

DISSERTATION

USING OFFICE REFERRALS
TO EXAMINE DISCIPLINE PATTERNS:
POSITIVE BEHAVIOR SUPPORT
IN A HIGH SCHOOL

Submitted by
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In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
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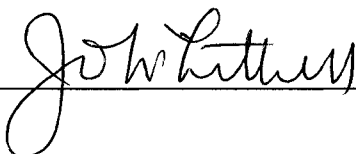
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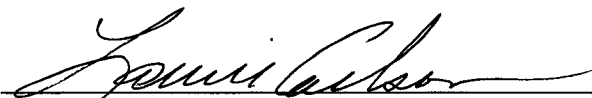
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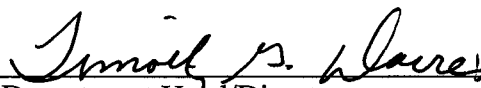




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ABSTRACT OF DISSERTATION

USING OFFICE REFERRALS
TO EXAMINE DISCIPLINE PATTERNS:
POSITIVE BEHAVIOR SUPPORT
IN A HIGH SCHOOL

The utility of systemic positive disciplinary frameworks such as school-wide positive behavior support (SWPBS) in high schools has not been determined. Most research to date has focused on elementary and middle schools that have instituted positive school-wide disciplinary frameworks with varying degrees of success. Similar research is necessary to determine if this type of disciplinary framework can be efficaciously applied at the high school level.

The purpose of this three-year study was to describe discipline patterns in a comprehensive public high school pre- and post-implementation of a school-wide positive behavior support (SWPBS) system. Participants in the study were students from grades nine through twelve. The mean annual population of the school was 1,187. The research objective was to utilize longitudinal systematic observation data to provide a comprehensive description (Johnson, 2001) of a SWPBS system as it was applied in one high school and to increase understanding of universal level implementation of SWPBS in this particular context. Disciplinary incidences as measured by archival office discipline referrals (ODRs) were analyzed and described for each of the three years (one year of baseline data and two years of intervention data) under study.

Overall ODR patterns were examined as well as the incidence of disciplinary referrals related to student grade level, gender, and selected disruptive and antisocial discipline categories. The descriptive analysis provided data in both aggregate and disaggregate form to render insights into educational reform, both process and outcome, in one high school. Information on implementation fidelity was provided. The study highlighted areas for improvement within this specific school and indicated that SWPBS may be beneficial at the high school level.

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DEDICATION

This dissertation is dedicated to my family to whom I owe a huge debt of gratitude. My parents, Anna and Amber Loe, infused me with a love of learning and the drive for academic excellence. My husband, Randy, supported me unconditionally throughout the time it took to complete my doctoral program never once mentioning his sacrifices—the hours and days that we would have spent together and with friends and family if I had not been involved in my studies. My children, Josh and Alysia, students themselves, empathized with me and gave pragmatic encouragement. I thank them for their understanding, patience, and support. Every graduate student should be so fortunate.

CHAPTER 1: INTRODUCTION

Many schools in the United States are challenged by negative social climates that influence academic achievement and contribute to student maladaptive behaviors ranging from truancy to extreme violence. Because research shows that aversive punishment is not generally effective or fairly applied across the school population (Gordon, Piana, & Keleher, 2000), policy makers and public school leaders have turned to positive behavior support (PBS) systems as an alternative framework to regular disciplinary practices.

Discipline as applied in a school-wide positive behavior support (SWPBS) system teaches both students and staff behavioral expectations and then trains them so that everyone knows how to meet the expectations (Sugai, Horner, Dunlap, et al., 2000). The focus of SWPBS is to modify the school environment to foster behavior change in individuals. SWPBS is proactive rather than reactive. It is based on applied behavior analysis and is research-based. The goal of SWPBS is to use school data to drive systems change within the whole school context to improve social and academic outcomes (Horner, Sugai, Todd, & Lewis-Palmer, 2005). Research suggests that the use of SWPBS practices is related to improved school climate as well as to improved interpersonal and behavioral competence and academic achievement (Horner, Sugai, Todd, et al., 2005).

In SWPBS, there are three tiers or levels of intervention (Walker et al., 1996). This study addresses one level, universal intervention, which includes interventions that are applicable to everyone in the school. For students who need additional training, small

group (secondary level) or individual (tertiary level) interventions can be provided through the SWPBS framework.

Research on violence in schools reveals conflicting results pertaining to the relationship of student demographics to violence (National Center for Education Statistics, 2001). What is known is that traditional disciplinary measures, such as loss of privileges, office referrals, and suspension, that do not consider students' individual circumstances, are meaningless to those students (Sugai, Horner, Dunlap, et al., 2000). This renders discipline ineffective and can actually exacerbate disciplinary issues (Gordon et al., 2000).

Purpose of Study

The purpose of this three-year study is to describe discipline patterns in a public high school pre- and post-implementation of a SWPBS system. Office discipline referrals (ODRs) are the measurement or outcome variable. The school district population is 98,685 (National Center for Education Statistics, 2005); the participating high school's population is approximately 1,200 students.

The study will yield information about the overall incidence of behavior problems as well as the frequency of specific disruptive and antisocial behaviors in selected subpopulations as measured by the incidence of ODRs in one school. The study examines and describes changes in numbers of ODRs issued during the first three years (one year of baseline data and two years of intervention data) of implementation of a SWPBS system. In addition, disciplinary referrals that occurred related to student grade level and gender, as well as accumulated data that reflect the behavior that elicited the ODR response will be examined.

Significance of Study

Limited research on the use of SWPBS systems at the high school level has been published to date. Several research studies, completed at elementary and middle schools, show that implementing a SWPBS system results in significant, positive changes in school climate, in student behavior, and in student academic achievement (e.g., Lassen, Steele, & Sailor, 2006; Luiselli, Putnam, Handler, & Feinberg, 2005; Metzler, Biglan, Rusby, & Sprague, 2001). Luiselli et al., in their multi-year study of a SWPBS implementation, found that academic performance improved because the concomitant decrease in disruptions and negative behaviors led to increased classroom instruction time. Because discipline issues distract from learning and absorb large amounts of time, a discipline system that operates efficiently can lead to improved school climate and increased learning (Horner, Sugai, Todd, et al., 2005).

It is important that disciplinary issues in high schools are studied so that effective disciplinary systems can be implemented for improved safety and social and academic growth during the high school years. In a literature review of universal level implementation at the secondary (middle school, junior high school, and high school) level, Lane, Robertson, and Graham-Bailey (2006) found that results from studies examining the utilization of SWPBS generally showed improved student behavior and should be described as “cautiously optimistic” (p. 185). The 14 peer-reviewed articles winnowed for their review included 63 schools serving grades 6-12; only the Skiba and Peterson (2003) article included high school outcomes.

Research Questions

The following research questions will be analyzed to increase understanding of the pattern of disciplinary ODRs at the target SWPBS high school and to “provide insights into processes that improve educational practices and outcomes” (Kennedy, 2005, p. 12). To facilitate understanding for the reader, the questions have been grouped into two sections.

Group One: Research question one investigates total incidences of office discipline referrals. Questions 1a and 1b will address ODR incidences by grade level and gender.

1. What was the overall incidence of ODRs during the three-year period that SWPBS was utilized?
 - a. What was the incidence by grade level (9th through 12th) during years 1, 2, and 3?
 - b. What was the incidence by gender during years 1, 2, and 3?

Group Two: Research questions two, three, and four investigate occurrence of ODR incidences for the three main areas of behavioral concern at this particular high school

- *defiance/disrespect/insubordination/non-compliance*
 - *fighting/physical aggression*
 - *skipping class/truancy*
2. What was the incidence of *defiance/disrespect/insubordination/non-compliance* referrals issued during years 1, 2, and 3?
 3. What was the incidence of *fighting/physical aggression* referrals issued during years 1, 2, and 3?

4. What was the incidence of *skipping class/truancy* referrals issued during years 1, 2, and 3?

Research Design

This is a descriptive study with a pre-post nonexperimental research design (Johnson, 2001). It will illustrate disciplinary patterns and the incidence of specific student behaviors, as measured by ODRs, in various subpopulations during the first three years of SWPBS implementation at one high school. The participants are the entire student population for the 2004-05, 2005-06, and 2006-07 school years. The instrument is the high school's office discipline referral form (ODR).

ODRs are used to track student behavior that is outside acceptable norms in a school setting. Multiple studies have used ODRs as the measure for examining referral pattern change in schools (e.g., Bohanon et al., 2006; Luiselli et al., 2005; Putnam, Luiselli, Handler, & Jefferson, 2003). The ODR is detailed and includes information pertaining to the offending student's grade level, gender, type of infraction, motivation for the infraction, time of day, location within the campus, person issuing the ODR, and the administrative consequences applied to the student's behavior. Information from the ODR is tracked on the School-wide Information System (SWIS) database. Data will be selected and analyzed to describe trends in the incidence of specified types of problem behavior and problem behavior in various subpopulations, as identified by ODRs.

Definition of Terms

Belonging/connectedness is a sense of well-being felt in a secure relationship (Farlex, 2007).

Context refers to “internal or external events or circumstances that are perceived by an individual (consciously or not) that may influence the individual’s behavior” (Dunlap, Harrower, & Fox, 2005, p. 30).

Discipline is training that is expected to produce a specific moral or mental character or pattern (Farlex, 2007).

Disrespect is the lack of courteous regard (Farlex, 2007).

Externalizing behaviors are undercontrolled behaviors; “those acts that impinge on others and disrupt the environment. Examples include stealing, fighting, truancy, destructiveness, and lying” (Kazdin, 1995, p. 9).

Fidelity is “the accuracy and consistency with which interventions are delivered in schools and/or classrooms” (Gresham, 2004, p. 333).

High school is a school that includes grades 9 through 12.

Implementation is “a specified set of activities designed to put into practice an activity or program of known dimensions” (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005, p. 5).

Internalizing behaviors are over-controlled behaviors with “characteristics that are more internally focused: anxiety, shyness, withdrawal, hypersensitivity, and physical complaints” (Kazdin, 1995, p. 9).

Intervention is use of evidence-based practices to foster behavior change either by teaching new skills and/or by environmental manipulation (Bowen, Jenson, & Clark, 2004).

Problem behaviors are behaviors that interfere with achieving a positive result or that tend to produce a negative result (Farlex, 2007); they disrupt the social well-being and academic progress of other students and “present formidable challenges to school personnel” (Bambara, 2005, p. 1).

Prosocial/positive behavior consists of voluntary actions, such as “sharing, comforting, rescuing, and helping” (Knickerbocker, n.d., ¶1), that benefit others “with no obvious benefit for the person performing the behavior” (Changing Minds, 2007, ¶ 1).

Safety is freedom from danger, risk, or injury (Farlex, 2007) whether physical or psychological.

School climate is a combination of the beliefs and values that have shaped a school over time. It is manifested by the behaviors and actions of students, staff, and the school community (Deal & Peterson, 1999).

School violence is either physical force or psychological stressors used for the purpose of violating, damaging, or abusing a person (Johnson, Naumann, Steed, & Hennessey, 2002).

Trends in data are “the tendency for performance to decrease or increase systematically or consistently over time” (Kazdin, 2001, p. 127).

Delimitations

The study is delimited to all students enrolled in one specific suburban high school in 9th, 10th, 11th, and 12th grades. Other high schools and their populations were not included in this study. The study is also delimited to the 2004-05, 2005-06, and 2006-07 school years and to the three disciplinary categories—(1) *defiance/disrespect/*

insubordination/non-compliance; (2) fighting/physical aggression; (3) skipping class/truancy—that were selected for examination.

Assumptions

Information recorded on the ODRs was consistent among the adults filling out the forms over the three year period. In other words, two adults seeing a rule infraction would code it the same on the ODR or an individual seeing a similar infraction would code it the same at two different times/occurrences.

Summary

In recent years concern has been rising about the safety of high school campuses. There is a need for information about high school student behavior and for investigating disciplinary frameworks that have the potential to impact that behavior. There is little research on implementation of SWPBS at the high school level—most data comes from rural, suburban, and urban elementary or middle schools. This study will expand the knowledge-base about student behavior and will yield information about the use of a specific, positive, proactive disciplinary framework, SWPBS, at the high school level. Because SWPBS does not endorse the traditional aversive and exclusionary punishment used in secondary schools, the incidence of ODRs in schools utilizing SWPBS is of general interest.

Researcher's Perspective

This study was conceived from the researcher's experience as a mother—her son refused to attend middle school because of rampant environmental disorder—and as a member of a PBS leadership team in a high school. Because a preponderance of PBS research focuses on special populations, tertiary interventions, and on elementary and

middle schools, this researcher wanted to investigate office discipline referral patterns in a high school following the institution of a positive behavior support system as a disciplinary framework.

Implementation of PBS at the high school level is daunting, and fidelity of implementation takes Herculean effort. A logical step is analysis of longitudinal SWPBS data to evaluate trends in the incidence of specific behaviors as well as behavioral trends among various subsets of the school population. As a counselor, this researcher experiences the daily impact of school disorder on students, on the school environment, on family systems, and on the larger community. Oftentimes, adults are heard bemoaning the fact that negative behavior seems to be contagious while positive behavior is not. Perhaps utilization of SWPBS can help to reverse this impression.

