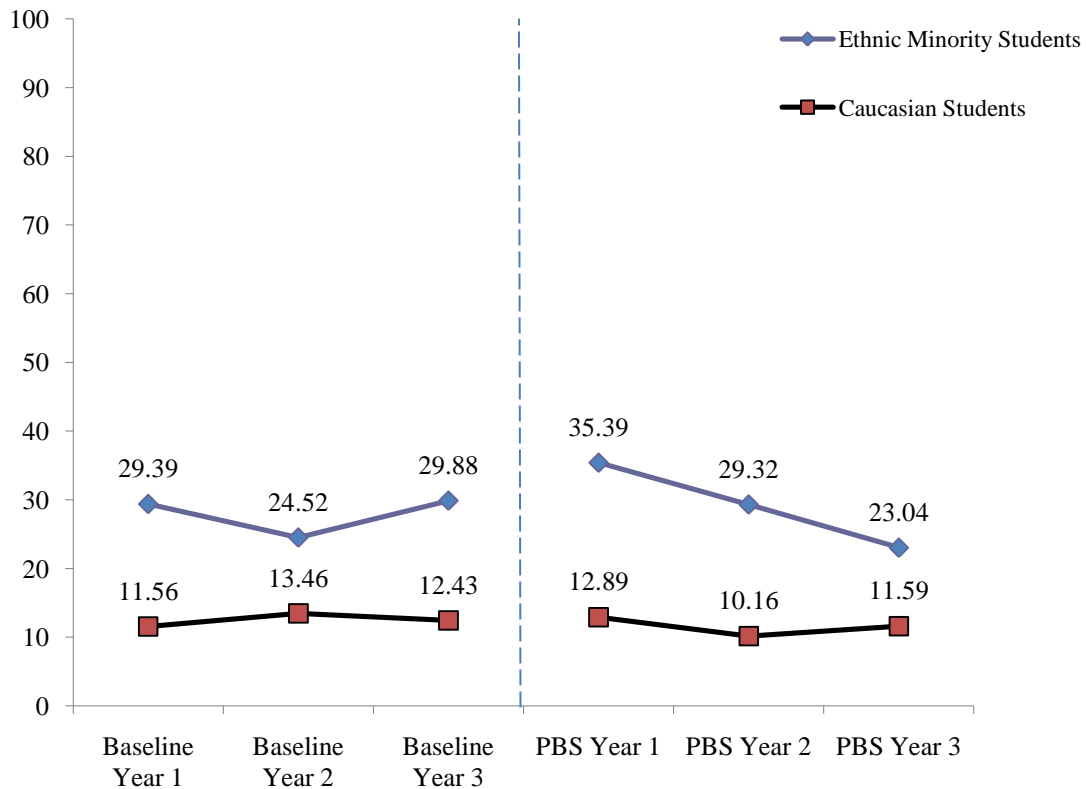
Figure 14. Incident Rates of Out-of-School Suspensions for Ethnic Minority and Caucasian Students

These data in Figure 15 show the number of suspensions per 100 students for special education and general education students. These data indicate that when differences in the population sizes of special education and general education students are controlled, special education students have a greater chance than general education students of being involved in a disciplinary incident that results in an out-of-school suspension. Baseline data collected during the first three years of the study indicate a special education student was 1.6, 1.9, and 2.3 times more likely than a general education student to be involved with an incident of suspension. This likelihood has increased

since the implementation of SWPBS, with special education students being 4.5, 3.5, and

5.8 times more likely than a general education student to be involved in an incident of

out-of-school suspension.
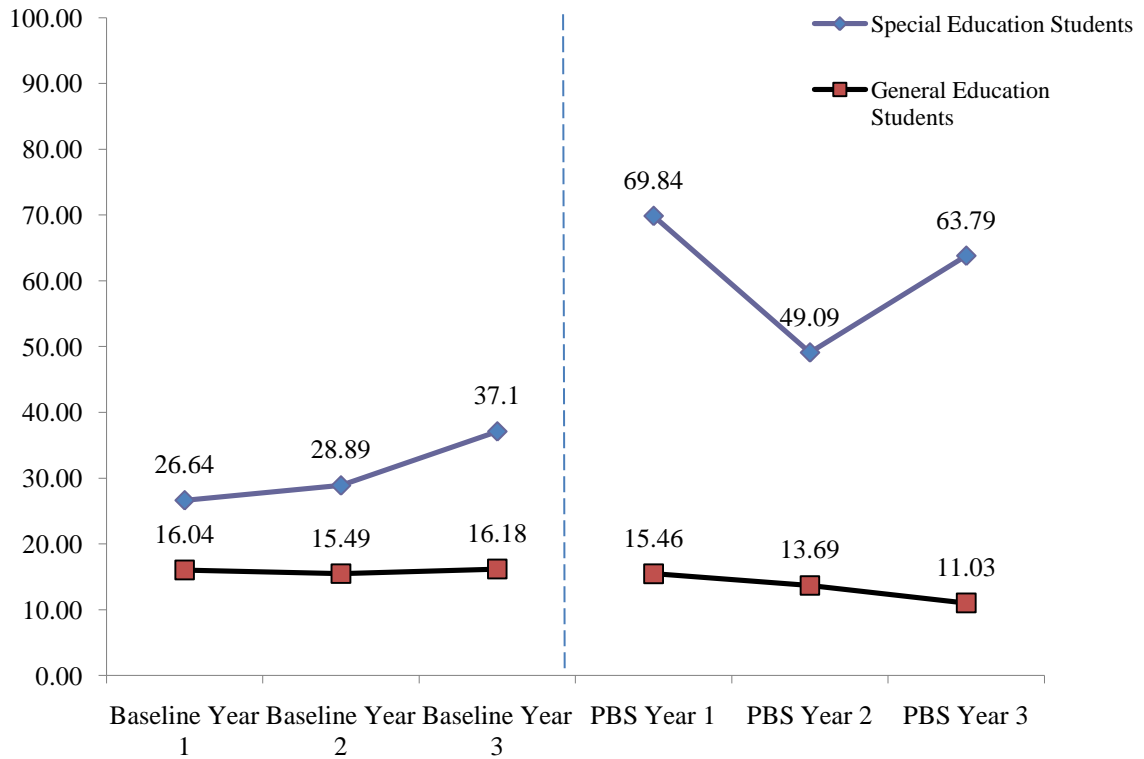
Figure 15. Comparison of Suspensions between Special Education and General
Education Students

Table 6 includes information on the percentage of ethnic minority students who

are also receiving special education services. The data in this table indicate that during

baseline year three and during years one and two of SWPBS, ethnic minority students

were also disproportionately represented in special education.

Table 6
Proportion of Ethnic Minority Students in Special Education

Year	% of Ethnic Minority Students Enrolled	% of Ethnic Minority Students in Special Education	Difference
Baseline Year 1	29.91	33.33	-3.42
Baseline Year 2	31.10	38.88	7.78
Baseline Year 3	30.54	44.44	-13.9*
SWPBS Year 1	30.60	44.44	-13.84*
SWPBS Year 2	31.13	52.72	-21.59*
SWPBS Year 3	30.07	28.58	1.49

Note. (+) Indicates that the % of ethnic minority students enrolled is greater than % in special education
- Indicates % of ethnic minority students in special education is greater than the percentage enrolled

Research Question 5

Are out-of-school suspensions resulting from mild, moderate, and severe disciplinary infractions equally divided across ethnic minority, Caucasian, special education, and general education students?

Research Question 5 was addressed initially by calculating the total number of suspensions for each infraction category (mild, moderate, severe). Next, the number of suspensions for each category for ethnic minority, Caucasian, general education, and special education students was calculated. The combined number of infractions in each category was then divided by the number of infractions in the same category committed by each group. This resulted in a percentage of suspension for each category of infraction accounted for by each group. These numbers were then compared with the percentage of students in each group so that the over or under-representation of the group in each category of infraction could be determined. Reschly's ten percent standard was

again applied to determine disproportionality. If the group's representation in the incident category exceeded its representation in the population by 10%, it is denoted by a "+" symbol to indicate overrepresentation. In contrast, if the group's representation in the incident category was at least 10% lower than their representation in the population, it is denoted by a "-" symbol to indicate underrepresentation.

Table 7 includes information on the proportion of out-of-school suspensions for mild disciplinary infractions that involved ethnic minority, Caucasian, general education, and special education students. As shown in Table 7, ethnic minority students have consistently experienced a much greater percentage of suspensions for mild disciplinary infractions than would be expected given their representation in the population. For example, ethnic minority students made up only 29.91% of the student population during year one of data collection; however, they made up 60.24% of the total suspensions for those suspensions related to mild disciplinary infractions. In contrast, Caucasian students experienced a much smaller percentage of suspensions for mild disciplinary infractions than would be expected, given their representation in the population. The only year that Caucasian students were not underrepresented in this category of infraction was the most recent year (SWPBS year three) that data were collected.

Table 7
Distribution of Suspensions for Mild Infractions

Year	Ethnic Minority	Caucasian	General Education	Special Education
Baseline Year 1	60.34 (29.91)+	39.65 (70.09)-	91.37 (91.10)	8.62 (8.90)
Baseline Year 2	51.47 (31.10)+	48.53 (68.89)-	85.29 (89.44)	14.71 (10.56)
Baseline Year 3	65.52 (30.54)+	34.48 (69.46)-	84.48 (92.46)	15.52 (7.54)
SWPBS Year 1	60.00 (30.60)+	40.00 (69.40)-	82.67 (92.07)-	17.33 (7.93)+
SWPBS Year 2	58.00 (31.13)+	42.00 (68.86)-	78.00 (93.03)-	22.00 (6.88)+
SWPBS Year 3	40.43 (30.07)+	59.57 (69.93)-	61.70 (92.42)-	38.30 (7.58)+

Note. The first number denotes in the table represents the % of suspensions for infraction category. The second number denotes the % of enrollment.
+ Indicates overrepresentation in incident category
- Indicates underrepresentation in incident category

During baseline data collection, the percentages of suspensions for general education and special education were proportionate, and reflective of their representation in the population. However, data collected after the implementation of SWPBS indicate that special education students have become over represented in this infraction category. During the most recent year of data collection special education students were suspended five times as often as would be expected, given their representation in the population. In contrast, general education students have become underrepresented in this infraction category. For example, although they represented 92.42% of the population during the most recent year of data collection, they represented only 61.70% of the total suspensions for mild disciplinary infractions.

Table 8 includes information on the proportion of out-of-school suspensions for moderate disciplinary infractions that that involved ethnic minority, Caucasian,

general education, and special education students. As shown in Table 8, ethnic minority

students have been overrepresented in suspensions for moderate disciplinary infractions

during each year that data were collected, with the exception of year two of baseline data

collection. In contrast, Caucasian students have consistently been underrepresented in

this infraction category, with the exception of year two of baseline data collection. In

addition, special education students have experienced a much greater percentage of

suspensions in this category than would be expected, given their demographic

representation in the population.

Table 8
*Distribution of Suspensions for Moderate Infraction*s

Year	Ethnic Minority	Caucasian	General Education	Special Education
Baseline Year 1	50.00 (29.91)+	50.00 (70.09)-	81.08 (91.10)-	18.91 (8.90)+
Baseline Year 2	40.00 (31.10)	60.00 (68.89)	76.92 (89.44)-	23.08 (10.56)+
Baseline Year 3	43.04 (30.54)+	56.96 (69.46)-	84.10 (92.46)	15.19 (7.54)
SWPBS Year 1	50.65 (30.60)+	49.35 (69.40)-	62.33 (92.07)-	37.66 (7.93)+
SWPBS Year 2	46.58 (31.13)+	43.42 (68.86)-	78.95 (93.03)-	21.05 (688)+
SWPBS Year 3	52.31 (30.07)+	47.69 (69.93)-	72.31 (92.42)-	27.69 (7.58)+

Note. The first number denotes in the table represents the % of suspensions for infraction category. The second number denotes the % of enrollment.
+ Indicates overrepresentation in incident category
- Indicates underrepresentation in incident category

Table 9 includes information on the proportion of out-of-school suspensions

for severe disciplinary infractions that that involved ethnic minority, Caucasian, general

education, and special education students. As shown in Table 9, ethnic minority students

received a greater percentage of suspensions for severe disciplinary infractions than

would be expected, given their representation in the population during the first and third years of SWPBS. In contrast, Caucasian students experienced a lower percentage of suspensions that would be expected, given their representation in the population during these two years. Special education students experienced a much higher percentage of suspensions for severe disciplinary infractions than would be expected, given their representation in the population during year three of baseline data collection, and years one and three of SWPBS implementation.

Table 9
Distribution of Suspensions for Severe Infractions

Year	Ethnic Minority	Caucasian	General Education	Special Education
Baseline Year 1	31.25 (29.91)	68.75 (70.09)	93.75 (91.10)	6.25 (8.90)
Baseline Year 2	36.36 (31.10)	63.63 (68.89)	90.90 (89.44)	9.09 (10.56)
Baseline Year 3	33.33 (30.54)	66.66 (69.46)	77.77 (92.46)-	22.22 (7.54)+
SWPBS Year 1	40.00 (30.60)	60.00 (69.40)	60.00 (92.07)-	40.00 (7.93)+
SWPBS Year 2	33.33 (31.13)	66.66 (68.86)	100.00 (93.03)	0 (6.88)
SWPBS Year 3	0 (30.07)-	100.00 (69.93)+	66.66 (92.42)-	33.33 (7.58)+

Note. The first number denotes in the table represents the % of suspensions for infraction category. The second number denotes the % of enrollment.
+ Indicates overrepresentation in incident category
- Indicates underrepresentation in incident category

Chapter 5

Discussion

As public concern regarding school safety has grown in recent years, out-of-school suspension has occurred with increasing frequency in response to student misbehavior in order to maintain a positive educational climate in schools (Brooks, Schiraldi, & Zeidenberg, 1999). Although the impact of out-of-school suspension continues to be debated, research indicates that it is not always reserved for the most severe and dangerous disciplinary infractions (Skiba et al., 1997), nor or is it used consistently across the student populations (Tobin, Sugai, & Colvin, 1996). Additionally, suspensions often fail to take into account the context of a student's behavior (Verdugo, 2002) and instead may reflect school staff's misperceptions, personal biases, and lack of cultural knowledge (Varvus & Cole, 2002). This often results in a disproportionately large number of ethnic minority and special education students who receive out-of-school suspensions and subsequently miss valuable instructional time (Costenbader & Markson, 1998).

The high suspension rates of ethnic minority and students with disabilities have serious implications for our society. Suspensions have been clearly linked to a variety of negative outcomes for students, some of which include academic failure, negative school attitudes, grade retention, and school dropout (Brooks et al., 1999; Leone et al., 2003; Skiba et al., 2003). Therefore it is critical for schools to address this problem for these already vulnerable children and youth. Recently, Schoolwide Positive Behavior Support (SWPBS) has emerged as an alternative model to suspension as a means of behavior management. An emerging body of research has provided evidence that the

implementation of universal systems of school-wide behavior support can potentially decrease the overall rate of problem behavior and suspension in schools (Nakasato, 2001; Scott, 2001; Sugai et al., 2000; Taylor-Greene & Kartub, 2000). However, less is known specifically about the impact that universal SWPBS has on decreasing the out-of-school suspension rate of ethnic minority and special education students. Although initial studies demonstrate that SWPBS can be effective in reducing the out-of-school suspension rates of ethnic minority students, more research is needed to further explore the potential impact that SWPBS can have on ethnic minority students and on students with disabilities (Dolan, 2009; Eber, Upreti, & Rose, 2010).

The current study examined the out-of-school suspension data of a middle school over a period of six years to determine if (a) the overall number of out-of-school suspensions decreased after the implementation of SWPBS, (b) the number of suspensions of ethnic minority and special education students decreased after the implementation of SWPBS, and (c) ethnic minority students and students with disabilities became more proportionately represented in out-of-school suspension data after the implementation of SWPBS. Disciplinary incidents that resulted in out-of-school suspension and school enrollment data were used to obtain these rates. Additionally, incidents were disaggregated into three levels of severity in order to determine if differences existed among the types of infractions that resulted in out-of-school suspensions. The overall purpose of this study was to determine the outcome that SWPBS can potentially have on the disproportionate use of suspension practices. It was predicted that (a) the school's overall out-of-school suspension rate would be lower after the implementation of SWPBS and that (b) the out-of-school suspension rates of ethnic

minority and special education students would be lower, and more proportionate after the implementation of SWPBS, when compared with baseline data.

SWPBS and Overall Out-of-School Suspension Rates

The results of the current study demonstrate that the school utilized in the study experienced a reduction in its overall out-of-school suspension rate and remains on a decreasing trend after the implementation of SWPBS, as compared with baseline data collected. These results support the growing body of research indicating that the implementation of SWPBS results in a reduced frequency in the occurrence of problem behaviors that warrant office discipline referrals (Barret, Bradshaw & Lewis-Palmer, 2008) and a reduction of infractions that justify an out-of-school suspension (Horner et al., 2009; Scott, 2001). The results of the current study also support Taylor-Greene & Kartub's (2000) findings that schools are likely to experience continual declines in out-of-school suspension rates during each year of successive SWPBS implementation.

Although the school utilized in the current study did not experience reductions in their out-of-school suspension rate until after the second full year of the implementation, Eber and her colleagues (2010) report that this is not unusual. Typically, the first year of SWPBS implementation is a time of significant adjustment for a school. School staff is still learning about the theoretical basis for the program and are still being trained on the policies and procedures related to SWPBS. Additionally, staff buy-in may be lower during the first year of implementation than during successive years of implementation because teachers and administrators have not yet experienced the positive outcomes of the program (Horner et al., 2009). Therefore, the program may not be implemented with as much fidelity during the initial year of implementation as it is during later years.

Because of these variables, Eber and her colleagues (2010) argue that schools are not typically able to observe the full benefits of SWPBS until they have completely and successfully transitioned to the model.

It is also important to note that although the school utilized in the current study had a SET score of 80/80 during the 2009-2010 academic school year, indicating that it had reached an appropriate level of program implementation at the universal level, the SWPBS framework was adopted only during the 2007-2008 school year; therefore, full implementation of the program has not been reached. Research demonstrates that schools implementing a comprehensive continuum of interventions at the universal, secondary, and tertiary levels, and a proactive systematic identification of students-at - risk for behavioral problems are more likely than schools who have not yet reached full implementation to experience drastic reductions in out of school suspension rates (Lewis & Sugai, 1999; Sugai et al., 2005). However, research also demonstrates that a school must become proficient in implementing prevention strategies at the universal level (indicating that systems change has taken place) before it can effectively implement intervention strategies at the secondary and tertiary levels (Kutash, Duchnowski, & Lynne, 2006; McKevitt & Braaksma, 2008; Walker, Ramsey, & Gresham, 2005). This typically takes a three to five year commitment from schools (Sugai & Horner, 2002). Therefore, the school utilized in the current study may be expected to continue to experience reductions in its out-of-school suspension rate as it reaches full SWPBS implementation.

Distribution of Overall Suspensions by Infraction

Data collected from the current study indicate that since the implementation of SWPBS, the majority of infractions that result in out-of-school suspensions are for moderate disciplinary infractions. One possible explanation for this finding is that out-of-school suspensions may not be reserved for the most severe disciplinary infractions (Raffaele Mendez & Knoff, 2003). However, another more likely argument may be that many of the infractions within this category are often more serious in nature despite the fact that they are not categorized as "severe". For instance, although a physical attack is coded within the category of moderate infractions, the level of severity of the actual attack may vary. Therefore, many of these infractions may warrant an out-of-school suspension.

Since the implementation of SWPBS, the number of out-of-school suspensions resulting from mild disciplinary infractions has decreased. This finding is hopeful, because it indicates that SWPBS may indeed help to reduce schools' overreliance on exclusionary discipline such as suspension, especially for disciplinary infractions that are mild in nature. In addition, these findings indicate that the school in the current study has been successful in implementing discipline alternatives prior to out-of-school suspension. These findings also indicate that staff may be better equipped to deal with minor disciplinary infractions in the classroom, rather than making a formal discipline referral.

Suspension Rates of Ethnic Minority Students

The results of the current study indicate that although the percentage of out-of-school suspensions involving ethnic minority students decreased from year two to year three of SWPBS implementation, the percentage of out-of-school suspensions involving

ethnic minority students has not consistently declined since the implementation of the

program in 2007. For example, data indicate that the percentage of out-of-school

suspensions of ethnic minority students was greater during year three of SWPBS

implementation than it was during Baseline Year Two of data collection; however, data

from year two and three of SWPBS implementation indicate that the out-of-school

suspension rate of ethnic minority students decreased by approximately 10 percent.