The prevention aspect of the universal level of SWPBS is intriguing as “an ounce of prevention is worth a pound of cure.” Findings to date in elementary and middle schools indicate the beneficence of SWPBS in improving behavioral performance which concurrently improves academic performance (Horner, Sugai, Todd, et al., 2005).

Organization of Remaining Chapters

The next chapter contains a review of the literature about PBS systems in schools. It focuses on the evolution of PBS from theory to public policy to current issues in schools. Topics to be discussed are school violence, student behavior and social learning, and past and present school discipline practices. Chapter 3 explains the research methods utilized in the study. This is followed by Chapter Four in which the findings of the study are presented; Chapter 5 is a reflection on the study and the findings.

CHAPTER 2: LITERATURE REVIEW

School Disorder and Violence

A psychologically and physically safe school environment is a necessity if children are to learn and achieve (Gable, Butler, Walker-Bolton, Tonelson, Quinn, & Fox, 2003). Nationally, there is great concern about disorderly and violent behavior and the harm those behaviors can do to others within the school environment (Anderson & Kincaid, 2005). A substantial body of research indicates that antisocial behavior can adversely affect academic achievement (McEvoy & Welker, 2000; McNeely, Nonnemaker, & Blum, 2002; National Center for Education Statistics, 2001; Sellstrom & Bremberg, 2006) and cause negative school climates to develop (McCurdy, Mannella, & Eldridge, 2003).

In a random sample survey of 725 middle and high school teachers, Public Agenda (2004) found that student disruptive behavior impeded teaching for 77% of the teachers surveyed. Students who exhibit chronic behavior problems during their early years are prone to continue these behaviors throughout their school career (Sprague & Walker, 2000). When misbehavior is mitigated and prosocial replacement behaviors are taught the school environment is more ordered, students and staff feel safer, and academic and social progress can be made (Horner, Sugai, Todd, et al., 2005; Skiba & Peterson, 2000).

Johnson et al. (2002) define school-related violence as “any school-related physical or psychological behavior that produces a victim” (p. 5). It disrupts the learning

environment (Dinkes, Cataldi, Kena, & Baum, 2006) and can cause damage, pain, injury or fear. Researchers describe the dysfunctional atmosphere that is found in some U.S. schools with a variety of terms—school disorder (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005), misbehavior, antisocial behavior, problem behavior, and school violence. They generally agree there is a continuum of violence within schools (Johnson et al., 2002). On the lower end of the violence scale rest behaviors that Welsh (2001) characterizes as misconduct—inappropriate language, off-task behavior, put-downs and insults, truancy, and general noncompliance and disruption. These behaviors escalate to illegal “offending” behaviors—intimidation, physical aggression, drug and weapon violations, and hate crimes—on the extreme of the continuum.

While most schools focus their safety efforts around violence prevention, problem behavior, and illegal activities such as weapons and drug violations (Bailey, 2006), the continuum clearly demonstrates that safety in school includes concerns about not only physical safety, but also psychosocial safety (Anderson & Kincaid, 2005; Clarksean & Pelton, 2002; Johnson et al., 2002; Morrison & Furlong, 1994). In response, 78% of public schools have implemented school violence prevention programs in order to improve school climate and to optimize education opportunities for students (Heaviside, Rowand, Williams, & Farris, 1998).

Most violence occurs in middle and high schools and in large (over 1,000 students) schools (Dinkes et al., 2006; Heaviside et al., 1998) where size impedes the development of a sense of community (Gottfredson et al., 2005). Between 1992 and 2004, school crime rates for students ages 12–18 generally declined (Dinkes et al., 2006;

Johnson et al., 2002), however, students' fear of violence increased and the public belief that school-related violence is increasing grew (Johnson et al., 2002). Sugai, Sprague, Horner, and Walker (2000) suggested that a continuum of behavior supports is necessary to interrupt the violence.

School Safety

Although there are behavior problems that must be ameliorated, the vast majority of public schools in the United States are safe (Schiraldi & Ziedenberg, 2001). On school safety surveys (Dinkes et al., 2006), students reported increased school security measures from 2001-2005. Over 90% of students (n = 21,823) ages 12–18 reported that their schools had a student code of conduct, a requirement that visitors sign in, and adult supervision in the hallways. Less frequently noted security measures included security guards and/or assigned police officers (63%); locker checks, locked entrance or exit doors during the day, and security cameras (53% - 68% per measure); badges or picture identification (25%); and metal detectors (11%) at their schools.

The U.S. Department of Education Office of Civil Rights (1999) found that creating a positive school climate is a key factor in preventing violence and that a consistent discipline program is instrumental in this process. In a study of 254 schools (34% high schools and 66% middle/junior high schools) with an average population of 790 students, Gottfredson et al. (2005) found that “schools with greater perceived fairness and clarity of rules [both school climate factors]” (p. 433) and consistent discipline had lower levels of disorder. School violence decreases as the school environment becomes more positive and more prosocial (Osher, Dwyer, & Jimerson, 2006).

The literature refers to the need for a comprehensive framework for behavior and discipline that

- incorporates safety,
- integrates connections and relationships for student support (Blankemeyer, Flannery, & Vazsonyi, 2002; Resnick et al., 1997; Rosenfeld, Richman, & Bowen, 2000),
- emphasizes the importance of academic achievement (Lassen et al., 2006; Luiselli et al., 2005; Najaka, Gottfredson, & Wilson, 2001), and
- accepts cultural differences (Sugai, Horner, Dunlap, et al., 2000).

Several research studies show that implementing a SWPBS system results in significant, positive systems change in climate, in behavior, and in academic achievement (e.g., Lassen et al., 2006; Luiselli et al., 2005; Metzler et al., 2001).

McCurdy et al. (2003) and the U.S. Surgeon General (2001) found that school-wide interventions appear to be more effective than those that focus on altering individual attitudes, social skills, and other behaviors. “Constructing cultures incompatible with violence and threat, as opposed to curricular add-ons or narrow skills training approaches, should be the preferred approach for preventive efforts” (Erickson, Mattaini, & McGuire, 2004, p. 102). SWPBS provides a disciplinary framework for constructing a positive school climate and culture.

Promoting School Success

According to Osher et al. (2006) the characteristics of a safe and effective school cannot be separated, but exist as part of a system that includes academic instruction, emotional and social safety, and adult and student relationships and behavior. When

students feel a connection with their schools, they are less likely to display violent behaviors. Students who feel safe are more likely to display attachment to the school (Resnick et al., 1997) and to follow the tenets of the school (Stewart, 2003). A sense of belonging or connectedness comes, in part, from positive interpersonal relationships with both adults and peers.

School connectedness was the most salient protective factor for both boys and girls against the acting out behaviors [i.e., absenteeism, drug use, risk of injury]. . . These findings underscore the importance of schools as a primary source of connectedness with adults. . . [thus] schools can and do play a vital role in. . . providing a sense of belonging that may not be provided by other sources such as family or peers. (Resnick, Harris, & Blum, 1993, pp. S6-S7)

Effective schools foster positive social and academic growth which is vital to students' future success. An orderly school environment that supports and values its citizens is an essential intervention to increase student engagement (McPartland, 1994) which in turn increases positive behaviors such as respect, effort, and attendance. Najaka et al. (2001), in a meta-analysis of 87 studies, found that improved academic performance produced moderate improvements in behavior and that positive changes in behavior accompanied increased attachment and commitment to school. The overall results of their findings suggest that "attachment to school and commitment to education are more predictive of problem behavior than achievement in school [is]" (p.267). A positive disciplinary framework is essential because students cannot learn social and academic life skills that are taught in school if they are excluded from the school environment through punitive actions such as confinement, suspension, or expulsion.

Federal initiatives, specifically the Individuals with Disabilities Education Act and the No Child Left Behind Act, make schools accountable for the academic

achievement of all students. Empirical evidence shows that academic achievement is closely related to student behavior (Lassen et al., 2006; Luiselli et al., 2005). In separate studies, Gottfredson (1997), in a meta-analysis of 149 violence prevention programs, and the U.S. Surgeon General (2001) found that problem behaviors can be mitigated by establishing and sustaining SWPBS programs in schools. This, in combination with recent legislation naming positive behavior supports, interventions, and strategies as the preferred methods for ameliorating dysfunctional behaviors (Wilcox, Turnbull, & Turnbull, 2000), has encouraged schools to incorporate SWPBS as the foundation for their disciplinary programs (Bowen et al., 2004).

Public Policy and School-wide Positive Behavior Support

Federal Initiatives

Problem behavior and violence potentially interfere with the educational process as well as threatening student and staff safety (Turnbull, Wilcox, Stowe, Raper, & Hedges, 2000). Because of this, many laws have been passed (e.g., Safe Schools Act, Safe & Drug Free Schools & Communities Act, Guns-Free Act, Community Oriented Policy Services, Safe Schools/Healthy Students) in attempts to ensure safety on school campuses. Recent reauthorizations of the Elementary and Secondary Education Act of 1965 as the No Child Left Behind Act of 2001 (NCLB) and the Individuals with Disabilities Education Act (IDEA) of 1997, as the Individuals with Disabilities Education Improvement Act in 2004 (IDEIA), encourage the inclusion of all students in SWPBS programs because maladaptive social behavior can have a negative effect on students' social and academic learning. These laws encourage the use of behavior support programs for effective use of resources and for facilitation of comprehensive reform that

is evidence-based and data driven. Although both laws emphasize quality education for all children, NCLB emphasizes global student achievement and school accountability, while IDEIA focuses on meeting the individual needs of students (U.S. Department of Education, 2005).

NCLB. According to Sipple and Banach (2006) and Kimmelman (2006), equity and access to public education for students who have disabilities and/or who belong to identified sub-populations have been major educational concerns of the federal government for the last 50 years. The terms equity and access have evolved and now mean equity within and access to general curricula rather than access to a special place within the school building. NCLB states that every student in the public schools is part of the general education system (Sailor & Roger, 2005). In harmony with SWPBS, NCLB's focus is on educational quality for *all* students in *all* schools across *all* disciplines.

NCLB is designed to improve American education through accountability. It provides unprecedented flexibility in how federal funds are used and requires the development of evidence-based methods and programs. This law addresses both behavioral and achievement issues between children with disadvantages and other children. However, NCLB does little to address learning, cultural, or socioeconomic differences between students. NCLB's most important contribution is focused attention on the need for empirical research and on the need for applying scientific findings in schools and in classrooms across the nation (Kimmelman, 2006).

IDEA 1997. On the surface, IDEA and NCLB are complementary, however, they are in conflict regarding assessment. IDEA tries to strike a balance between academic and functional assessment, taking the student's needs and strengths into consideration. Like

NCLB, IDEA 1997 is outcome focused but with an emphasis on access and participation in the general curriculum—the right to be treated fairly (Timberlake & Sabatino, 2006). IDEA 1997 meshes well with SWPBS because of mutual emphasis on social justice and equity.

IDEA 1997 approves the use of positive behavior interventions (Individuals with Disabilities, 1997) over aversive ones and addresses the fact that positive behavioral interventions, supports, and strategies can be used if a student's behavior impedes anyone's ability to teach or to learn. By specifically naming only positive behavior supports (PBS) as an intervention strategy, Congress indicated that PBS or SWPBS is the intervention of choice (Wilcox et al., 2000). Additionally, SWPBS practices are approved for use whether or not students are identified as having special needs (Turnbull et al., 2000; Wilcox et al., 2000). The wording in IDEA 1997, allowing the application of PBS across all students, leads the way to a generalized curriculum rather than compartmentalized education based on a student's classification or label and specifically disallows special education services because of inadequate instruction or because of limited English language proficiency (Yell & Shriner, 1997). This increases the number of students with learning differences in general education programs and thus increases the need for special and general education collaboration to coordinate the education process for all students.

Individuals with Disabilities Education Improvement Act (IDEIA 2004). IDEIA 2004, a reauthorization of IDEA 1997, is primarily a special education law that is written in such a way that it impacts all children. IDEIA maintains the integrity of IDEA 1997 and increases the need for special and general education collaboration (U.S. Department

of Education, 2005). Local education agencies (LEAs) are allowed to use a specified percentage of the federal special education money they receive to give academic *and behavioral supports* to students in general education programs who need additional help to succeed in school. The focus on prevention is obvious because, although allowed for grades K-12, the emphasis is on grades K-3. The funding may be used for professional development expenditures to train teachers and staff in the implementation of evidence-based teaching and behavioral interventions. IDEIA also provides for educational and behavioral evaluations, services, and supports for all students (Individuals with Disabilities, 2004), “blurring the distinction between learning and behavior problems” (Gable et al., 2003, p. 75).

Civil rights. Federal anti-discrimination policies make school districts responsible for stopping hate crimes. The Office for Civil Rights (OCR) defines harassment [school violence] as anything from name-calling to malicious mischief to violent crime (U.S. Department of Education, 1999). According to the OCR, empirical research and a growing consensus among educators indicate the appropriateness of using intervention programs to create a supportive school climate. The curricula for support programs delineate clear expectations for appropriate behavior while promoting tolerance and sensitivity for personal differences.