These results may indicate that the out-of-school suspension rate of ethnic

minority students is likely to continue to decrease as the school reaches full

implementation of the SWPBS program. These results are consistent with the Eber and

colleagues (2010) study, which found that the reductions in the out-of-school suspension

rate of ethnic minority students were more noticeable for schools fully implementing

SWPBS, as compared with schools with partial or emerging implementation. With

respect to improved outcomes for ethnic minority students, Eber et al. (2010) cite that in

addition to the implementation of SWPBS, schools demonstrating the greatest progress in

addressing the problem of disparity in discipline practices share several critical features.

These include the following: (a) data collection and regular use of reliable and effective

data systems, (b) implementation of multi-tiered systems of school-wide recognition, (c)

response and support for students struggling with behavioral issues, (d) positive

relationships among students and staff, (e) inclusion of family/community as active

participants in school-level efforts, (f) willingness to engage in conversations that take

them beyond their comfort levels, and (g) allowing data to guide those conversations.

Disproportionally of Ethnic Minority Students

The current study found that despite the reduction in the out-of-school

suspensions of ethnic minority students after the implementation of SWPBS, this group

has continued to be overrepresented when compared with their own proportion of

enrollment. Additionally, when data were organized to compare groups, ethnic minority

students have continued to be over-represented, compared with Caucasian students. Such

findings are not new, and have been reported in the literature extensively (Costenbader &

Markson, 1998; McFadden et al., 1992; Skiba et al., 2006).   In spite of this finding,

comparisons of pre and post SWPBS data do indicate that since the implementation of the

program, the disparity has decreased, with a slightly better proportionate rate of

enrollment and out-of-school suspensions of ethnic minority students during the third

year of SWPBS implementation. Therefore, the findings of the current study are hopeful

because they demonstrate that the sustained implementation of a universal SWPBS

program can result in, to an extent, more proportionate out-of-school suspension rates of

ethnic minority students.

Distribution of Suspensions by Infraction for Ethnic Minority Students

Since the implementation of SWPBS, ethnic minority students are much less

likely to receive out-of-school suspensions for mild disciplinary infractions. For

example, data indicate that the percent of mild incidents for which ethnic minority

students were suspended has decreased by approximately 17% since year one of SWPBS

implementation. This finding is hopeful, because it may indicate that since the

implementation of SWPBS, the school may have developed alternative ways in which

respond to mild disciplinary infractions. It may also indicate that the number of

behavioral infractions that these students engage in may possibly have decreased as a result of universal level SWPBS strategies.

Similar to trends in their overall suspension rates, ethnic minority students have consistently been overrepresented in out-of-school suspensions resulting from both mild and moderate disciplinary infractions for the previous six school years; however, they have not been over-represented in data for severe infractions. Therefore, although ethnic minority students engage in disciplinary infractions that are less severe, they may be disciplined with one of the more severe disciplinary consequences. This finding lends further support to the hypothesis that ethnic minority students may be punished for less severe rule violations than are Caucasian students (Shaw & Braden, 1990).

Explanations of Disproportionally of Ethnic Minority Students

Despite the findings from this study, which indicate that ethnic minority students are over-represented in out-of-school suspensions, the reason indicating why they are over-represented remains unclear. One plausible explanation would be that ethnic minority students demonstrate higher rates of misbehavior that would result in disproportionate rates of discipline. This information as it relates to the current study is unknown; however, previous studies indicate that ethnic minority students do not engage in higher rates of problem behaviors than do other students (Skiba et al., 2002). In fact, there is evidence that ethnic minority students are punished for less severe infractions than are Caucasian students (Shaw & Braden, 1990).

It is plausible that the over-representation of ethnic minority students may be related to the cultural and social challenges associated with meeting the diverse needs of this population (Skiba & Rausch, 2006). This possibility is supported by Vavrus & Cole,

2002, who found that the disproportionate use of suspensions result from a complex

interplay of sociocultural factors at the classroom and school levels (Vavrus & Cole,

2002). It is likely that a combination of these factors play a role in the over-

representation of ethnic minority and special education students, although the precise role

of these factors cannot be ascertained from the data collected in the current study. These

factors, which include cultural misinterpretations, classroom management techniques,

and perceptions both of a classroom teacher and of a student, may only be moderately

addressed during the first several years of SWPBS implementation when universal

interventions tend to focus on the more general adoption of school-wide policies and the

teaching of behavioral expectations. However, by using data objectively to identify areas

that need improvement, schools will be able to better identify where their weaknesses

exist and design specific and targeted interventions to address these areas in successive

years.

Suspension Rates of Students with Disabilities

In contrast to the overall out-of-school suspension rate, the results of the current

study do not reflect a reduction in the out-of-school suspension rate of special education

students since the implementation of SWPBS. Rather, data collected from the past six

years indicate that the out-of-school suspension rates of special education students has

increased since the implementation of SWPBS during the 2007-2008 academic school

year. One possible reason that the out-of-school suspension rates of special education

students increased after the implementation of universal SWPBS is that strategies geared

towards the general population of students may not be effective for special education

students. By definition, students in special education need accommodations,

modifications, or both during academic skill instruction (IDEA, 2002); therefore, one

would expect this population to require some level of modification or specialized

instruction to learn school-wide expectations (Hawken & O'Neill, 2006). Typically, the

student body is taught behavioral expectations of the SWPBS program in a large group

setting at the beginning of school year and booster sessions may be provided throughout

the year to promote appropriate behavior. In addition, schools usually develop some kind

of token system, which provides teachers with a mechanism to acknowledge students

who are following school-wide expectations. The purpose of this level of support is to

impact most of the student population (Turnbull et al., 2002); however, those students

with disabilities may not be able to benefit from the typical teaching of behavioral

expectations in the same manner as their peers who have no disabilities. For example,

although a student with an emotional disability may be able to access the contingencies of

the universal SWPBS program physically, he or she may not be emotionally accessible to

the contingencies because of his or her depressed mood or anxious behavior. A student

with a receptive language disorder may need behavioral expectations to be presented in a

modality other than a large group format. This may include a small group setting,

simplified explanation, one on one instruction, or supplemental picture cues. For a

student with Attention Deficit Hyperactivity Disorder (ADHD), school-wide token

reinforcement systems may be too abstract, too greatly delayed, or both for some students

to make meaning or derive benefit (Hawken & O'Neill, 2006).

　　　　Additionally, the implementation of SWPBS in the current study was measured

through administration of the SET. Although this measure is useful in measuring many

aspects of SWPBS implementation, it does not clearly stipulate the involvement of

students who have already been identified with disabilities or students who are at risk for being classified for special education (Brown & Michaels, 2006). For example, the SET requires that the random sampling of 15 students take place to determine the extent to which each student knows the school-wide expectations and to determine whether or not they have received acknowledgement for appropriate behavior within the past month (Horner, et al., 2004). It does not, however, require that interviews with students with disabilities take place. Therefore, schools may receive high SET scores whether or not students with disabilities have been included in the school-wide behavior system.

Although students in special education should be involved in the training, monitoring, and feedback activities of universal SWPBS, this may prove to be a challenge for educators. One possible explanation for this is that many students in special education have already demonstrated the need for secondary and tertiary levels of support; therefore, educators may presuppose that these students should be involved exclusively in secondary and tertiary-level interventions. Furthermore, students with more severe disabilities may be educated in settings different from general education students (Ryndak & Billingsle, 2004). According to federal data, over 50% of students who qualify for special education under the categories of an emotional disability, intellectual disability, or autism spend the majority of their days outside the general education setting (Office of Special Education Rehabilitative Services, 2002). Self-contained environments, such as those of life-skill or emotional support programs often have a "school within a school" type setting where the responsibility for the students falls primarily on the special education teachers who are involved in administering their Individualized Education Plans (IEPs; Ryndak & Billingsley, 2004). Although special

education teachers that serve students with severe disabilities typically have extensive

training in the implementation of tertiary level interventions, they may not have training

in the area of universal level intervention. In addition, special educators may place much

of their daily focus on preventing some of the more severe problem behaviors that these

students can demonstrate rather than focusing on teaching school-wide expectations.

Disproportionally of Students with Disabilities

The current study also found that special education students continue to be

overrepresented when compared to their proportion of enrollment. This finding is

consistent with previous research documenting disproportionate suspensions of students

with disabilities (Cooley, 1995; Leone et al., 2000; Zhang et al., 2004). Another

interesting finding that is indicated when baseline data are compared to data collected

since the implementation of SWPBS, is that the over-representation of special education

students has increased. During the three years prior to the implementation of the

program, special education students were proportionately represented in out-of-school

suspensions and have since become disproportionately over-represented.   This finding is

consistent with several recent studies which indicate that the SWPBS model used in most

schools may not be as effective for students who have already been identified as having a

disability as is it is for students without disabilities (Brown & Michaels, 2006; Crimmin

& Farrell, 2006). Theoretically, special education students should be able to benefit from

the SWPBS program more fully than all other subgroups of students because they could

potentially receive multiple layers of support. However, when universal level of supports

are implemented alone, this if not the case, because special education students may not be

able to access all these supports that they need to respond to the program (Snell, 2006).

This may present a problem for schools that have partial or emerging implementation of

the program. The implementation SWPBS model suggests that it is necessary to

implement universal supports first and then move on to the implementation of targeted

and intensive supports. Because this process typically takes three to five years, it may

inadvertently divert resources from students with more severe and challenging behaviors

(Carr, 2006; Crimms & Farrell, 2006).

Distribution of Suspensions by Infraction for Students with Disabilities

Since the implementation of SWPBS, special education students have consistently

been over-represented in the number of suspension incidents resulting from mild and

moderate disciplinary infractions. With the exception of SWPBS year two, this group

has also been over-represented in severe disciplinary infractions. Additionally, special

education students have received out-of-school suspensions for infractions related to mild

disciplinary infractions since the implementation of SWPBS. There may be several

explanations for these findings. One explanation is that general education teachers who

typically implement universal interventions may lack the skill set to implement SWPBS

with sensitivity and attention directed towards the nature of a student's disability. As

Hawken and O'Neill (2006) note, making universal strategies work for students with

disabilities would entail modification in how one trains behavioral expectations, and also

how to assess whether or not these methods are effective. Without explicit training in

this area, general education teachers may lack this skill set. This problem is further

compounded by the fact that teachers are often expected to apply the same consequences

to all students, regardless of their disabilities. These factors could easily create a climate

in which universal SWPBS leads to a bifurcated system of general education versus special education (Carr, 2006).

Explanations of Disproportionally of Students with Disabilities

Despite these findings, the reasons that students with disabilities continue to be over-represented in out-of-school suspension data are unclear. Currently, there are no studies documenting the fact that students with disabilities display high enough rates of misbehavior to cause disproportionate rates of out-of-school suspension (Leone et al., 2000). If this were to be true, however, it would not be unexpected when considering the nature of the disabilities with which many of these students are diagnosed. For instance, many children with Attention Deficit Hyperactivity Disorder have problems with impulsivity, to the degree that it impacts their social and educational functioning.   These students may not think through the consequences of their actions and may therefore demonstrate more behavioral infractions than their peers, putting them at greater risk of being suspended.

Another reason that students with disabilities may continue to be over-represented in out-of-school suspension data may be related to the training of teachers who deliver universal SWPBS strategies. As discussed previously, the teaching and reinforcing of school-wide expectations often occur within the general education setting. Because these strategies are delivered in the general education setting, they are likely to be delivered by general education teachers.   Although general education teachers are often the first members of the staff to receive trainings about the universal SWPBS framework, they may not be trained on the specific deficits that children in special education often manifest (Krezmien, Achilles, and Leone, 2006). If teachers are not

trained in this area, they may not possess knowledge about how to prevent and address many of the problem behaviors that these students demonstrate (Peshak-George, Kincaid, & Pollard-Sage, 2009). This could possibly result in the over-representation of these students in out-of-school suspension data.

Implications of Findings

Although findings from this study indicate that SWPBS may be the first step in addressing the problem of disproportionally in discipline, data also indicate that the program alone does not remediate the issue. In addition, the findings gleaned from the current study suggest that it cannot be assumed that interventions intended improve behavior will be effective to the same degree for all groups. Existing differences in the use of current disciplinary interventions strongly indicate that for any intervention strategy aimed at reducing such disparities, disciplinary outcome data should be disaggregated, in order to evaluate, explicitly, whether or not SWPBS is equally effective for all groups. As highlighted in the current study, data may be easily disaggregated and analyzed by specific groups, such as special education students and ethnic minorities. By consulting data in this manner, school teams can make decisions about whether or not universal SWPBS strategies are effective for the students involved and what groups are over-represented in the data. If differences in suspensions or other disciplinary consequences do indeed exist, schools can proactively respond by (a) determining the reasons why the differences exist and (b) develop and implement a plan to remediate the problem.

When developing and implementing a plan to remediate the disparate use of discipline, it is important for school teams to adopt an approach that focuses on thinking

through the issues that may surround the over-representation of certain groups (Skiba &

Rausch, 2006). For instance, if a school determines that ethnic minority students are

suspended more often than other students because they are committing more serious

infractions, then the reason why this may be occurring should be examined from an

ecological perspective. If schools were to employ such an approach, they may find that

frequently used classroom materials and teaching strategies are not culturally relevant for

these students. Alternatively, it may be determined that ethnic minority students are

over-represented due to a lack of cultural or socio-behavioral understanding of these

students by school staff. If it is determined that either of these problems may be

contributing to the high suspension rate of this group of students, then they may wish to

increase diversity training for school staff and examine more carefully the way various

behavior problems are handled across specific groups of students.

It is important to highlight the fact that in order to achieve this, schools must be

willing to commit time and resources to determining the reasons why disparities in their

school discipline practices may exist. Too often, educators assume that the inequity and

disproportionate treatment and outcomes in education, such as the over-representation of

some student groups in suspension, are due solely to factors outside of the school's

control (e.g., socioeconomic status, lack of parent engagement, negative role models in

the community). Adopting an ecological perspective that includes examining students'

experiences in the school setting can help schools generate real and applicable solutions

to such problems by changing factors that can be addressed within the context of the

school.

A second important implication of this study is that educators cannot assume that universal SWPBS is equally effective for all students.   The current study provides evidence that universal SWPBS strategies vary in their levels of effectiveness for different groups of students. Although universal strategies may be beneficial for the majority of the student population, there will inevitably be students who require more intensive and targeted interventions. Therefore, it is important for schools to recognize this limitation and work to proactively create appropriate individualized plans for these students in order to ensure their meaningful integration into their school community (Carr, 2010).   This includes training teachers about how to implement universal intervention with the individual student in mind. Additionally, schools must work to proactively implement secondary and tertiary interventions for students already identified with disabilities while simultaneously delivering universal SWPBS strategies.

A wider variety of professionals should become involved in the development of school disciplinary policies. Data collected from this study indicate that students with disabilities are being disproportionately suspended from school. A multi-disciplinary effort can potentially result in the development of disciplinary policies that promote school safety while simultaneously limiting the influence of zero-tolerance practices on students in special education whose problem behaviors may be due to their disabilities.

Recommendations for Future Research

Future investigations into school discipline practices should pursue several areas of examination. First, researchers should find ways to link individual students with the infractions that result in disciplinary suspension. This would allow researchers not only to examine differences and similarities in infractions among students of different races and

disabilities, but it would also allow for an examination of the percentage of the

population that engages in chronic disciplinary infractions. Future research should also

attempt to identify underlying causes of disproportionate infractions by using multilevel

designs to examine the complex ways that the interactions between individual

characteristics and school factors affect patterns of suspensions. For example, research

might examine the risk of suspension for minority students and students with disabilities

at the individual level and then use multilevel analyses to determine whether or not

school factors change the risks observed at the individual level. This research may also

examine how the implementation of SWPBS changes school factors to decrease risk for

these individuals. Additionally, SWPBS implementation at the secondary and tertiary

levels should be examined in order to determine if more intensive levels of intervention

result in better outcomes for ethnic minority and special education students. Finally,

researchers should study associations between suspensions of individuals and long-term

problems such as risk for future suspension or expulsion, dropping out of school, grade

retention, and future involvement with the juvenile justice system.

Limitations

The current study had several limitations that warrant discussion.   The first

limitation is related to internal validity and the relationship between the implementation

of SWPBS and the school's out-of-school suspension rates. Because out-of-school

suspension rates were collected retrospectively and were used as the sole method of

evaluation in the current study, it is impossible to draw causal inferences between the

implementation of SWPBS and the quantitative differences among out-of-school

suspension rates during pre and post baseline data collection. If this study is replicated in

the future, additional data should be collected so that these generalizations can be made.

For example, it would also be beneficial to collect qualitative information regarding

teacher and students perspectives of SWPBS, administrator's beliefs about school

discipline, and measures of school climate.

The second limitation is related to external validity. The current study utilized a

single case study research design and therefore lacked a rigorous experimental design.

These characteristics indicate that the ability to generalize the findings of the study will

be limited to settings with very similar demographics. For example, generalizations

drawn from this study would be most appropriate for rural schools primarily serving

Caucasian students. In addition, discipline policies should be similar to those

implemented in the district used in this study. Even then, because this study utilized only

a single school, generalizations should be made with caution. Because of this, future

research may seek to examine multiple schools in various school districts. Additionally,

this research may utilize a randomized experimental design to better determine the impact

that SWPBS has on out-of-school suspension rates.

Other limitations must also be considered. The information available to complete

the analysis for the current study was limited. Data did not include demographic

information related to individual characteristics of students who were suspended.

Therefore, there was no way to link specific infractions to specific students.

Additionally, data were not collected on gender, grade level, and the socio-economic

status of students who were suspended. This prevented the study from examining

differences that might exist by gender, grade, academic status, socio-economic status, or

by any combination of these factors. This lack of information is considered to be a major

limitation because research suggests that all of these variables may be related to the risk of a student receiving an out-of-school suspension (Skiba, 2008).

Data included in the current study also reflected only the total number of out-of-school suspension incidents during a given school year. They did not reflect the number of students who received out-of-school suspensions. Existing research suggests that a small percentage of students often make up a large percentage of a school's suspensions (Tobin & Sugai, 1999). Therefore, if several students were repeat offenders and chronically engaged in disciplinary infractions, these students would account for a large proportion of the students suspended during that year. Unfortunately, the data reported to MSDE is reflective only of the number of occurrences of suspensions and does not link specific students to a suspension incident. In addition, the data collected from the current study do not indicate if special education students who were suspended were also ethnic minority students.

Finally, the current study analyzed only out-of-school suspension data at the school level and not at the classroom level. Although existing literature documents many advantages of using suspension data (Wright & Dusek, 1998), there are also several noted limitations. These include the potential for teacher bias in the documentation of student behavior, variations in teacher tolerance for misbehavior, and a lack of independent or objective data related to the behavior (Morrison & Skiba, 2001; Nelson et al., 2002; Wright & Dusek, 1998). These factors may result in variability in terms of responses to problem behavior within and across school years. These factors may further limit the interpretability of these findings.

Conclusion

In the 2009-2010 academic school year, an astonishing 74,518 students received out of school suspensions in the state of Maryland, placing them at increased risk of academic failure, dropout, and involvement in the criminal justice system (Sundius & Farneth, 2004). Among these students were disproportionate numbers of ethnic minorities or students with disabilities (MSDE, 2010).   Unfortunately, these findings constitute only one example among many that have documented disproportionality in school discipline (Brantlinger, 1991; Costenbader & Markson, 1994; Leone et al., 2000; Skiba et al., 2002). These differences do not appear to be explainable solely by the socio-economic status of those students (Skiba et al., 2002; Wu et al., 1982), nor are they explainable because of higher rates of disruption (McFadden, et al., 1992; Shaw & Braden, 1990).

 Opportunity to remain engaged in academic instruction is arguably the single most important predictor of positive academic outcomes (Skiba et al., 1997). In addition, suspension is one of the most important predicators of negative social and academic outcomes (AAP, 2003; Dinkes et al, 2006). The current study proposes that the evidence documenting disproportionate school discipline and the severe effect of exclusionary discipline on academic and social success make this topic a significant concern for our society. Although current school reform efforts have started to address this problem by implementing more positive, proactive approaches to manage behavior and prevent the reliance on exclusionary discipline practices such as out-of-school suspension, the findings of this study indicate that the implementation of these practices is not as effective for ethnic minority students and students with disabilities as it is for

nonminority and general education students. These findings suggest that to truly

remediate disparities in school discipline, schools must make a long-term commitment to

examine the complex nature of the disproportionate use of discipline over time. At the

school level, policies should focus on prevention and culturally responsive practice

should also be encouraged. In addition, disaggregated data on discipline patterns should

be available and disseminated, policies addressing disciplinary inequity and promoting

equity should be established, and professional development and training should be made

available to minimize the disproportionate application of discipline.