Office of Special Education Programs (OSEP). The U.S. Department of Education’s OSEP is currently studying the implementation of SWPBS in over 2,900 schools in 34 states. It is examining the effect of technical support on SWPBS adoption, social and academic outcomes for students, and SWPBS sustainability issues (Horner, Sugai, & Vincent, 2005).

State Initiatives

Many states have adopted statewide PBS initiatives. Listing PBS contacts in all fifty states, the U.S. Department of Education (2007b) promotes systemic support to encourage efficient implementation of statewide PBS for improved academic and behavioral outcomes. The four essential components listed for a successful statewide implementation of PBS are establishment of (a) leadership teams; (b) funding, marketing, and political support; (c) training, coaching, and evaluation capacity; and (d) successful PBS schools within the state to demonstrate the potential impact of PBS. An example of statewide implementation is the Colorado School-wide Positive Behavior Support Initiative which has established all four of the above mentioned components. Colorado PBS states that its mission is “to establish and maintain effective school environments that maximize academic achievement and behavioral competence of all learners in Colorado” (Colorado Department of Education, 2007a, ¶ 1). PBS is currently being implemented in 563 schools and 68 school districts in Colorado, and there are currently 78 coaches (Colorado Department of Education, 2007b, ¶ 1).

School-wide Positive Behavior Support

Model of Prevention/Intervention

The conceptual framework used to describe SWPBS, follows the U.S. Public Health Service model of prevention (Walker et al., 1996). As shown in figure 1, it is a three-tiered triangle with each tier representing a level of prevention/intervention on the behavior continuum. At the universal or primary level of SWPBS, behavioral goals pertain to the entire student body. Goals are geared toward specific groups and individuals at the secondary and tertiary levels (Crone & Horner, 2000).

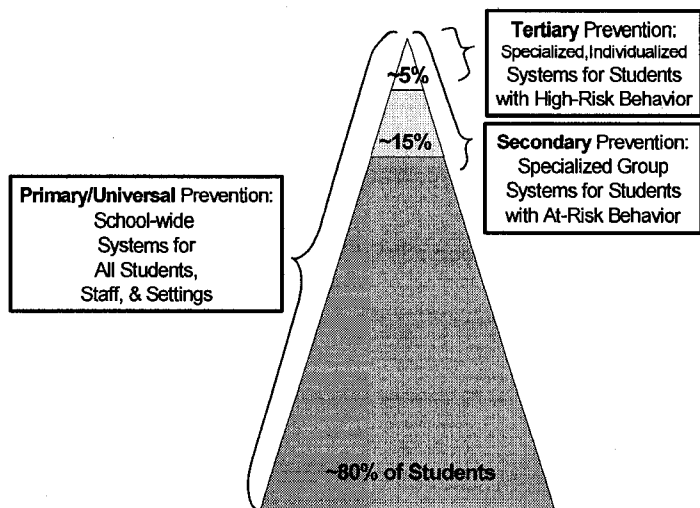


Figure 1. Continuum of school-wide instructional and positive behavior support. From <http://www.pbis.org/schoolwide.htm#components>.

This comprehensive design, because it includes the entire student body, affords the opportunity to positively affect a much larger, more diverse population than traditional disciplinary

measures (Crone & Horner, 2000). The goal of this model

is to environmentally reinforce prosocial behavior and to help students learn and internalize the use of contextually appropriate behavior (Bowen et al., 2004). That is, it increases students' understanding of appropriate and acceptable behavior so that they can construct behavioral learning from where they are on the learning continuum.

Primary/universal (tier 1). The goal of the primary or universal level of SWPBS is prevention—creating environmental change that increases student connectedness to school, decreases problem behavior, and promotes learning. This is the level that affects the approximately 80% of the student body who already meet the school's behavior expectations, yet also encompasses the approximately 20% of the student body who require more intensive, targeted supports (Anderson & Kincaid, 2005).

At this level all students receive reinforcement and support for behavior that is within the norms for the school. Expected social skills and behavior are taught school-wide. All students, including at-risk and disadvantaged students, benefit from this level of intervention (Turnbull et al., 2002). All adults within the school are involved, and the

universal level applies to all times and settings within the school (Horner, Sugai, Todd, et al., 2005). Embry (2002) metaphorically describes universal interventions as vaccines which curb the epidemic of disorder and violence in schools. He states that the vaccines are “most effective when everyone who is at risk receives a critical dose” (p. 279). Walker et al. (1996) compare universal interventions with “putting fluoride in a community’s water supply in order to prevent dental cavities” (§ 41).

Secondary (tier 2). The secondary intervention level, which involves about 10 to 15% of the student body, is designed to develop supports for the students whose behavioral needs were not met at the universal level of intervention. The function of the student’s problem behavior is determined and alternative behaviors are taught and/or environmental modifications are made.

Tertiary (tier 3). At the third or tertiary tier, which involves about 5% to 10 % of the student body, the most behaviorally involved students receive intensive, individualized plans for behavioral change.

In an alternate view, Frattura and Topinka (2006) take exception to the use of the PBS framework described above because it implies disability and because behavioral and other labels are still applied to students. They promote the integration of comprehensive services for all students through the use of instructional systems that use individual data to measure *every* student’s success—with services provided primarily in classrooms. This idea promotes generalization of disciplinary focus by dismantling segregated programs within schools and combining funding from those programs so that integrated comprehensive services are offered to each student. Implementation would be difficult

because it is time and personnel intensive. It, in essence, moves every student to the “tip of the triangle” or tertiary tier and inverts the triangle.

SWPBS Defined

SWPBS is a culturally-sensitive, systems wide, research-validated approach to discipline that allows educators to focus on problem behavior, ranging from tardiness to major disruptions, with the goal of improving school climate and thus increasing safety and academic success. It is both preventive and remedial in nature (Nelson & Sugai, 1999); it is a data-driven, problem solving approach that attempts to understand why problem behaviors occur (Bambara, 2005) and is predicated on careful assessment of student issues and disciplinary problems specific to the school. Effective SWPBS systems include the following elements: (a) a universal, negotiated discipline strategy, (b) a positive mission statement, (c) two to three positive, common behavior expectations for all members of the school community, (d) on-going methods for teaching the expectations and for promoting and maintaining them, (e) on-going methods for deterring unacceptable behavior, and (f) systematic, scheduled processes for observing and evaluating the overall performance of the SWPBS system (U.S. Department of Education, 2007a). Emphasis is on four types of change—systems change, environmental change, social skills change, and behavioral change (Sugai, Horner, Dunlap, et al., 2000).

Academic and behavior targets are chosen by the leadership team with input from students and adults within the school community. Expectations for behavior are clearly explained to staff and students. Universal SWPBS practices are consistently used by the school community and are designed to be positive as well as preventive. PBS schools ensure that the cultural values and educational goals of the community are reflected in

their norms (Sugai, Horner, Dunlap, et al., 2000). The SWPBS framework is person-centered and promotes social justice and equity (Carlisle, Jackson, & George, 2006) through inclusion, high expectations for all students, family-school-community partnerships, and direct advocacy.

Many students do not meet behavioral and academic expectations due to any of a number of adverse personal circumstances. Because they do not fit into a defined disability category, they are often not eligible for special education services. On the other hand, some students receive a plethora of overlapping services because they meet the eligibility criteria for many special programs (Reynolds, Wang, & Walberg, 1987; Sugai, Horner, Dunlap, et al., 2000). SWPBS moves all students toward the general education curriculum. With its secondary and tertiary intervention levels and school-wide focus, it eliminates duplicate services and provides interventions for students who might otherwise not receive services thus improving access to education for all children in a cost-effective manner (Sugai, Sprague, et al., 2000).

The primary function of a SWPBS system is to facilitate development and maintenance of school environments that reinforce positive behaviors that already occur, to prevent new antisocial behaviors from appearing, and to mitigate or extinguish maladaptive behaviors that are already present. In a SWPBS school, interventions are collaboratively designed for the entire student body, for small groups, and for individual students who are significantly behaviorally challenged. Settings for universal supports include the entire school building, classrooms, and specific school environments where targeted problem behaviors are known to occur, such as hallways and cafeterias (Walker

et al., 1996; Warger, 1999). SWPBS is incorporated into daily routines; consistency throughout the school is paramount.

In the SWPBS paradigm, the student is not considered to be the problem; the problem is found in how the student reacts to specific environmental events, therefore, the environment is altered to enhance the probability of desired behavior on the part of the student (Crone & Horner, 2003; Darch & Kame'enui, 2004). For example, traffic patterns can be altered if there is a congested area where physical confrontations occur regularly or transitions can be changed if a spike in office discipline referrals (ODRs) is noted during a specific transition time. Effective strategies that promote positive behavior include maintaining high staff visibility, implementing dress codes to encourage a sense of identity and pride, including students in planning and decision-making, encouraging students to take responsibility for helping other students and community members, recognizing success, and initiating and observing rituals, such as meeting and greeting students at the door every day as they enter the classroom (Griffiths & Stephenson, 2006).

A Disciplinary Paradigm Shift

"The process of school discipline is highly complex, involving student behavior, teacher reactions, administrative disposition, and even local, state, and national politics" (Morrison & Skiba, 2001, p. 175). Discipline as it is used in SWPBS applies to all students and refers to actions that are taken to increase the probability of academic and social success while decreasing the occurrence of unwanted behaviors (Bowen et al., 2004; Sugai, Horner, Dunlap, et al., 2000). SWPBS is educative and is used as an alternative to traditional discipline which embraces aversive consequences, such as

expulsion, that usually do not result in a decrease in negative behaviors (Miltnerberger, 2008). Because the SWPBS philosophy is in direct conflict with traditional disciplinary measures and zero tolerance practices, it requires a shift in the paradigm related to discipline.

Contrary to what many people believe, discipline is not synonymous with punishment, and there is no evidence that aversive discipline improves school climate. In fact, it makes the climate seem hostile (Skiba & Peterson, 2003). Gordon et al. (2000) found that reactive, punitive, exclusionary disciplinary measures, traditionally used as behavior controls, most often do not result in permanent behavior change. Students who misbehave do not benefit from being punished or excluded from the school environment because the punishments are not relevant to their current life situations (Sugai, Horner, Dunlap, et al., 2000) and can reinforce the very behaviors they are intended to eliminate (Gordon et al., 2000; Miltnerberger, 2008; Nelson, Martella, & Galand, 1998; Turnbull et al., 2002). Moreover, punishment is disproportionately applied to students from minority groups (Gordon et al., 2000; Schiraldi & Zidenberg, 2001; Skiba & Peterson, 2003) and students with disabilities (Darch & Kame'enui, 2004). Students (and the school) benefit from positive social and academic intervention to “interrupt the negative trajectory of student misbehavior” (Morrison & Skiba, 2001, p. 179) and to increase the probability of sustained prosocial behavior.

An undisciplined school environment offers many circumstances that can trigger antisocial and violent behaviors (Gordon et al., 2000; Gottfredson, 1997). When school cultures incorporate generally ineffective and inconsistently applied rules, they reinforce discipline problems causing dysfunctional and toxic school climates to develop (Gordon

et al., 2000). SWPBS moves the focus from aversive, one-size-fits-all consequences for problem behavior to individualized teaching of and reinforcement for desired behavior. The intensity of intervention is related to the severity of the problem behavior (Sugai, Horner, & Gresham, 2002).

Universal Behavior Supports

“Problem behavior is not always generated by individual factors, and behavior interventions should not always be targeted to individuals” (Crone & Horner, 2000, p. 164). Universal approaches to school-wide discipline are preferred over other approaches because of their preventive nature. They have the potential to inhibit new problem behaviors from developing while reducing currently occurring negative behavior (Sprague, Sugai, Horner, & Walker, 1999). Classroom and nonclassroom settings are inextricably entwined at the universal support level because school-wide strategies are primarily taught in the classroom setting.

According to Skiba and Peterson (2003) and Sugai, Horner, and Gresham (2002), instructional strategies that have been used effectively for academics also work for teaching school-wide behavioral expectations. In a SWPBS school, problem behaviors are prevented and remediated in much the same way that academic difficulties are addressed—appropriate behavior is identified and effectively taught and reinforced. The student is given multiple opportunities to practice to perfect the learning (Colvin, Kame’euni, & Sugai, 1993). Sugai, Horner, and Gresham (2002) name four components of the instructional approach to classroom management: (a) direct teaching of behavioral expectations using both positive and negative examples and role play, practice of the behaviors, and feedback; (b) planning so that responses related to the behavior

expectations will occur during normal classroom activities; (c) providing feedback and reinforcement for the student's response; and (d) monitoring the student's behavior to ensure that instruction is appropriate and is eliciting desired responses.

Gottfredson and Gottfredson (2002), in their study of 3,691 school-based prevention activities across all 50 U.S. states and the District of Columbia (D.C.), found that poor quality in universal level implementation affected prevention program outcomes. Their recommendations for improved universal supports included more and better training for staff, more supervision and administrative support, and better integration of the prevention activities in the day-to-day operations of the school. Implementing a violence prevention system with fidelity is essential (Gottfredson et al., 2000; U. S. Surgeon General, 2001). Teachers and school staff are instrumental in this process.

Laying the Foundation

“Educational change depends on what teachers do and think—it’s as simple and as complex as that” (Fullan, 2007, p. 129). Keller (1987) found that people must value a concept before they will exert the effort to make it succeed, thus, it is important to lay solid groundwork for new programs in terms of well-structured professional development opportunities, support, and resources. Schools must go slowly to develop support for the PBS program; they must ensure that all components are in place and that consistent, comprehensive professional development is available (Colvin et al., 1993, Kerr & Nelson, 2006). Universal SWPBS interventions are often in place for a year or more before secondary or tertiary interventions are used (Sugai, Horner, & Gresham, 2002). “Beginning stages of implementation take between 3 to 5 years (longer for secondary

schools) to become completely embedded within a system” (Colorado Department of Education-PBS, 2007e, p. 3).

A climate that encourages professional development is vital to a culture that supports and encourages student achievement and well-being (Darling-Hammond, 1998; Peterson, 2002). Altering teacher behavior is difficult (Colvin et al., 1993), and implementing a new program in any school is challenging. Non-compliance by teachers can become an issue, and dissatisfied teachers can sabotage reform efforts (Bransford, Brown, & Cocking, 1999). The effective institution of school-wide programs is dependent on the teachers and the staff who implement the teaching and learning (Harris and Hopkins, 1999). Teaching is central to PBS, and teachers are key to its success.

Sugai, Horner, Dunlap, et al. (2000) highlight the importance of attending to adult behavior(s) that must be changed and to creating environments conducive to learning. Teachers need to form professional learning communities so that they can share best practices, build leadership, and collaborate to set and to reach goals (Darling-Hammond, 1998; Fullan, 2007). A vital component to educators’ professional development is attaining cultural competence so that teachers can meet the needs of students who are diverse (Utley, Kozleski, Smith, & Draper, 2002). It is important for educators to recognize that not all subpopulations within a school building experience and evaluate a school’s climate in the same way (Brand, Felner, Shim, Seitsinger, & Dumas, 2003) and, thus, responses to SWPBS interventions will be different (Lane, Wehby, Robertson, & Rogers, 2007). Promoting positive, safe school climates through recognition of the myriad types of diversity and individual values is integral to a successful SWPBS program.

Effective SWPBS schools develop a mission statement and actively teach the rationale and supporting theory for SWPBS. They collaboratively, with the extended school community (Utley et al., 2002), formulate a list of positive behavioral norms and delineate consistent procedures for adults to use in directly teaching appropriate behaviors and skills to students. Teachers are taught procedures for reinforcing positive behavior and for discouraging negative behavior. They also learn to collect data and to monitor and evaluate progress (Colvin et al., 1993).

Effecting Behavior Change

Ecological management, behavior education, and function-based, student-centered discipline are integral to effecting behavior change (Sugai & Horner, 2005). Applied behavior analysis in conjunction with social learning theory and social control theory provide support for proactive, positive disciplinary practices at the high school level. They reinforce the use of holistic preventive practices as well as student-centered intervention measures.

Applied Behavior Analysis

Applied behavior analysis (ABA) provides the mechanism for behavior change as embraced by SWPBS. ABA is “a branch of behavior analysis that uses behavior principles to solve practical problems” (Pierce & Cheney, 2004, p. 419). According to Dunlap et al. (2005), behavior is understandable and predictable, purposive, and environmentally or contextually dependent. Setting events, which occur far in advance of the behavior, prime the person to display a behavior. Antecedent events, which occur just before the behavior and can seem to be unrelated to the behavior, cause the behavior to

occur. Setting and antecedent events can be physiological, cognitive/emotional, environmental, or social.

When a person acts out it is because a disconnect exists between a need and what is happening in the environment. ABA practitioners discern the reason for a behavior so that it can be modified. The intent is to replace the problem behavior with an alternative behavior that meets the person's needs more effectively and efficiently than the problem behavior did.

Although most students are able to regulate their behavior, they may choose to act out when adversity strikes or when stressors or competing attractions get in the way (Zimmerman, 1995). To maintain a safe environment, schools must have a system in place to assist students in dealing with behavioral issues. One method currently espoused by educators, school districts, and the U. S. government is SWPBS which uses the tenets of applied behavior analysis to teach students school-appropriate responses (behaviors) to events that occur during school (environment) and thus to self-regulate their behavior.

Social Control Theory

Social control theory demonstrates the relevance of social bonding to positive behavior. Social control theory states that schools are the main conduit to social bonding for many students. Social and cultural controls are weakened when schools do not effectively teach societal values, resulting in increased levels of misconduct and delinquency (Welsh, Greene, & Jenkins, 1999). According to Hirschi (1969, as cited in Welsh et al., 1999), the four major elements of social bonding are commitment to conventional goals, attachment to others who exhibit normative behavior, involvement in traditional activities, and belief in customary rules.

Students who do not know how to navigate the educational and social systems within schools often experience social and academic failure causing education to become irrelevant and unrewarding. A successfully established school social bond is an important intervention in school crime, misconduct, and truancy (Jenkins, 1997). The four major elements for social bonding are addressed by SWPBS systems.

Social Learning Theory

Social learning theory explicates an alternative venue through which students learn to emulate the positive behavior of others in their environments. It states that a person can learn new behavior by observing behavior that is modeled. Observational learning is highlighted as “the most important mechanism through which human behavior changes. . . learners must pay attention, construct and remember mental representations of what they saw, retrieve them from memory, and use them to guide behavior” (Sigelman & Rider, 2003, p. 36).

Social learning theory differs from ABA in that the observer’s behavior is not directly reinforced; the behavioral learning stems from observation of the consequence the model incurs. It stands to reason that observation of positive consequences for positive behavior in a school environment will increase prosocial behavior through social learning. The components of social learning are embedded in the universal level of PBS.

SWPBS Research in Schools

Office Discipline Referrals (ODRs)

ODRs are often used to provide the primary disciplinary data used to ascertain the impact of SWPBS. ODRs are staff-generated, written records of observed problem behavior (Sprague et al., 1999) and are viewed as sensitive measures of school disorder

(Sugai, Sprague, et al., 2000). Wright and Dusek (1998) noted that ODRs are not used in all instances of misbehavior but are used when the behavior(s) cannot be managed in the classroom, and the student is referred to an administrator's office. Schools must develop a school-specific, comprehensive list of distinctive, measurable problem behaviors for inclusion on the ODR.

Because most schools collect discipline data during the school year, disciplinary records such as ODRs can be used to identify behavior patterns (Sugai, Sprague, et al., 2000; Wright & Dusek, 1998) and to plan interventions and evaluate outcomes (Putnam et al., 2003; Sugai, Sprague, et al., 2000). Retrospective analysis of existing data is unobtrusive and does not cause behavior changes (Miltenberger, 2008) in students or in teachers making it an efficient method of behavioral assessment.

Much of the research on SWPBS and its impact on student behavior at the universal level has utilized ODRs as an outcome variable because they are specific to the school and provide detailed, quantifiable data about student behavior over time. Hagan-Burke et al. (2004, as cited in Irvin, Tobin, Sprague, Sugai, & Vincent, 2004) found that 75% of school discipline intervention studies used archival data. Various studies and literature reviews report the effectiveness of using ODRs to measure behavior in schools (e.g., Bohanon et al., 2006; Metzler et al., 2001; Putnam et al., 2003; Safran & Oswald, 2003; Taylor-Greene et al., 1997). Tobin and Sugai (1999) found that the archival ODRs of 526 sixth graders were predictive of late middle school and high school problem behavior. They suggested that behavior supports should proactively be put in place for sixth grade students who receive referrals to prevent (mis)behavior escalation.

Irvin et al. (2004) evaluated the validity of empirical studies that used ODRs to measure student behavior, school climate, and the impact of positive behavior supports. Their evaluation included information pertaining to how ODRs were used and perceived as well as social validity and sensitivity to interventions. They found evidence that “supports the interpretation of ODRs as school-wide behavioral climate indicators” (p. 138) and shows ODRs “to be sensitive measures of the effects of interventions designed to change student behavior (p.139). This evidence is positive support for the use of ODRs as an outcome measure for SWPBS program development and implementation.

Limitations to using ODR data are that the label attached to a problem behavior is contextually dependent (Wright & Dusek, 1998) and also depends on the personal perspective of the ODR issuer (Morrison & Skiba, 2001; Wright & Dusek). Those who issue ODRs are not trained, independent observers but are, in fact, staff at the school and so their assessment of the seriousness of a problem behavior reflects their personal experiences (Wright & Dusek). Despite some limitations, ODRs remain “important indicators of student behavior and implementation of school policies” (Morrison, Redding, Fisher, & Peterson, 2006, p. 218). Lane et al. (2007) point out that existing data, such as ODRs, are the data that schools use to measure the effectiveness of innovations, and, “therefore, warrant examination” (p.17). Morrison et al. recommend increasing the reliability and validity of ODRs through (a) staff involvement in discipline policy development, (b) development of a standard ODR form, (c) recording of referral consequences, (d) analysis of ODR data yearly and sharing results with staff, and (e) notation of changes in policy and in SWPBS personnel as they occur.

Miltenberger (2005) stated that assessment is vital to executing a school-wide behavioral plan (such as SWPBS). Problem behaviors must be identified and operationalized. A pre-intervention baseline must be established and behavior must be recorded during the intervention. The success of an intervention is judged on the basis of the frequency of behavior events and the trend of the data—whether the behavior is increasing or decreasing.

Much of the research using ODRs as a variable has been descriptive in nature and longitudinal, utilizing from two to six years of data (e.g., Ervin et al., 2007; Luiselli et al., 2005; Luiselli, Putnam, & Sunderland, 2002; McCurdy et al., 2003; Scott & Barrett, 2004) and indicates that SWPBS is effective in ameliorating misconduct. The fact is, though, that the majority of this research has been completed in elementary and middle schools (Todd, Haugen, Anderson, & Spriggs, 2002; Sprague et al., 1999; Sugai, Sprague, et al., 2000; Taylor-Greene et al., 1997; Warren et al., 2006).

Bohanon et al. (2006) used ODRs as measures of behavior in an evaluation of the impact of SWPBS in an urban high school. They found a 20% reduction in the number of ODRs during the intervention year, as well as a decrease in the need for secondary and tertiary supports for students, and concluded that implementation of SWPBS in high schools can have positive benefits. Another benefit of SWPBS is increased instruction time for students and for teachers (Scott & Barrett, 2004).

School-wide Information System (SWIS)

To determine whether behavior change has occurred, documentation must be produced. A system for recording, tracking, and analyzing discipline data is essential for effective use of the data in determining focal areas for prevention and remedial efforts

and to determine the efficacy of the interventions (Irvin et. al., 2004). The school-wide information system (SWIS) is one such system.

ODR data are frequently compiled using SWIS, a web-based software program designed to enable schools to systematically monitor discipline data for use in evidence-based decision making. The use of the SWIS program adds consistency to ODR forms across schools because there are prescribed behaviors that must be included on the form and in the data entry. Standardized readiness training requirements must be met before a school can be licensed to use SWIS (Todd & Horner, 2007). In an empirical study of the validity of SWIS in 22 elementary and 10 middle schools, Irvin et al. (2006) found preliminary validity for the SWIS system and stated that SWIS data are efficaciously and regularly used to plan and implement behavioral interventions, to evaluate student behavior throughout the school, and to guide change that leads to positive behavioral results in the school. As of August 2007, SWIS was being used in 4,413 schools in six countries; 332 of these schools were high schools (School-wide Information System, 2007).

SWPBS Implementation

Metrics have been developed to measure SWPBS implementation. Both the School-wide Evaluation Tool (SET) and the Effective Behavior Support–Self-Assessment Survey (EBS–SAS) have been found to be reliable, valid measures for assessing the universal level implementation of a SWPBS system.

Measures of Implementation

School-wide Evaluation Tool (SET). The School-wide Evaluation Tool (SET) provides a comprehensive evaluation of the universal (primary prevention tier)

implementation of SWPBS. It is a seven subscale, 28 question survey, developed by Sugai, Lewis-Palmer, Todd, and Horner (2005). External evaluators administer the survey and follow predetermined procedures for documentation and review of SWPBS processes through observations; administrator, staff, and student interviews; and perusal of school documents (i.e., policies, school improvement plans, curriculum, and minutes from meetings). The SET is used to aid in goal setting, to provide procedural direction, and to enable annual comparison of SWPBS progress (Horner et al., 2004).

Horner et al. (2004) found internal consistency ($\alpha = .96$) and high test-retest reliability (97.3%) and interobserver agreement (range = 98.4–100%) as well as excellent construct validity ($r = .75$, $p \leq .01$). They concluded that the SET is a valid, reliable measure and stated that “the SET meets and exceeds basic psychometric criteria for measurement tools used in research” (p. 10). Scores of 80% on both the *SET Total (Implementation Averages)* and *Expectations Taught* subscales—referred to as the 80/80% criterion by Doolittle (2006)—are considered to suggest that SWPBS universal or primary prevention practices are being implemented.

Doolittle (2006) states that “the cutoff for implementation fidelity for the SET [as defined by Horner et al. (2004)] does not have an empirical basis and is instead based on practical experience and conclusions drawn from other implementation research” (p. 172). She suggests a measure of 90% for the *SET Total* as the true point of implementation fidelity necessary for sustainability.