Despite the current shift for school reform efforts to focus on a more positive,

proactive approach towards school discipline, disparities that leave ethnic minority and

disabled students behind remain behind remain ever-present in our educational system

(Caldwell, Sewell, Parks, & Toldson, 2009; Leone, et al., 2003). Although personal,

family, and community factors make a contribution to such disparities, so do school and

teacher characteristics, such as student perceptions of being respected and supported by

teachers, and perceptions of school safety (Skiba et al., 2002). To the extent that the

policies and practices of schools maintain or widen disparities in school discipline, it is

imperative that educators, researchers, and policy makers continue to search for school-

based solutions that can contribute to reducing disparities in important educational

outcomes. This study demonstrates the fact that by understanding the data and their

implications, schools may be able to develop and implement more positive and effective

school-wide behavioral support systems (Lewis, Sugai, & Colvin, 1998; Sugai & Horner,

1999).

All children deserve access to effective educational settings that are positive,

consistent, safe, and equitable. Access to educational achievement requires the support

needed to be socially successful in school (Skiba et al, 2002). This typically involves

implementing programs that help to foster a school culture in which appropriate behavior

is clearly defined, actively taught, and consistently acknowledged (Sugai & Horner,

1999). However, educators cannot assume that universal intervention programs such as

SWPBS address problem behavior equitably, nor can they assume that such programs

will be equally effective for all groups of students.   For race and disability to become a

socially neutral factor in education, school systems must be willing to make a significant

investment devoted explicitly to altering inequitable discipline patterns, to ensure that our

instructional and disciplinary systems afford all children an equal opportunity for school

learning.

References

Advocates for children and youth-Voices for Maryland's children. (2006). School suspension and alternatives. Retrieved from http://www.soros.org/initiatives/baltimore

Alberto, P., & Troutman, A. C. (1999). *Applied behavior analysis for teachers* (5th ed.). Upper Saddle River, N.J.: Merrill.

American Academy of Pediatrics (AAP). (2003). Policy statement: Out-of-school suspension and expulsion." *Pediatrics. 112*(5). 1206-1210.

American Psychological Association (1993). Violence and youth: Psychology's response (Vol. 1). Washington, D.C.: Author.

American Psychological Association Zero Tolerance Task Force. (August 2006) Are Zero Tolerance Policies Effective in the Schools?: An Evidentiary Review and Recommendations.

Anderson, C. M., & Kincaid, D. (2005). Applying behavior analysis to school violence and discipline problems: Schoolwide positive behavior support. *Behavior Analyst, 28*, 49–63. Anderson, C. M., & Kincaid, D. (2005). Applying behavior analysis to school violence and discipline problems: Schoolwide positive behavior support. *Behavior Analyst, 28*, 49–63. doi: 10.1007/s10648-006-9008-1

Annotated Code Of Maryland, Education Article §7-304.1

Atkins, M.S., McKay, M.M., Frazier, S.L., Jakobsons, L.J., Arvanitis, P., Cunningham, T., Brown, C., & Lambrecht, L. (2002). Suspensions and detentions in an urban, low-income school: Punishment or reward? *Journal of Abnormal Child Psychology. 30*(4), 361-371. doi: 10.1023/A:1015765924135

Ayers, W., Dohrn, B., & Ayers, R. (Eds.). (2001). *Zero tolerance*. New York: New Press.

Baer, D.M., Wolf, M.M., & Risley, T.R. (1968). Some current dimensions of applied

behavior analysis. *Journal of Applied Behavior Analysis, (1),* 91-97.

Balfanz, R. & Boccanfuso, C. (2007). Falling off the Path to Graduation: Early

Indicators Brief. Baltimore, MD: Center for the Social Organization of Schools.

Balfanz R. et al. (2003). High Poverty Secondary Schools and the Juvenile

Justice System. In Wald & Losen (Eds.), Deconstructing The School To Prison

Pipeline, 77-78. San Francisco: Jossey-Bass.

Barrett, S., Bradshaw, C., & Lewis-Palmer, T. (2008). Maryland state-wide PBIS

initiative. *Journal of Positive Behavior Interventions, 10,* 1005-114.

Bear, G. G., & Minke, K. M. (Eds.). (2006). *Children's needs III: Development,*

prevention, and intervention. Bethesda, MD: National Association of School

Psychologists.

Bishop, D. M. & Frazier, C. E. (2000). Consequences of transfer. In. J. Fagan & F.

Zimring (Eds.), *The changing borders of juvenile justice: Transfer of adolescents*

to the criminal court (pp. 277-320). Chicago, IL: University of Chicago Press.

Bowditch, C. (1993). Getting rid of troublemakers: High school disciplinary procedures

and the production of dropouts. *Social Problems, 40*, 493-507.

Bradshaw, C., Reinke, W., Brown, L., Bevans, K., & Leaf, P. (2008). Implementation of

school-wide positive behavioral interventions and supports (PBIS) in elementary

schools: Observations from a randomized trial. *Education and Treatment of*

Children, 31, 1-26.

Brady, K.P. (2002). Zero tolerance or (in) tolerance policies? Weaponless school
        violence, due process, and the law of student suspensions and expulsions: An
        examination of Fuller v. Decatur Public School Board of Education School
        District. *Brigham Young Education and Law Journal,* 159.

Brantlinger, E. (1991). Social class distinctions in adolescents' reports of problems and
        punishment in school. *Behavioral Disorders, 17*, 36-46

Brooks, K., Schiraldi, V., & Zeidenberg, J. (2001). School house hype: Two years later.
        San Fransisco, CA: Justice Policy Institute.

Browns, F., & Michaels, C.A. (2006). School-Wide positive behavior support initiatives
        and students with severe disabilities: A time for reflection. *Research & Practice
        for Persons with Severe Disabilities, 31* (1), 57-61.

Caldwell, L. D., Sewell, A. A., Parks, N. & Toldson, I. A. (2009). Before the bell rings:
        Implementing coordinated school health models to influence the academic
        achievement of African American males. *The Journal of Negro Education, 78*(3),
        204-215.

Caplan, G. (1964). The principles of preventive psychiatry. New York: Basic Books

Carr, E.G. (2006). SWPBS: The greatest good for the greatest number, or the needs of
        the majority trump the needs of the minority? *Research and Practice for Persons
        With Severe Disabilities, 31*, 54-56.

Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., & Sailor, W.
        (2002). Positive behavior support: Evolution of an applied science. *Journal of
        Positive Behavior Interventions, 4*, 4–16.

Center on Crime, Communities, and Culture (1997). Education as crime prevention:

      Providing education to prisoners. Research Brief (2). New York: Occasional

      Paper Series.

Centers for Disease Control and Prevention. (1994). Health risk behaviors among

      adolescents who do and do not attend school: United States, 1992. Morbidity and

      Mortality Weekly Report. Atlanta, GA: Centers for Disease Control and

      Prevention.

Chen, D., Downing, J.E., & Peckham-Hardin, K. D. (2002). Working with families of

      diverse cultural and linguistic backgrounds: Considerations for culturally

      responsive behavior support. In J.M. Lucyshyn, G. Dunlap, & R.W. Albin (Eds.),

      Family and positive behavioral support: Addressing problem behavior in family

      contexts (pp. 133-152). Baltimore, Brookes.

Children's Defense Fund (1975). School suspensions: Are they helping children?

      Cambridge, MA: Washington Research Project.

Civil Rights Project. (1999). On "Zero Tolerance" policies: An issue brief (Testimony

      submitted to the U.S. Commission on Civil Rights). Cambridge, MA: Harvard

      University Civil Rights Project.

Code of Maryland Agency Regulations. §13A. 08.06.00; 13A.08.06.01 (2009).

Cohn, A.M. (2001). *Positive behavioral supports: information for educators.* Retrieved

      from http://www.nasponline.org/resources/factsheets/pbs

Colvin, G., Sugai, G., & Kame'enui, E.J. (1993). Reconceptualizing behavior

      management and schoolwide discipline in general education. *Education and*

      Treatment of Children, 16, 361-381.

Cooley, S. (1995). Suspension/expulsion of regular and special education students in

Kansas: A report to the Kansas State Board of Education. Topeka: Kansas State

Board of Education.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). Applied behavior analysis

(2nd ed.). Upper Saddle River, NJ: Pearson.

Costenbader, V., & Markson, S. (1998). School suspension: A study with secondary

school students. Journal of School Psychology, 36, 59–82.

Crone, D. A., & Horner, R. H. (2003). *Building positive behavior support systems in

schools.* New York, London: Guilford Press.

Crone, D., Horner, R., & Hawken, L. (2004). *Responding to problem behavior in

schools: The behavior education program.* New York: The Guilford Press.

Dinkes, R., Cataldi, E.F., Kena, G., Baum, K., and Snyder, T.D. (December 2006).

Indicators of School Crime and Safety, 2006. Washington, DC: US Departments

of Education and Justice.

Dolan, V. (2009). PBIS Summative Report. Anne Arundel County Public Schools.

Annapolis Maryland.

Drakeford, W. (2006). Racial disproportionality in school disciplinary practices.

Culturally Responsive Education Systems, University of Maryland.

Dunlap, G. (2006). The applied behavior analytic heritage of PBS: A dynamic model of

action-oriented research. Journal of Positive Behavior Interventions, 8(1), 58-60.

Dwyer, K., Osher, D., & Warger, C. (1998). Early warning, timely response: A guide to

safe schools. Washington, DC: U.S. Department of Education.

Eber, L. (2005). *Illinios PBIS evaluation report.* La Grange Park: Illinois State Board of Education, PBIS/EBD Network.

Eber, L, Upreti, G, & Rose, J. (2010). Disproportionality in school discipline through positive behavior interventions and supports (PBIS). Building Leadership, 17, 8, 1-10.

Ekstrom, R. B., Goertz, M. E., Pollack, J. M., & Rock, D. A. (1986). Who drops out of high school and why?: Findings from a national study. Teachers College Record, 87, 357-73.

Elliot, D., Hatot, N.J., Sirovatka, P., & Potter, B.B. (2001). Youth violence: A report of the surgeon general. Washington, DC: U.S. Department of Health and Human Services.

Emerson, E., McGill, P., & Mansell, J. (Eds.). (1994). *Severe learning disabilities and challenging behaviours.* London: Chapman & Hall.

Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children, 73*, 288–310.

Fenning, P., & Rose, J. (2007). Overrepresentation of African American students in exclusionary discipline: The role of school policy. *Urban Education*, *42*, 536–559. doi: 10.1177/0042085907305039

Frey, A.J., Lingo, A., & Nelson, C.M. (2008). *Positive behavior support: A call for leadership. Children & Schools, 30*, 5-14.

Gagnon, J.C., & Leone, P.E. (2001). Alternative strategies for youth violence prevention.

In R.J. Skiba & G.G. Noam (Eds.), *New directions for youth development* (pp.

101-125). San Francisco: Jossey-Bass.

Gordon, R., Piana, L. D., & Keleher, T. (2000). *Facing the consequences: An*

examination of racial discrimination in U. S. Public Schools. Oakland, CA:

Applied Research Center.

Gregory, J. F. (1996). The crime of punishment: Racial and gender disparities in the use

of corporal punishment in the U.S. Public Schools. *Journal of Negro Education,*

64, 454-462. doi: 10.1177/0042085907313440

Gresham, F. M. (2004). Current status and future directions of school-based behavioral

interventions. *School Psychology Review, 33*, 326-343.

 doi: 10.1177/15345084070320040301

Hawken, L.S., & O'Neill, R.E. (2006). Including students with severe disabilities in all

levels of school-wide positive behavior support. *Research and Practice for*

Persons with Severe Disabilities, 31, 46-53.

Heaviside, S., Rowand, C., Williams, C., & Farris, E. (1998). Violence and discipline

problems in U.S. Public Schools: 1996–97 (NCES Publication No. 98-030).

Washington, DC: U.S. Department of Education, National Center for Education

Statistics. Retrieved from http://nces.ed.gov/pubs98/98030.pdf.

Hendley, S. L., & Lock, R. H. (2007). Use positive behavior support for inclusion in the

general education classroom. *Intervention in School and Clinic, 42*, 225-228.

doi: 10.1177/10534512070420040601

Horner, R.H., Sugai, G., Smalkowski, K., Eber, L., Nakasato, J., Todd, A.W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. Journal of Positive Behavior Interventions, 11 (3), 133-144. doi: 10.1177/1098300709334798

Horner, R. H., Sugai, **G.,** Todd, A. W., & Lewis-Palmer, T. (2005). School-wide positive behavior support: An alternative approach to discipline in schools. In L. Bambara & L. Kern (Eds.), *Positive behavior support* (pp. 359 390). NewYork: Guilford Press

Horner, R.H., Sugai, G., Todd, A.W., & Lewis-Palmer,T. (2005). School-wide positive behavior support. In L. Bambara & L. Kern (Eds.) *Individualized supports for students with problem behaviors: Designing positive behavior plans*. (pp. 359-390) New York: Guilford Press

Horner, R.H., Todd, A.W., Lewis-Palmer, T., Irvin, L.K., Sugai, G., & Boland, J.B. (2002). The School-Wide Evaluation Tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavioral Interventions, 6*, 3-12.

Individuals with Disabilities Education Improvement Act (IDEIA). (2004). Public Law 108-446 (CFR Parts 300 and 301).

Individuals with Disabilities Education Act (IDEA), 20 U.S.C. §§ 1401 *et seq;* Individuals with Disabilities Education Act Amendments of 1997, Public Law 105-17, 105th Cong., 1st Sess.; Individuals with Disabilities Education Act Regulations, 34 C.F.R. 300.1 et seq.

Ingram, K., Lewis-Palmer, T., & Sugai, G. (2005). Function-based intervention planning:

Comparing the effectiveness of FBA indicated and contra-indicated intervention

plans. *Journal of Positive Behavior Interventions, 7*, 224-236.

Jacob, S., & Hartshorne, T. S. (2007). *Ethics and law for school psychologists, fifth*

edition. John Wiley.

Johnson, W. L., Johnson, A. M., & Zimmerman, K., (1996). Assessing school climate

priorities: A Texas study. *The Clearing House, 70*(2), 64-66.

Kaeser, S.C. (1979). Suspension and school discipline. *Education and Urban Society*,

11, 465-484.

Kazdin, A.E. (2003). *Research design in clinical psychology, fourth edition.* New

Haven, Connecticut: Pearson.

Kendler, H.H. (1990). Looking backward to see ahead. Psychological Sciences, 1, 107-

113. doi: 10.1111/j.1467-9280.1990.tb00076.x

Krezmien, P.E., Leone, P.E., & Achilles, G.M. (2006). Suspension, race and disability:

Analysis of statewide reporting and practices.   Journal of Emotional and

Behavioral Disorders, 14(4) 217-226. doi: 10.1177/10634266060140040501

Kuperminc, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school

climate and difficulties in the social adjustment of middle school students.

Applied Developmental Science, 1(2), 76-88.

Lassen, S., Steele, M., & Sailor, W. (2006). The relationship of school-wide positive

behavior support to academic achievement in an urban middle school. *Psychology*

in Schools 43(6), 701-712. DOI: 10.1002/pits.20177

Leone, P.E., Christie, C.A., Nelson, C.M., Skiba, R., Frey, A., & Jolivette, K. (2003). School failure, race and disability: Promoting positive outcomes, decreasing vulnerability for involvement, with the juvenile delinquency system. College Park, MD: The National Center on Education, Disability and Juvenile Justice.

Leone, P.E., Mayer, M.J., Malmgren, K., & Meisel, S.M. (2000). School violence and disruption: Rhetoric, reality, and reasonable balance. *Focus on Exceptional Children, 33*(1), 1-20.

Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive school-wide management. *Focus on Exceptional Children, 31*, 1–24. doi: 10.1177/10983007060080030501

Lewis Palmer, T., Sugai, G., & Larson, S. (1999). Using data to guide decisions about program implementation and effectiveness. *Effective School Practices, 17*(4), 47-53. doi: 10.1177/106342660000800205

Luiselli, J.K., & Cameron, M.J. (Eds.). (1998). *Antecedent control procedures for the behavioral support of persons with developmental disabilities*. Baltimore: Paul H. Brookes.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71(3),* 543-562.

Martella, R.C., Nelson, J.R., & Marchand-Martella, N.E. (2003). Managing disruptive behavior in the schools: A schoolwide, classroom, and individualized social learning approach. Boston: Allyn & Bacon.

Maryland Public School Suspension by School and Major Offense Category, 2004-2005.

    (2005). Maryland State Department of Education, Division of Planning, Results,

    and Information Management. Retrieved August 27, 2010 from

    http://www.marylandpublicschools.org/MSDE/divisions/planningre

    sultstest/prim_pubs.htm

Maryland Public School Suspension by School and Major Offense Category, 2005-2006.

    (2006). Maryland State Department of Education, Division of Planning, Results,

    and Information Management. Retrieved August 27, 2010 from

    http://www.marylandpublicschools.org/MSDE/divisions/planningre

    sultstest/prim_pubs.htm

Maryland Public School Suspension by School and Major Offense Category, 2006-2007.

    (2007). Maryland State Department of Education, Division of Planning, Results,

    and Information Management. Retrieved August 27, 2010 from

    http://www.marylandpublicschools.org/MSDE/divisions/planningre

    sultstest/prim_pubs.htm

Maryland Public School Suspension by School and Major Offense Category, 2007-2008.

    (2008). Maryland State Department of Education, Division of Planning, Results,

    and Information Management. Retrieved August 28, 2010 from

    http://www.marylandpublicschools.org/MSDE/divisions/planningre

    sultstest/prim_pubs.htm

Maryland Public School Suspension by School and Major Offense Category, 2008-2009.

    (2009). Maryland State Department of Education, Division of Planning, Results,

and Information Management. Retrieved August 28, 2010 from

http://www.marylandpublicschools.org/MSDE/divisions/planningre

sultstest/prim_pubs.htm

Maryland Public School Suspension by School and Major Offense Category, 2009-2010.

(2010). Maryland State Department of Education, Division of Planning, Results,

and Information Management. Retrieved October 1, 2010 from

http://www.marylandpublicschools.org/MSDE/divisions/planningre

sultstest/prim_pubs.htm

Maryland State Department of Education. (2006). Task Force on the Education of

Maryland's African American Males, December 2006 Report (2006). Retrieved

on August 21, 2010 from

http://www.marylandpublicschools.org/NR/rdonlyres/075539F6-8792-462A-

BAB65074A29705A3/11495/AfricanAmericanMaleTaskForceReportDecember0

6.pdf

Massachusetts Advocacy Center. (1986). *The way out: School exclusion practices in
Boston middle schools.* Boston, MA: Author.

McCurdy, B.L., Mannella, M.C., & Eldridge, N. (2003). Positive behavior support in

urban schools: Can we prevent the escalation of antisocial behavior? *Journal of
Positive Behavior Interventions, 5*, 158–170.

McFadden, A. C., Marsh, G. E., Price, B. J., & Hwang.Y. (1992). A study of race and

gender bias in the punishment of school children. *Education & Treatment of
Children, 15*, 140-146.

McIntosh, K., Horner, R. H., & Sugai, G. (2009). Sustainability of systems-level

   evidence-based practices in schools: Current knowledge and future directions. In

   W. Sailor, G. Sugai, R. H. Horner, & G. Dunlap (Eds.), *Handbook of positive*

   behavior support (pp. 327–352). New York: Springer

McKevitt, B. C. & Braaksma, A. (2008). Best practices in developing a positive behavior

   support system at the school level. In A. Thomas and J. Grimes (Eds.), *Best*

   practices in school psychology, fifth edition (pp. 735-747). Bethesda, MD:

   National Association of School Psychologists.

Metzler, C.W., Biglan, A., & Rusby, J.C. (2001). Evaluation of a comprehensive

   behavior management program to improve school-wide positive behavior support.

   Education and Treatment of Children, *24*, 448-479.

   doi: 10.1177/10983007070090040301

Minke, K, & Anderson, K. (2005). Family-school collaboration and positive behavior

   support. *Journal of Positive Behavior Support*, 7(3), 181-185

Morrison, G.M., & D'Incau, B. (1997). The web of zero-tolerance: Characteristics of

   students who are recommended for expulsion from school. *Education and*

   Treatment of Children, 20, 316–335.