Effective Behavior Support–Self-Assessment Survey (EBS-SAS). The Effective Behavior Support–Self-Assessment Survey [EBS–SAS] (Boland, Todd, Horner, & Sugai, 2005) was developed to support the development of SWPBS plans. Data for the EBS–

SAS is obtained by the PBS Leadership Team at the school rather than from external observers (Horner et al., 2004). It is a self-report survey. Administered annually, information from this survey aids in assessing the status of the SWPBS plan and is used in developing and implementing the next year's action plan. The survey highlights the features of the SWPBS plan that are *in place*, *partially in place*, and *not in place* in terms of the domains in which behavior is being examined—the discipline system, classroom and nonclassroom environments, and individual supports. A rating (high, medium, or low) is given for the amount of improvement needed (Lewis & Sugai, 1999).

The EBS–SAS has been found to be a reliable measure of SWPBS status within a school. Safran (2003) found a total scale reliability to be moderate to high ($\alpha = .85$) for current status of effective behavior support and high ($\alpha = .94$) for improvement priority among the schools assessed. Hagan-Burke et al. (2005) found similar results, for example, $\alpha > .87$ for current status and $\alpha > .93$ for improvement priority. In reference to test validity, Safran (2003) stated that “intervention effectiveness and positive student outcomes are the ultimate evidence supporting the validity of the EBS [EBS–SAS] Survey” (p. 8).

Implementation Fidelity

Implementation of a program or system implies that structured practices, procedures, and processes are in place (Fixsen et al., 2005). Two of the most widely used methods for implementing new programs and policies are information dissemination and staff training—what Stokes and Baer (1977, as cited in Sugai, 2003) refer to as the “train-and-hope” (p. 534) method of staff development. These two practices have proven ineffective. In a literature synthesis of 1,054 implementation articles, Fixsen et al. found

that a long-term, multi-level approach is necessary for successful implementation outcomes. The evidence showed that skill-based training, such as teaching appropriate behavior, and fidelity of implementation were essential for good outcomes.

As was previously stated, it is crucial that a violence prevention program is implemented with fidelity (Gottfredson et al., 2000; Gresham, 2004; U. S. Surgeon General, 2001). Results can be markedly different depending on implementation integrity, and schools that implement programs poorly have shown significant negative effects on various outcome measures (Gottfredson, 2001). Doolittle (2006) found that of 285 schools that implemented SWPBS for at least three years, only 140 met the 80/80% SET criterion for full universal implementation (Horner et al., 2004). 74 schools met the 80/80% criterion for the SET but did not sustain it for two years, and 71 of the schools were not yet to criterion for full implementation of the universal level of SWPBS.

Utilizing multiple measures of implementation including ODRs, Gottfredson, Gottfredson, and Hybl (1993) found that student behavior and student perceptions of other's behavior improved in schools that implemented the school-wide behavior program with fidelity. They stated that "simply adding a cosmetic system of positive reinforcement onto a punitive system is not productive" (p. 209). They believe that a combination of targeted behavior-management approaches in conjunction with environmental change provides the most effective disciplinary system.

System Sustainability

Fullan (2005) defines sustainability as "continuous improvement, adaptation, and collective problem solving in the face of complex challenges that keep arising" (p. 22). Doolittle's (2006) operational definition for sustaining SWPBS was "a minimum of three

years of implementation with the last two years demonstrating implementation fidelity” (p. 95). Her findings indicate that the three most critical features for sustainability of SWPBS systems are measured by three of the seven subscales from the SET—*Behavioral Expectations Taught, On-going System for Rewarding Behavioral Expectations, and Monitoring and Decision-making*. She suggests thorough planning and readiness prior to implementation, along with continuous monitoring and adjustment of procedures as contexts change, to increase the likelihood of sustaining implementation with fidelity.

According to Adelman and Taylor (2003), in order to sustain change, the education system must address barriers for both students and teachers. The likelihood of sustaining innovations within schools is increased when implementation of innovations is blended with other existing school improvement programs and systems so that they become a part of the school’s infrastructure. This entails designing activities for the specific school, the district, and the local community. Concomitant practices must be accompanied by a “high degree of commitment and relentlessness of effort” (p. 9).

Challenges in High Schools

Challenges that Bohanon et al. (2006) noted specific to SWPBS implementation in a high school setting were fidelity of implementation, teaching and rewarding positive behavior, and meaningful modification of ODR forms. Other challenges to successful secondary level implementation noted throughout the literature (e.g., Lane et al., 2006; Lane et al., 2007; Walker et al., 2004) address the complexity of a high school setting: (1) high schools tend to be large and loosely structured, (2) high school students experience multiple, dissimilar environments, peer groups, and teachers each day; (3) practices and

expectations vary from adult to adult in the school building adding inconsistency to academic, behavioral, and social expectations; (4) many schools have not developed or disseminated normative rules for behavior; (5) effective reinforcement is difficult because adult approbation is less influential than peer approval; and (6) high school problem behaviors are manifested differently than those in younger children.

Adolescent behaviors may be more covert than those in younger children and are often internalized. Examples of this are eating disorders, cutting, and avoidance behaviors such as shyness and withdrawal. Consequences from externalized behaviors, which are generally antisocial (e.g., physical aggression, disruption, and truancy), tend to have wide ecological impact and often require immediate administrative reaction to protect others within the school. Females tend to show more internalizing behaviors and males tend to display more externalizing behaviors (Kazdin, 1995).

Summary

A school's climate is determined by its behavioral norms and expectations, rules and disciplinary practices, instructional practices, and social opportunities (McEvoy & Welker, 2000). High expectations and support for socially appropriate behavior are community norms in SWPBS schools. School-wide universal—nonclassroom, classroom, and individual—support for positive behavior is incorporated into school rules. Disciplinary action is combined with the teaching of socially appropriate behaviors so that students can “eliminate negative behaviors and replace them with positive ones. . . to ensure that the school is safer and the child is less troubled and can learn” (U.S. Department of Education, 1998, ¶ 37). The U.S. government has recognized the

importance of many of the above findings and has enacted legislation to encourage continued development and implementation of SWPBS programs.

Conclusion

This chapter has provided information about school violence and school safety. The rationale for using the prevention/intervention protocols of SWPBS systems as disciplinary frameworks within schools was addressed through discussion of the interwoven aspects of traditional school discipline, staff and teacher effectiveness, school-wide behavior supports, and promoting successful schools and, thus, successful students. State and federal public policy promoting the use of SWPBS in schools across the nation was explicated, and the theoretical bases underlying and supporting SWPBS as a framework for school discipline were explained. A section of the literature review was devoted to SWPBS research in schools and to the practice of using archival disciplinary data, in the form of ODRs, for measuring student behavior and (dis)order within schools. Implementation fidelity and sustainability research was discussed.

CHAPTER 3: METHODOLOGY

The purpose of this study was to examine discipline patterns in a comprehensive public high school (grades 9 through 12) that was implementing a school-wide positive behavior (SWPBS) support system. The research objective was to utilize longitudinal systematic observation data to provide a comprehensive description (Johnson, 2001) of a SWPBS system as it was applied in one high school and to increase understanding of universal level implementation of SWPBS in this particular context. Disciplinary incidences as measured by archival ODRs were analyzed for each of the three years under study. A year of study was considered to be the school year—from August 1 of one year to June 1 of the following year.

Sugai, Sprague, et al. (2000) suggested that the universal intervention level of SWPBS is appropriate “when (a) the referral per student ratio exceeds 0.5 or (b) the percentage of students receiving one or more referrals per year exceeds 20” (§ 29). During the 2004-05 baseline year, referrals at the target high school were .554 per student, and 24.8% of the students received one or more referrals.

Research Design

The present study used a quantitative research paradigm and a descriptive, single-case pre-post nonexperimental design (Alberto & Troutman, 2006; Patten, 2005) to examine changes in the incidence of office referrals for problem behavior at one high school following institution of a SWPBS system. The system was applied at the high school as a census population intervention. The variables utilized to evaluate trends in

student behavior over the three years of the study were ODRs as related to student gender, grade level, and type of problem behavior (e.g., disrespect, fighting, and skipping class).

The above variables were selected because of their prominence in the SWPBS literature and their relevance to the high school participating in this study. The data utilized were collected over a period of three school years—2004-05 (baseline – year 1) and 2005-06 and 2006-07 (intervention – years 2 and 3). This study is a subtype of longitudinal research that examines data trends (Johnson, 2001).

Rationale and Fit

Although an A-B-A-B reversal design in single-case research has the highest internal validity, an A-B (two phase) design was utilized in this SWPBS study because there are “practical and ethical difficulties that restrict its [A-B-A-B] use in applied settings” (Pierce & Cheney, 2004, p. 364). Two of the potential difficulties for this study were that (1) resistance to a reversal procedure is often present in natural settings, such as the high school, because new behaviors may be socially reinforced by others in the environment, and (2) removing the contingency of reinforcement (behavior-response-consequence) to demonstrate effectiveness was not desirable or ethical. Anderson and Kincaid (2005) reported that most published SWPBS studies used an A-B design and that although extraneous variables might affect the outcome, these studies “provide some evidence of the effects of the intervention, especially when data are collected for extended periods of time, as is common in most studies of SWPBS” (p. 58).

A current educational research concern is that “limitations on evidence-based research designs may result in fewer effective options being made available to

practitioners for meeting needs of high-risk youth” (Mayer, 2006, p. 186). Recognizing this, the U.S. Department of Education (2005) added single-subject and single-case research designs to the list of accepted evidence-based methods in educational research because “there are cases in which random assignment is not ethical [or feasible] and, in such cases, . . . single-subject designs [are recognized] as alternatives that may be justified by the circumstances of particular interventions” (p. 3588).

Single-subject designs, also known as single-case designs (Alberto & Troutman, 2006; Kazdin, 2001; Patten, 2005), are derived from the field of applied behavior analysis. These designs are not effective for determining a functional relationship [cause and effect] (Alberto & Troutman, 2006; Johnson, 2001; Patten, 2005; Pierce & Cheney, 2004) but “provide insights into processes that improve educational practices and outcomes” (Kennedy, 2005, p. 12). A single-case research design is appropriate here because no entity is better qualified to determine the value of the outcomes of this study than the high school and the individuals involved in the SWPBS process (Kennedy; Scott & Barrett, 2004). They do not “allow for precise manipulation of the independent variable and for a statement of causal functional relations but, in the case of SWPBS, they provide convincing evidence that schools that implement SWPBS achieve and maintain significant changes” (Anderson & Kincaid, 2005, p. 58).

The present study was an outgrowth of a SWPBS plan at the target high school. Because very little high school level SWPBS research has been published, findings from this study will extend the existing literature on discipline patterns in SWPBS high schools. This study is unusual as SWPBS studies have historically taken place in elementary or middle schools.

Participants and Setting

Participants were students at a comprehensive high school in a small city (population 60,000) during the 2004-05, 2005-06, and 2006-07 school years. The high school in this study was the only one, out of five in the district, utilizing a SWPBS system to improve discipline and school climate. Demographic data is displayed in Appendix A and explained below.

A census population from grades 9 through 12 was accessed. The high school population was stable during the three years of data collection ranging from a low of 1,179 students to a high of 1,194 with a stable gender distribution varying 0.8% among females and 0.8% among males. The school was predominantly low to middle income. The percentage of students eligible for free and reduced lunch, a socio-economic status indicator, was 24.1% in 2004-05, 27.9% in 2005-06, and 30.3% in 2006-07. The percentage of students identified as eligible for special education services was 9.5% in 2004-05, 9.3% in 2005-06, and 8.8% in 2006-07. Daily attendance averages were 94% in 2004-05, 93.8% in 2005-06, and 89.8% in 2006-07. Drop out rates were 3.2% in 2004-05, 4.3% in 2005-06, and 3.6% in 2006-07. Student mobility, the rate at which students change schools for reasons other than promotion to the next grade level, for years 1, 2, and 3, respectively, was 15.5%, 16.3%, and 18.4%. The school was ethnically homogenous with a preponderance of White students. It should be noted that the ethnic and racial distribution was static except for Hispanic students (showing a 4.8% increase in numbers) and White students (showing a 5.3% decrease) during the course of the study.

Demographic information for year 1 and year 2 of the study was obtained from the Colorado Department of Education (2007c) as was data for year 3 (2007d). Drop out rate and average daily attendance for the 2006-07 school year was obtained from the school district data quality specialist. Students and others did not actively participate in the study because data were obtained from the school's archival disciplinary records. The human subjects committee's letter of exemption is appended (see Appendix B).

The school was selected for the study because (1) the administrative and PBS Leadership Teams were interested in improving the discipline system through PBS, (2) the school planned to use SWIS as its data collection system, and (3) the school's principal was interested in providing SWPBS data for analysis. Several "improvement" programs were in place in addition to SWPBS. Other programs, in various stages of development, included Professional Learning Communities (PLCs), Public Education and Business Coalition (PEBC), Student Intervention Teams, Project Lead the Way, and an art and business magnet. The school sponsored many activities for students including 10 sports each for females and males, several different types and levels of bands, orchestras, and choirs; theater; and a variety of clubs (e.g., world languages; Straight and Gay Alliance [SAGA]; Distributive Education Clubs of America [DECA]; Fellowship of Christian Athletes [FCA]; Future Business Leaders of America [FBLA]; Math, Engineering, Science Achievement [MESA]; drama; and art.