Morrison, G.M., & Skiba, R. (2001). Promises and perils. *Psychology in the*

   schools, 38(2), 173-184.

Muscott, H. S., Mann, E., Benjamin, T. B., Gately, S., Bell, K. E., and Muscott, A. J.

   (2004). Postive behavioral interventions and supports in New Hampshire:

   Preliminary results of a statewide system for implementing schoolwide discipline

   practices. Education and Treatment of Children, 27(4), 453-475.

doi: 10.1177/1098300708316258

Nakasato, J., (2000). Data-based Decision-making in Hawaii's Behavior Support Effort. *Journal of Positive Behavior Interventions 2*(4), 247-250.

Nelson, J.R., Benner, G.J., Reid, R.C., Epstein, M.H., & Currin, D. (2002). The convergent validity of office discipline referrals with the CBCL-TRF. *Journal of Emotional and Behavioral Disorders, 10*, 181–188.

Netzel, D.M. & Eber, E. (2003). Shifting from reactive to proactive discipline in an Urban School District: A change of focus through PBIS implementation. *Journal of Positive Behavior Interventions, 5*, 71-79. doi: 10.1177/10983007060080030201

No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008)

Noguera, P.A. (1995). Preventing and producing violence: A critical analysis of response to school violence. *Harvard Educational Review, 65*, 189-212.

Office of Special Education Programs (OSEP), Center on Positive Behavioral Interventions and Supports. (2005). School-Wide Positive Behavior Support Implementers' Blueprint and Self-Assessment. Washington D.C.: OSEP Center on Positive Behavioral Intervention and Supports, U.S. Department of Education.

Office of Special Education Rehabilitative Services (2002). Twenty-fourth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (IDEA). Washington, D.C.: OSERS.

Patterson, G. R. (1992). Developmental changes in antisocial behavior. In R. D. Peters, R. J. McMahon, & V. L. Quinsey (Eds.), *Aggression and violence throughout the life span* (pp. 52-82). Newbury Park, CA: Sage.

Patterson, G.R., Forgatch, K.L., & Stoolmiller, M. (1998). Variables that initiate and

     maintain an early-onset trajectory for juvenile offending. *Development and*

     Psychopathology, 10, 531-547.

Pavlov, Ivan P. (1927). Conditioned reflexes: An investigation of the physiological

     activity of the cerebral cortex (G. V. Anrep, Trans.). (Original work published

     1927).

Peshak George, H., Kincaid, D., & Pollard-Sage, J. (2008). Primary-tier interventions and

     supports. In W. Sailor, G. Dunlap, G. Sugai, & R.H. Horner (Eds.), *Handbook of*

     positive behavior support (pp. 375-394). New York, NY: Springer.

Rabinovic, G., & Levin, J. (2003). The quality of post-exclusion assignments: Racial and

     ethnic differences in post exclusion assignments for students in Massachusetts.

     Paper presented at the School to Prison Pipeline Conference, Harvard University,

     Cambridge, MA.

Racial disparity clear in school discipline. (2009). The State Journal-Register.

Raffaele Mendez, L. M., & Knoff, H. M. (2003). Who gets suspended from school and

     why: A demographic analysis of schools and disciplinary infractions in a large

     school district. *Education and Treatment of Children, 26*(1), 30-51.

Reschly, D. J. (1997). *Disproportionate minority representation in general and special*

     education: Patterns, issues, and alternatives. Des Moines, IA: Mountain Plains

     Regional Resource Center, Drake University.

Rose, L.C., & Gallup, A.M. (2004). The 36th Annual Phi Delta Kappa/Gallup poll of the

     public's attitudes toward the public school. Bloomington, IN: Phi Delta Kappa.

     Retrieved August 26, 2010, from http://www.pdkintl.org/kappq/k0409.htm

Ryndak, D.L., & Billingsley, F.F. (2004). Access to the general education curriculum.

In C.H. Kennedy & E.M. Horn (Eds.), Including students with severe disabilities

(pp.33-53). Boston: Allyn & Bacon.

Safran, S.P., & Oswald, K. (2003). Positive Behavior Supports: Can schools reshape

disciplinary practices? *Exceptional Children, 69*, 361-373.

Scott, T. M. (2001). A school-wide example of positive behavioral support. *Journal of

Positive Behavioral Interventions, 3,* 88-94. doi: 10.1177/109830070100300205

Shaw, S. R., & Braden, J. P. (1990). Race and gender bias in the administration of

corporal punishment. *School Psychology Review, 19*, 378-383.

Sherman, L.W., Gottfredson, D.C., MacKenzie, D.L., Eck, J., Reuter, P., & Bushway,

S.D. (Eds.). (1997). Preventing crime: What works, what doesn't, what's

promising. A report to the United States Congress (NCJ 171676). Washington,

DC: U.S. Department of Justice, Office of Justice Programs.

Singer, G., & Wang, M. (2009). The intellectual roots of positive behavior support and

their implications for its development. In W. Sailor, G. Dunlap, G. Sugai, & R.

Horner (Eds.), *Handbook of positive behavior support* (pp. 17–46). New York:

Springer.

Skiba, R.J., Michael, R.S., Nardo, A.C., & Peterson, R. (2002). The color of discipline:

Sources of racial and gender disproportionality in school punishment. *The Urban

Review, 24*, 317-342.

Skiba, R. J., & Peterson, R. (1999). The dark side of zero tolerance: Can punishment lead

to safe schools. *Phi Delta Kappan, 80*(5), 372-382.

doi: 10.1177/106342660000800306

Skiba, R.J., & Peterson, R. (2000). School discipline at a crossroads: From zero

   tolerance to early response. Exceptional Children, 66(3), 335-346.

   doi: 10.1177/10634266060140040501

Skiba, R. J., Peterson, R. L., & Williams, T. (1997). Office referrals and suspension:

   Disciplinary intervention in middle schools. *Education and Treatment of

   Children, 20*(3), 295-315. doi: 10.1177/1098300708329710

Skiba, R. J., & Rausch, M. K. (2006). Zero tolerance, suspension, and expulsion:

   Questions of equity and effectiveness. In C. M. Evertson & C. S. Weinstein

   (Eds.), Handbook of classroom management: Research, practice, and

   contemporary issues (pp. 1063–1089). Mahwah, NJ: Erlbaum.

Skiba, R., Simmons, A., Stuadinger, L., Rausch, M., Down, G., Feggins, R. (2003).

   Consistent Removal: Contributions of school discipline to the school-prison

   pipeline. Paper presented at the School to Prison Pipeline Conference, Harvard

   University, Cambridge, MA.

Skinner, B.F. (1953). Science and human behavior. New York: Free Press.

Slavin, R. (2003). Educational Psychology: Theory and Practice and Practice, 7th.

   Boston, MA: Allyn and Bacon

Southern Poverty Law Center (2010). SPLC report on school disciplinary policies.

   Unpublished manuscript. Retrieved from http://www.splcenter.org/get-

   informed/news/new-study-finds-big-racial-gap-in-suspensions-of-middle-school-

   students

Sugai, G. & Horner, R.H. (1999). Discipline and behavioral support: Preferred processes

   and practices. *Effective School Practices, 17*, 10-22.

Sugai, G., & Horner, R.H. (2002). The evolution of discipline practices: School-wide

    positive behavior supports. *Child and Family Behavior Therapy, 24*, 23-50. doi:

    10.1177/0013124509331605

Sugai, G., Horner, R.H., Dunlap, G., Hieneman, M., Lewis, T.J., Nelson, C. M., Scott, T.,

    Liaupsin, C., Sailor, W., Turnbull, A.P., Turnbull, H.R., III, Wickham, D.,

    Wilcox, B., & Ruef, M. (2000). Applying positive behavioral support and

    functional behavioral assessment in schools. *Journal of Positive Behavioral*

    Interventions, 2, 131-143.

Sugai, G., Horner, R.H., Sailor, W., Dunlap, G., Eber, L., Lewis, T., Kinciad, D., Scott,

    T., Barrett, S., Algozzine, R., Putnam, R., Massanari, C., & Nelson, M. (2005).

    School-wide positive behavior support: Implementers' blueprint and self-

    assessment. Eugene, OR: University of Oregon.

Sugai, G., Sprague, J. R., Horner, R. H., & Walker, H. M. (2000). Preventing school

    violence: The use of office discipline referrals to assess and monitor school-wide

    discipline interventions. *Journal of Emotional and Behavioral Disorders, 8*, 94-

    101. doi: 10.1177/106342660000800205

Sundius, J., & Farneth, M. (2008). *Putting kids out of school: What's causing high*

    suspension rates and why they are detrimental to students, schools, and

    communities. Open Society Institute, Baltimore. Retrieved November September

    12, 2010, from http://www.soros.org/initiatives/baltimore.

Tailor, H., & Detch, E. R. (1998). Getting tough on kids: A look at zero tolerance.

    Nashville, TN: Tennessee Office of Education Accountability, Comptroller of the

    Treasury.

Taylor-Greene, S., Brown, D., Nelson, L., Longton, J., Gassman, Cohen, J., Swartz, J.,

    Horner, R. H., Sugai, G., & Hall, S. (1997). School-wide behavioral support:

    Starting the year off right. *Journal of Behavioral Education, 7,* 99-112.

    doi: 10.1177/109830070100300406

Taylor-Greene, S. J. & Kartub, D. T., (2000). Durable implementation of school-wide

    behavior support: The high five program. *Journal of Positive Behavior*

    Interventions, 2(4), 231-232. doi: 10.1177/105381510702900405

Thorndike, Edward L. (1910). The contribution of psychology to education. *Journal of*

    Educational Psychology, *1*, 5-12.

Thorton, C.H., & Trent, W. (1988). School desegregation and suspension in East Baton

    Rouge Parish: A preliminary report. *Journal of Negro Education, 57*, 482-501.

Tobin, T., Sugai, G., & Colvin, G. (1996). Patterns in middle school discipline records.

    Journal of Emotional and Behavioral Disorders, 4, 82–94.

    doi: 10.1177/106342669600400203

Tobin, T. J., Sugai, G., & Colvin, G. (2000). Using discipline referrals to make decisions.

    NAASP Bulletin, 84(616), 106-117. doi:10.1177/019263650008461616

Todd, A. W., Haugen, L., Anderson, K., & Spriggs, M. (2002). Teaching recess: Low

    cost efforts producing effective results. *Journal of Positive Behavior*

    Interventions, 4(1).