Preparing for Implementation

Initial exploration of PBS began in the 2003-04 school year. The initial PBS Leadership Team was formed by eight volunteers from all sectors of the school, including classified staff, teachers, specialists, and administrators. The team met regularly during

the spring of 2004 and held an all-day planning retreat during July to set the groundwork for implementation.

Because staff buy-in is essential when implementing a new program, information about positive behavior support systems was disseminated to staff during the first semester of the 2004-2005 school year. Staff meetings included discussion of the feasibility and potential utility of a PBS program at the high school. Sugai and Horner (1999) stated that optimally 100% of the school's staff will agree that a discipline problem requiring a long-term intervention effort exists. However, they concluded that staff agreement of 80% is more feasible and is considered to be sufficient.

Two all-staff votes were held during fall of the 2004-05 school year to determine whether the staff would support a SWPBS implementation. According to the school's principal (personal communication, March 4, 2008), the first vote for PBS implementation failed to reach the 80% consensus. Between the first and second ballots members of the PBS Leadership Team campaigned for SWPBS and provided additional information to staff, individually and in small groups. In December of 2004, 89% of the staff voted in favor of implementing a SWPBS system. Only staff members who were present at the meetings voted; there was no attempt to poll members who were absent.

Team and Staff Development

The PBS Leadership Team was formed by eight volunteers from all sectors of the school, including classified staff, teachers, specialists, and administrators. Team members attended a two-day Colorado SWPBS Leadership Team Training sponsored by the Colorado Department of Education's Positive Behavior Support Initiative. Following this, team members trained the faculty and staff of the school through presentations at

staff meetings. In addition to these trainings, all newly hired certified staff members attended a mandatory orientation session on SWPBS prior to starting their first year at the high school. Optional out-of-school professional development in the form of SWPBS workshops was offered every year to the staff. No data or information was available pertaining to participation rates.

Baseline Year

During the baseline year, 2004-05, the PBS Leadership Team attended multiple PBS workshops offered through the Colorado Department of Education and the school district. The workshops provided an overview of PBS as well as information pertaining to school-wide discipline, data-based decision making, problem solving and action planning, and behavior management. During the baseline year, the team defined the school's universal behavior expectations (Horner, Sugai, Todd, et al., 2005). School-wide expectations were (1) **P**ride, (2) **O**wnership, (3) **W**ork, (4) **E**ffort, and (5) **R**espect. The first letters of the five expectations create the acronym POWER. The team created a logo to visually display POWER (see Appendix C). The team also developed a matrix that defined and explained school norms and positive behavior (see Appendix D) in terms of POWER. Many of the rules were written in a "looks like/sounds like" format to facilitate student and staff understanding. An example of the rules from the matrix is respect looks like "mindful of peers"/sounds like "polite." The PBS and POWER information were included in the school planner that students are given each year. In May of 2005, at the end of the baseline year and prior to implementation of SWPBS, a needs assessment that included both the EBS-SAS and the SET (described on pages 35 and 36 of this study) was administered.

Implementation

Implementation began in August 2005. The PBS Leadership Team permeated the school with posters of the new POWER logo and the POWER behavior matrix. LINK, a demographically balanced group of juniors and seniors selected for their leadership potential and trained to assist with transitioning new students into the high school, incorporated PBS and POWER into the day-long freshman and transfer student orientation—held the day before upperclassmen returned to school. The first day of school, a kick-off assembly, led by the LINK crew and student council, was held to affirm the school's basic tenets and to introduce the school's SWPBS system to the students and staff. The theme was positive behavior. Appropriate school behavior was taught, modeled, and practiced. POWER banners were displayed and prizes, e.g., bracelets and water bottles in school colors and bearing the POWER motto and logo, were given away.

Implementation continued with all staff members teaching, modeling, and practicing PBS behaviors and language in classrooms and throughout the school. Teachers were encouraged to use the POWER model at the beginning of each semester to establish classroom norms and to revisit those norms regularly to encourage desired behavior in the classroom. The LINK crew assisted staff with on-going behavior training for students during advisory sessions and in classrooms.

Both verbal and tangible reinforcement systems were developed. Verbal reinforcement included PBS language, such as, "I like the way you opened that door for that student," or "thanks for removing your hat when you entered the building." POWER tickets (see Appendix E) were used as tangible reinforcement for positive behavior. Each

ticket showcased student artwork (selected through a contest) and displayed the word POWER on the front. When a student demonstrated PBS behavior, the staff member issuing the ticket circled the letter of the PBS trait the student had displayed (e.g., the letter “O” for ownership with follow up such as, “I wish all students would. . . Thanks for showing ownership.”). The tickets had a line for the issuer’s name as well as the student name. Students turned in their tickets at the office and received prizes through weekly and monthly drawings. School-wide emphasis was on catching students displaying POWER.

The day before school started for all students in August 2006 another day-long orientation for incoming freshmen and transfer students, sponsored by LINK, emphasized the school culture and PBS. The PBS Leadership Team decided against a big assembly kick-off at the start of the year, and the entire student body started school without a specific PBS-based activity.

Monthly PBS Team Leadership meetings were held during the 2004-05, 2005-06, and 2006-07 school years. A guide that differentiated classroom and office managed behaviors (see Appendix F) was composed by the leadership team during the 2005 spring retreat and disseminated at a staff meeting the following fall. A semi-annual all-day retreat was held each year to evaluate progress and procedures and to plan next steps. Community representation was added to the team during fall 2006, and student representation was added to the leadership team in spring of 2007.

Consequences for Problem Behavior

Even though SWPBS accentuated positive behaviors and relationship building there were consequences for problem behaviors. These consequences included verbal

redirects, after school detention as determined by the adult involved, and ODRs. ODRs for extremely serious infractions could lead to consequences such as in-house suspension, out-of-school suspension, and expulsion. The goal for the high school staff was to maintain a ratio of at least five positive responses to one corrective response. According to G. Sugai (personal communication, June 8, 2008) “most classroom managers report a range of 4 to 8 for positives. . .”

The campus monitors and administrative team worked together on ODRs. Administrators in this high school did not just take what was written on the ODR and issue a consequence. They interviewed the student(s) involved, witnesses, and the staff member who issued the ODR to gain understanding of the incident. This thorough review of the incident served to increase cross-case consistency of ODR incident descriptors and consequences for problem behavior.

The makeup of the administrative team was consistent over the course of the study. The principal and two of the three assistant principals were at the school for all three years of the study. The third AP position was filled by two different people during the study—one during the baseline year, and one for years 2 and 3. The campus monitors showed more mobility. There were eight different campus monitors during the three year study—three were there for two years and five were there for one year.

Using Data to Evaluate Effectiveness

School-wide Information System (SWIS) data and information about data trends were shared and discussed with the staff during staff meetings. The PBS Leadership team examined the behavior data each month and based recommendations for environmental change on this evidence-based data. For example, a peak in ODRs was noted at the

beginning of both second and sixth blocks during spring 2007. By brainstorming for possible reasons for this spike in problem behavior, the team noted that daily announcements were made during that time. Deciding that some students were not getting promptly to class because they did not care whether they heard the announcements, the team moved the announcements to the last six minutes of the second and sixth blocks. The effectiveness of this action is not known. Teachers were displeased with the change so the administrative team arbitrarily moved announcements back to the beginning of second and sixth blocks.

Instrumentation

Office Discipline Referrals (ODRs)

ODRs were issued for serious rule infractions and were used to track student behavior that was deemed inappropriate and problematic in an educational setting. Students who received ODRs were sent to an administrator's office where their infractions were discussed with a member of the administrative team (principal or assistant principal). Disciplinary measures were usually assigned during this meeting.

The high school's discipline referral form (see Appendix G) was developed by the administrative and PBS leadership teams at the high school during fall of the baseline year and prior to implementation of the SWPBS system. Although both the old and the new forms contained essentially identical behavioral information, a format that aligned with the SWIS data collection system was desired. The referral form includes the following information: 1) name, 2) grade, 3) date, 4) time, 5) generated by, 6) location, 7) major offense, 8) minor offense, 9) people involved, 10) narrative description of incident, 11) disciplinary action taken by administrator, 12) parent contact, 13) behavior

frequency, 14) possible motivation, and 15) administrative comments. To ensure consistency, items 6 through 15 (with the exception of number 10) are in a multiple choice format. The validity of using discipline referrals in SWPBS research in schools was discussed previously.

Referrals for minor offenses, number 8 on the referral form, were not officially being issued or tracked at the time of the study. This information was added to the referral form in anticipation of tracking minor referrals—referrals that would be handled by school personnel other than administrators—in the future. Over the three years of data accumulation, only five minor offenses were recorded in error. Because administrative follow-up for these minor offenses was the same as that for ODRs, for purposes of this study, the minor offenses were rolled into the ODR count and assigned to the ODR category that matched the offense.

Evaluating SWPBS Implementation

School-wide Evaluation Tool (SET)

The School-wide Evaluation Tool, as stated previously, provides a comprehensive evaluation of the universal (primary level) implementation of SWPBS. Scores of 80% on both the *SET Total* and the *Expectations Taught* subscales are considered to indicate that SWPBS universal or primary prevention practices are being fully implemented. The school district PBS coach and designees, usually school psychologists, administered the SET to ten randomly selected staff members, fifteen students, and an administrator at the target high school at the end of each of the three years of the study—May of 2005, 2006, and 2007.

Effective Behavior Support–Self-Assessment Survey (EBS-SAS)

The Effective Behavior Support–Self-Assessment Survey (EBS-SAS), which was discussed earlier in this paper, was created to support the development of SWPBS plans. A website link for the computer-based version of the EBS-SAS was e-mailed to all staff in late spring. Completion of the EBS-SAS was a required step in the year-end checkout process for all classified and certified staff at the school. All surveys were completed by the end of May 2005, 2006, and 2007.

Data Collection

During the three years of the study, behavior data from ODRs were collected daily and input regularly into SWIS. Two individuals input data during the course of this study. Referral data obtained in year 1 was input by the principal's secretary. She trained an administrative assistant who input the data for years 2 and 3.

To ensure anonymity SWIS identification numbers were randomly assigned to all students who received ODRs. Identifying information, other than the randomly assigned SWIS identification numbers, was removed. Coded SWIS data were transferred to a spreadsheet and processed through the Statistical Program for Social Sciences (SPSS) 16.0 prior to analysis and interpretation of the study parameters. Consent forms were not obtained because students were not active participants in the study.

Data Analysis

This study is nonexperimental, descriptive single-case and thus will rely on visual analysis of graphed data rather than the inferential statistics utilized in various other research designs. The analysis will focus on behavioral trends in a specific environment (Kennedy, 2005). Because the descriptive parameters in a census study, such as this, do

not have sampling errors, inferential statistics are not necessary for interpretation of the results (Patten, 2005). In single-case designs “currently existing statistics either violate fundamental statistical assumptions or are intractable in the large majority of applied research. . . [therefore] the use of inferential statistics in single-case designs is largely an academic debate and not a practical issue” (Kennedy, p. 192). The descriptive nature of this study does not permit cause and effect conclusions. It does provide information about the application of a SWPBS system in a natural setting and its influence on disciplinary issues.

Exploratory data analysis was utilized to evaluate the accuracy of the data (Morgan, Leech, Gloeckner, & Barrett, 2007). Data from SWIS was exported to a spreadsheet and analyzed for missing values and erroneous entries. ODRs missing information that was pertinent to this study were excluded, and duplicate ODR entries were eliminated. Accuracy of SWIS ID number assignment was checked to ensure that each student had only one number under which ODRs were entered. SPSS 16.0 was utilized to perform descriptive analysis for all remaining data.

Thirty behaviors were tracked on the ODRs (see Appendix G). Defiance/disrespect/insubordination/non-compliance, fighting/physical aggression, and skipping class/truancy were selected for analysis (research questions 2, 3, and 4) because they were the behaviors of most concern to the administration, staff, and PBS team and because they are the behaviors most frequently mentioned in the research. The following six research questions were analyzed to increase understanding of the fluctuation of disciplinary action, as measured by ODRs, at the target high school following SWPBS

implementation. To facilitate understanding for the reader, the questions have been grouped into two sections. The method of analysis is provided following the questions.

Group One Research Questions

Research question one investigates total incidences of ODRs. Questions 1a-1b will be addressed to determine changes in ODR incidences in by grade level and gender.

1. What was the overall incidence of ODRs during the three year period that SWPBS was utilized?

a. What was the incidence by grade level (9th through 12th) during years 1, 2, and 3?

b. What was the incidence by gender during years 1, 2, and 3?

Group Two Research Questions

Research questions two, three, and four investigate occurrence of ODR incidences for the three main areas of behavioral concern at this particular high school

- *defiance/disrespect/insubordination/non-compliance*
- *fighting/physical aggression*
- *skipping class/truancy.*

2. What was the incidence of *defiance/disrespect/insubordination/non-compliance* referrals issued during years 1, 2, and 3?

3. What was the incidence of *fighting/physical aggression* referrals issued during years 1, 2, and 3?

4. What was the incidence of *skipping class/truancy* referrals issued during years 1, 2, and 3?

Data analysis. For research question one, vertical bar graphs were built to display the nominal data for annual ODR incidence changes and to show incidence per year per

100 students. A two-phase frequency polygon was constructed to display ODR patterns by month for all three years of the study. The frequency polygon was sectioned into individual years for detailed trend analysis. Vertical bar graphs presented data showing the percentage of students in different referral groupings—one referral, two to five referrals, six to eight referrals, and nine or more referrals.

For question 1a, a vertical bar graph was built to show a comparative summary of the frequency of ODRs by grade level and by year. An additional column on the graph shows the three-year combined total of ODRs for each grade level. The dichotomous data for gender, question 1b, were displayed on vertical bar graphs. Vertical bar graphs were also constructed for questions 2, 3, and 4 to show the changes in incidence in specific categories of behavior disorder (e.g., disrespect, fighting, skipping class) during the baseline year and the two intervention years.

A three-year comparative assessment of implementation fidelity was displayed in a vertical bar chart for the EBS-SAS. A multi-year line graph was built for the SET data to aid in visualization of changes over the three years. Auxiliary findings from the study were displayed in a vertical bar graph showing ODRs by year, grade, and gender. Finally, a summative, two-scale vertical bar and line graph was constructed to facilitate understanding of the overall study findings.

Strengths and Limitations

High schools present complex social and ecological systems in terms of size, structure, and population. A major strength of this study is that it took place in an actual setting (Killian, Fish, & Maniago, 2006) thus providing detailed description of disciplinary referrals generated in a high school prior to and during SWPBS

implementation. Wright and Dusek (1998) found wide variance in office referral rates among schools suggesting that problem behavior baselines should be procured at the school being studied, as was done for this research project. They stated that base rates “can be sufficiently stable from year to year to permit their use in making predictions about future teacher-initiated disciplinary referrals among selected subgroups of students” (§ 33). Because there is a dearth of published SWPBS research at the high school level, this study will enhance the knowledge base and add to the research pertaining to the efficacy of utilizing SWPBS as a disciplinary framework in a high school.

Consistency and standardization of practice is difficult to achieve in school settings because personal interpretations of procedures as well as contextual differences throughout the school lead to variation in implementation thus affecting research fidelity (Killian et al., 2006). In this study, control was an issue contributing to maintenance of research validity and reliability. Threats to internal validity in this study could have been due to multiple confounding variables including student maturation during the study and other environmental influences within and unique to the school (i.e., personnel turnover, multiple school improvement programs concurrently in place, interobserver agreement in recording disciplinary incidences, student mobility, and student population changes every year with the graduating 12th grade class leaving and a new 9th grade class matriculating).

The extraneous variables listed above are threats to internal validity and, thus, fluctuations in ODR incidence cannot be attributed solely to institution of a SWPBS system. The longitudinal nature of the study increases confidence that fluctuations in ODR incidence may be related to the SWPBS system (Anderson & Kincaid, 2005).

According to Creswell (2005), students represent the population of high school students in their current grade—even though they change grades each year. A key educational reform assumption is that a school's processes and climate remain essentially stable, despite population turnover, except when effective change efforts have occurred (Brand et al., 2003). Carr et al. (2002) state that

PBS entails balancing a concern with internal validity with the realities of conducting research and practice in complex naturalistic contexts in order to achieve ecological validity. . . [it] involves typical intervention agents. . . supporting individuals in typical settings. . . for protracted periods of time in all relevant venues (and not just those that lend themselves to good experimental control). (p. 7-8)

As with almost any program in the public schools, there was never enough time for professional development to support the SWPBS system; when time was allotted for professional development, it was shared with the numerous other competing programs within the school as well as with NCLB issues.

Conclusion

This chapter examined the methodology utilized in this study. It began with a reiteration of purpose and proceeded to a description of the research design. This was followed by an explanation of the rationale and fit of the design to the subject of the study. The study participants, setting, instrumentation, study procedures, and data collection and analysis were examined.

CHAPTER 4: FINDINGS

This pre-post, single-case nonexperimental study investigated disciplinary patterns in one high school, as measured by office disciplinary referrals. Research data from three years—one year of baseline and two years of intervention, pre- and post-institution of a SWPBS system—will be presented in this chapter. The study participants were the census population attending the school. Disciplinary patterns among various subpopulations and three specific groups of behaviors that result in ODRs in the high school were examined. The descriptive analysis provides data in both aggregate and disaggregate form to render insights into educational reform, both process and outcome, in one high school.

Restatement of Problem

The utility of systemic positive disciplinary frameworks such as SWPBS in high schools has not been determined. Most research to date has focused on elementary and middle schools that have instituted positive school-wide disciplinary frameworks with varying degrees of success. Similar research is necessary to determine if this type of disciplinary framework can be efficaciously applied at the high school level.

Extant discipline data, in the form of ODRs, has been utilized as a measure of school disorder as well as a measure of school climate. Analysis of this data can clarify discipline patterns to provide a snapshot of student behavior before and after implementation of a disciplinary system. When analyzed for a specific school, the data

can indicate focal points for individual behavior support as well as for large and small-scale prevention and intervention measures.

The purpose of this three-year study was to describe discipline patterns, as measured by ODRs, in one public high school pre- and post-implementation of a SWPBS system. The study yielded information about the aggregated and disaggregated incidence of office referrals in the school. Student grade level and gender, as well as selected disruptive and antisocial behavior categories, were examined. The study describes behavior patterns in terms of frequency and percentage of ODRs issued during three school years.

Research Questions

Defining effective disciplinary practices in schools is vital to developing positive academic, social, and behavioral climates in schools so that students can realize their full potential. Mounting empirical evidence shows that academic achievement is closely related to student behavior (Lassen et al., 2006; Luiselli et al., 2005) and that problem behaviors can be mitigated by establishing and sustaining SWPBS programs in schools (Gottfredson, 1997; U.S. Surgeon General, 2001). Recent legislation named positive behavior supports, interventions, and strategies as preferred methods for addressing problem behavior in the schools (Wilcox et al., 2000).

In view of the above information, investigation of SWPBS processes and outcomes at the high school level is important. The following research questions guided this study in an attempt to increase understanding of the pattern of disciplinary referrals at one high school:

1. What was the overall incidence of ODRs during the three year period that SWPBS was utilized?
 - a. What was the incidence by grade level (9th through 12th) during years 1, 2, and 3?
 - b. What was the incidence by gender during years 1, 2, and 3?
2. What was the incidence of *defiance/disrespect/insubordination/non-compliance* referrals issued during years 1, 2, and 3?
3. What was the incidence of *fighting/physical aggression* referrals issued during years 1, 2, and 3?
4. What was the incidence of *skipping class/truancy* referrals issued during years 1, 2, and 3?

Organization and Order of Presentation

The information below is presented in the order in which it occurs in the body of Chapter 4. The first section of the chapter describes data pertaining to research question 1 which asks about the overall incidence of ODRs pre and post SWPBS implementation. Sections two and three describe the incidence of ODRs by grade level and by gender and refer to research questions 1a and 1b. The fourth section of the chapter describes ODR incidence by each of the three specific behavior categories examined in this study: *defiance/disrespect/insubordination/non-compliance*, *fighting/physical aggression*, and *skipping class/truancy*. Section five contains the description and analysis of the SWPBS implementation fidelity, and section six contains ancillary findings that were of particular interest.

Demographic Data

Participants were the census population at a comprehensive, public high school in a small city during three school years. The high school in this study was the only one, out of five in the district, utilizing a SWPBS system to improve discipline and school climate. Demographic data is displayed in Table 1 in Appendix A and explained below.

The high school population was stable during the three years of data collection ranging from a low of 1,179 students to a high of 1,194. Gender distribution was approximately equal between males and females. The school was predominantly low to middle income and was ethnically homogenous with a majority of White students. Subpopulations were stable with the exception of an approximate 5% decrease in White students and a 5% increase in Hispanic students. The three year average for the percentage of special education students was 9.2%. Daily attendance averaged 92.5%, and the mean drop out rate was 3.7%. Student mobility showed a small increase, and socio-economic indicators indicated a slight decline over the three years of the study.

Section 1: Incidence of ODRs

Overview

ODRs were tallied from the first day of school in August through the last day of school during the 2004-05, 2005-06, and 2006-07 school years. No referrals were issued during June and July of any year. Very few referrals were issued in August which averaged just 7 school days per year.

Analysis of the data compiled during this investigation revealed ODR trends over the course of the study and across the overall population, individual grade levels, genders,

and the three selected discipline categories—*defiance/disrespect/insubordination/non-compliance, fighting/physical aggression, and skipping class/truancy*.

Overall Incidence

A total of 1,768 ODRs was generated during the course of the study with 662 occurring during the baseline year. Of the total ODRs 632 were recorded in 2005-06, and 474 were recorded in 2006-07—a decline of 28.4% (see Figure 2). During this time, the student count remained stable each year, varying by 1.3% or less.

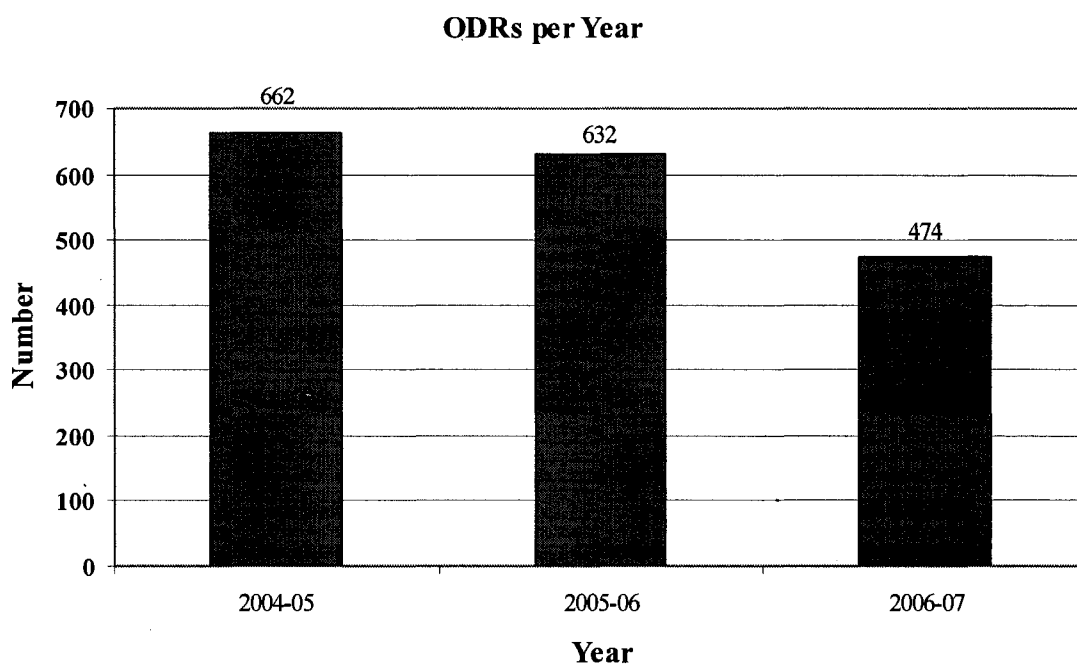


Figure 2. Number of ODRs issued per year.

The number of referrals per year per 100 students, a percentage, is shown in Figure 3. The number of referrals per one hundred students decreased from 55.4 (55.4 % of the students had a referral) in 2004-05 to 39.9 (39.9% of the students had a referral) in

2006-07. This represents a 28% reduction in the percentage of students receiving referrals from the baseline year to year 3. The above findings together indicate that both the number of referrals and the percentage of students receiving referrals declined over the course of the intervention.

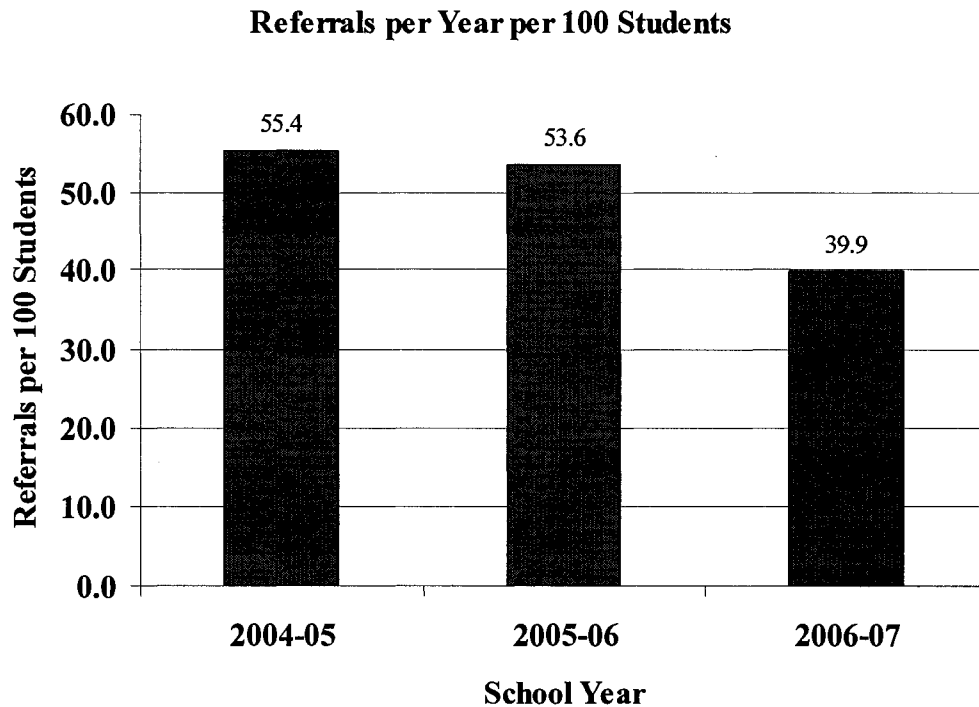


Figure 3. Referrals per year per 100 students in the student population.