Todd, A.W., Horner, R.H., Sugai, G., & Sprague, J.R. (1999). Effective behavior

support: strengthening school-wide systems through a team based approach,

E*ffective School Practices, 17*(4), 23-27. doi: 10.1177/10983007030050020301

Townsend, B. (2000). Disproportionate discipline of African American children and

youth: Culturally responsive strategies for reducing school suspension and

expulsions. *Exceptional Children, 66*, 381-391.

Turnbull, A., Edmonson, H., Griggs, P., Wickham, D., Sailor, W., Freeman, R., Guess,

D., Lassen, S., McCart, A., Park, J., Riffel, L., Turnbull, R., & Warren, J. (2002).

A blueprint for schoolwide positive behavior support: Implementation of three

components, *Exceptional Children, 68*, 377-402. doi: 10.1007/s10648-006-9008-1

U.S. Department of Education, Office of Special Education Programs (2007). National

technical assistance center on positive behavioral interventions and supports

website. www.pbis.org, Grant # H326S03002.

Vavrus, F., & Cole, K. (2002). "I didn't do nothing": The discursive construction of

school suspension, *Urban Review, 34*, 87-111.

Verdugo, R.R. (2002). Race-ethnicity, social class, and zero tolerance policies.

Education and Urban Society, 35(1), 50-75. doi: 10.1177/001312402237214

Wald, J., & Losen, D. J. (2003). Editors notes. In J. Wald & D. J. Losen (Eds.), *New

directions for youth development: Deconstructing the school-to-prison pipeline*

(pp. 1–2). San Francisco: Jossey-Bass.

Walker, H.M., Colvin, G., & Ramsey, E. (1995). Antisocial behavior in school:

strategies and best practices. Pacific Grove, CA: Brooks/Cole.

Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders, 4*, 194–209. doi: 10.1177/10634266020100030501

Warren, J.S., Edmonson, H.M., Griggs, P., Lassen, S.R., McCart, A., Turnbull, A., et al. (2003). Urban applications of school-wide positive behavior support: Critical issues and lessons learned. Journal of Positive Behavior Interven- tions, 5, 80–91.

Wehlage, G. G., & Rutter, R. A. (1986). Dropping out: How much do schools contribute to the problem? *Teachers College Record, 87*, 374-393.

Wright, J.A., & Dusek, J.B. (1998). Compiling base rates for disruptive behaviors from student discipline referral data. *School Psychology Review, 27*, 147–183. doi: 10.1002/pits.20202

Wu, S. C., Pink, W. T., Crain, R. L., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review, 14,* 245-303.

Zhang, D., Katsiyannis, A., & Herbst, M. (2004). Disciplinary exclusions in special education: A 4-year analysis. Behavioral Disorders, *29*, 337-347. doi: 10.1177/10634266070150010401

Appendix A

Discipline Policy Flowchart: Suggested Penalties

Offense	Recommended Penalty	Number of Days
Class Cutting	D, I	1-3 days
Tardniess	D, I	1-3 days
Truancy	D, I	1-3 days
Alcohol (1st Offense)	O	10 days
Alcohol (2nd Offense)	O	10 days; request expulsion
Inhalants (1st Offense)	O	10 days
Inhalants (2nd Offense)	O	10 days; request expulsion
Drugs (1st Offense)	O	10 days
Drugs (2nd Offense)	O	10 days, request expulsion
Tobacco	O	1-5 days
Other Guns	O	10 days; request expulsion
Other Weapons	I, O	1-10 days
Physical Attack Teacher/Staff/Other	I, O	1-10 days
Physical Attack Student	O	1-10 days
Verbal/Physical Threat Staff/Other	O	1-10 days
Verbal/Physical Threat Against Student	O	1-10 days
Fighting	O	1-10 days
Extortion	O	1-10 days
Serious Bodily Injury	O	10 days, request expulsion
Arson, Fire	O	1-10 days
False Alarm/Bomb Threat	O	1-10 days
Explosives	O	1-10 days
Physical Sexual Attack – Teacher/Staff/Other	O	1-10 days
Sexual Harassment – Teacher/Staff/Other	O	1-10 days
Sexual Harassment - Student	O	1-10 days
Sexual Activity– Teacher/Staff/Other	O	1-10 days
Sexual Activity - Student	O	1-10 days
Disrespect – Teacher/Staff/Other	I, O	1-5 days
Insubordination	I, O	1-5 days
Harassment Teacher/Staff/Other	I, O	1-5 days
Harassment Student	D, I, O	1-5 days

Class Disruption	D, I, O	1-5 days
Inciting/Participating in Disturbance	D, I, O	1-5 days
Academic Dishonesty/Cheating	I, O	1-5 days
Portable Communication	I, O	1-10 days
Theft Teacher/Staff/Other	I, O	1-10 days
Theft - Student	I, O	1-10 days
Sexual Harassment - Student	I, O	1-10 days
Trespassing	I, O	1-10 days
Unauthorized Sale or Distribution	I, O	1-3 days
Vandalism/Destruction of Property	I, O	1-10 days
Refusal to Obey School Policies	I, O	1-5 days
Violation of Attendance Policy	D, I	1-3 days
Failure to Serve Saturday School	O	1-2 days
Computer Misuse	D, I, O	1-10 days
Immunization	O	Until records completed
Personal Health	O	Until medical release

*D = Detention

* I = In School Suspension

* O = Out of School Suspension

Appendix B

Disciplinary Infractions: Categories and Definitions

1. Attendance
    a. Class Cutting: Unlawfully absent from a class or a school activities
    b. Tardiness: Late to school or class.
    c. Truancy: Unlawfully absent from school or classes for a school day or a portion of the school day.
2. Dangerous Substances
    a. Alcohol: Possession, use, or showing evidence of use, sale, or distribution of any alcoholic substances.
    b. Inhalants: Possession, use, or showing evidence of use, sale, or distribution of any inhalants or other intoxicants.
    c. Drugs: Possession, use, or showing evidence of use, sale, or distribution of controlled dangerous substances including prescription drugs, over-the-counter medicines, look-alike drugs, and substances represented as controlled substances or drug paraphernalia (unless documentation on file that student may self-carry).
    d. Tobacco: Possession, use, sale, or distribution of tobacco or tobacco products.
3. Weapons
    a. Firearms: Possession of a firearm as defined in 18 U.S.C. §921. Examples include handguns, rifles, shotguns, and bombs,
    b. Other Guns: Possession of any type of gun, other than a firearm, loaded or unloaded, operable or inoperable. This may include any object that is a look-alike of a gun or firearm. (e.g., B-B guns, pellet guns, water guns)
    c. Other Weapons: Possession of any implement that could cause or is intended to cause bodily harm, other than a firearm or other gun.
4. Attack/Threat/Fight
    a. Physical Attack – Teacher/Staff: Physically attacking an employee of the school system or other adult, including striking a staff member who is intervening in a fight or other disruptive activity.
    b. Physical Attack - Student: Physically pushing, hitting or otherwise attacking another student.
    c. Verbal or Physical Threat to Teacher, Staff or Others: Threatening or aggressive language or gestures directed toward a staff member or anyone other than a student.
    d. Verbal or Physical Threat to Student: Threatening or aggressive language or gestures directed toward another student
    e. Fighting: A physical confrontation involving two or more students.
    f. Extortion: The process of obtaining property from another, with or without that person's consent, by a wrongful use of force, fear or threat.
    g. Bullying: Intentional negative actions on the part of one or more students, repeatedly and over time, that interfere with a student's
    h. Serious Bodily Injury: means bodily injury which involves (a) substantial risk of death; (b) extreme physical pain; (c) protracted and obvious

disfigurement; or (d) protracted loss or impairment of a function of a bodily member, organ or mental faculty.

5. Arson/Fire/Explosives
    a. Arson/Fire: Attempting to set, aiding in setting, or setting fire to a building or other property.
    b. False Alarm/Bomb Threat: The conveyance of threats or false information concerning the placement of explosive or destructive substances. Initiating a report warning of a fire or other catastrophe without cause in a person or by phone. Misuse of 911. Discharging a fire extinguisher.
    c. Explosives: Possession, sale, distribution, detonation, or threat of detonation of an incendiary or explosive material or device including firecrackers, smoke bombs, flares or any combustible or explosive substance or combination of substances or articles, other than a firearm.

6. Sex Offenses
    a. Sexual Assault: Physical sexual attack on school system staff or another student.
    b. Sexual Harassment: Unwelcome sexual advances, requests for sexual favors, and/or other inappropriate verbal, written, or physical conduct of a sexual nature, directed toward others.
    c. Sexual Activity: Inappropriate behavior of a sexual nature, including indecent exposure, consensual sex, and other sexual activity not identified as sexual assault or harassment.

7. Disrespect/Insubordination/Disruption
    a. Disrespect: Inappropriate comments or physical gestures to teachers, staff members, or others.
    b. Insubordination: Refusing to follow directions of teachers, staff, or administrators.
    c. Harassment: Intentional negative actions on the part of one or more students that cause discomfort with identity issues in regard to race, color, national origin, gender, disability, sexual orientation, religion, or other identifying characteristics, and that interfere with a student's ability to participate in or benefit from the school's educational programs.
    d. Classroom Disruption: Behavior that interferes with the learning of others in a classroom or other learning environment.
    e. Inciting/Participating in Disturbance: Preventing orderly conduct, or otherwise causing a disruption to the atmosphere of order and discipline in the school necessary for effective learning, other than classroom disruption.

8. Other
    a. Academic Dishonesty: Academic dishonesty through cheating, copying, forging signature of teacher and/or parent, plagiarizing, or altering records, or assisting another in such actions.
    b. Portable Communication Devices: Possession or use of any electronic device carried, worn, or transported by a student to receive or communicate messages.

    c. Theft: Taking or obtaining property of another without permission and/or knowledge of the owner.

    d. Trespassing: Unauthorized presence on school property, including while on suspension.

    e. Unauthorized Sale of Distribution: Unapproved sale or distribution of items not otherwise defined in the suspension codes.

    f. Vandalism/Destruction of Property: Damage, destruction, or defacement of property belonging to the school or others.

    g. Refusal to Obey School Policies: Failure to comply with school rules, regulations, policies, and/or procedures, not otherwise defined in the suspension codes.