A two-phase frequency polygon was created to explore ODR patterns per month by year (see Figure 4). The pattern on the frequency polygon displays the incidences of ODRs for all three years. The occurrence of ODRs during the baseline year showed extensive variation, spiking steeply in February with a sharp drop in referrals in March that continued through the end of the school year. 2005-06, the first intervention year,

started with a notable spike in ODRs in September, October, and November. This peak may have been due to a combination of factors including increased student and staff focus on behavior. It was followed by a drop in December to a level that was maintained fairly consistently through to the end of the school year. The numbers from the second intervention year reveal a moderate downtrend in ODRs for the entire year.

The computer-generated trend line on the composite frequency polygon in Figure 4 reveals a slight downward slope indicating an overall decrease in the number of referrals over the course of the study. The two-phase, three-year chart was sectioned by year (see Figures 5, 6, and 7) to enable more detailed analysis. Individual sections of the frequency polygon revealed a slight upslope trend in ODRs for the baseline year (see Figure 5). The down slope in the following years (see Figures 6 and 7) follows a trajectory similar to that found in the composite chart in Figure 4. These findings indicated that ODR incidence levels increased slightly during the baseline year and declined in the ensuing two intervention years. Trend was evaluated because it is useful when examining change in populations that chronically fluctuate (Gall, Gall, & Borg, 2003).

The preponderance of ODRs each year was issued during the months of September and October (see Table 2). These two months accounted for 34.5% of all referrals incurred across the three years of the study. These high numbers may be a reflection of the transition from summer break to school. The atypical ODR increase in September, October, and November of 2005 could reflect heightened awareness of the school rules and an adjustment period to the new SWPBS norms. In contrast to this

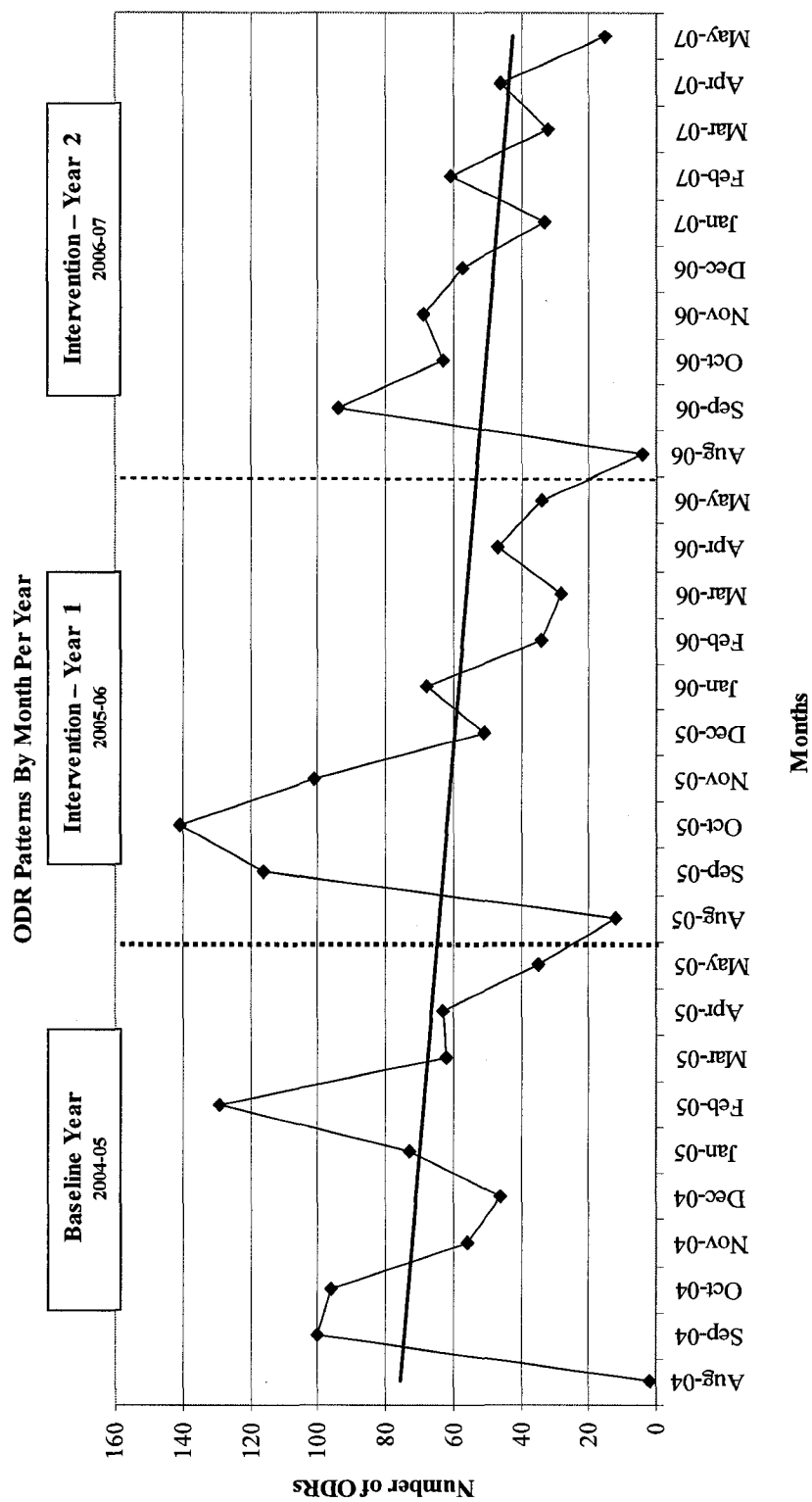


Figure 4. Number of ODRs issued during each month of the study. The trend line reveals a downward slope from baseline through the second intervention year. The dark hashed vertical line is the demarcation between the baseline and intervention years. The light hashed vertical line divides the two intervention years.

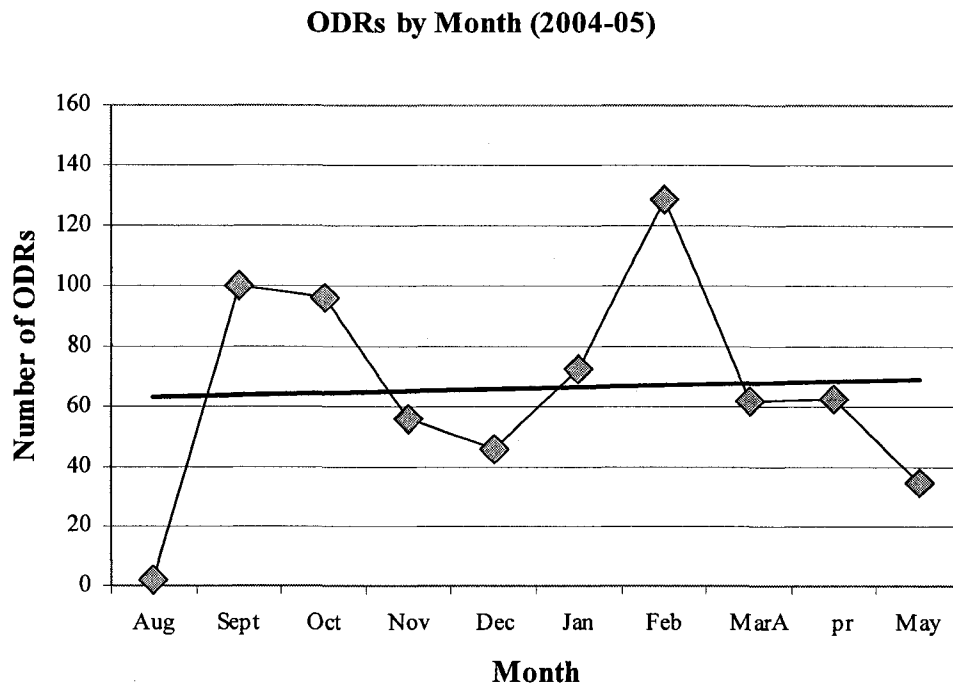


Figure 5. Trend line for ODR incidence during the 2004-05 baseline year.

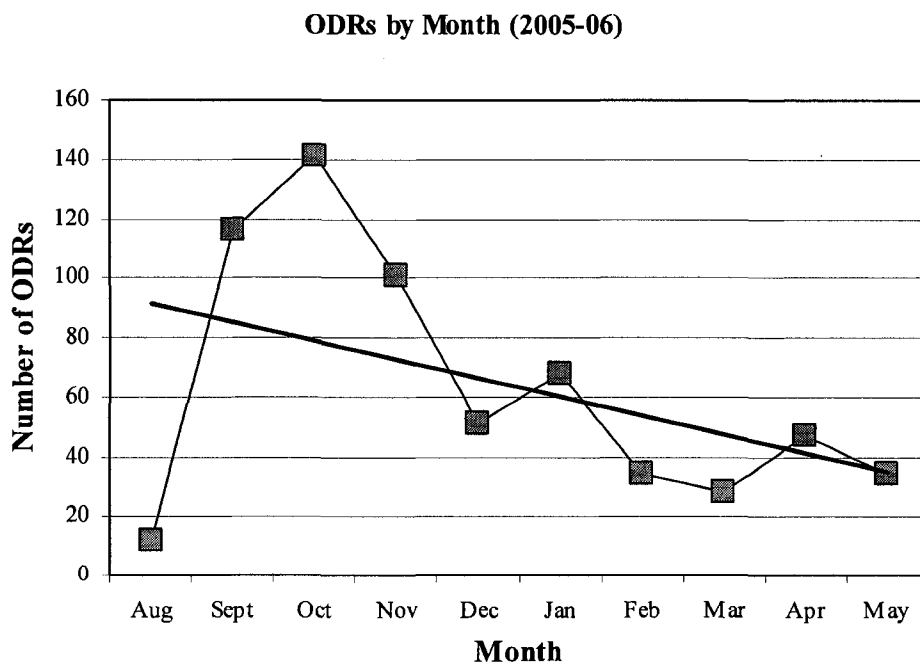


Figure 6. Trend line for ODR incidence during the 2005-06 intervention year.

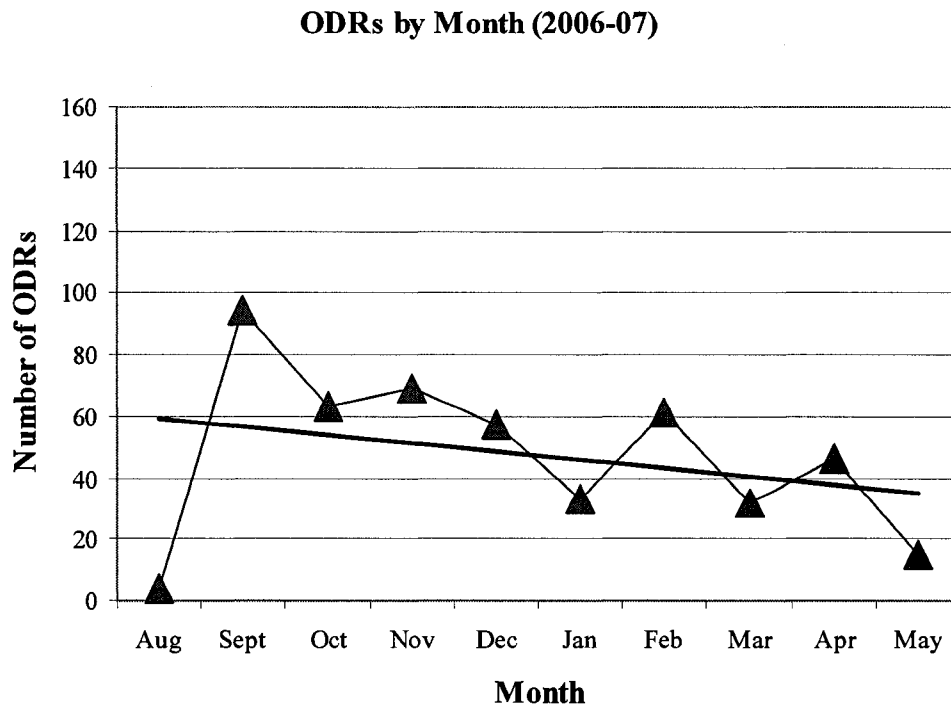


Figure 7. Trend line for ODR incidence during the 2006-07 intervention year.

result, Taylor-Greene et al. (1997) found that the highest incidence of office referrals in a rural middle school occurred in December, March, and May/June—months just prior to or containing school vacation times.

In schools, there is a not only a concern about students who receive referrals, but also about students who receive in excess of one referral. To examine this in greater detail, the ODRs were grouped as follows: (a) 1 ODR; (b) 2-5 ODRs; (c) 6-8 ODRs; and (d) 9 or more ODRs. These categories were chosen to align with the School-wide Information System (SWIS) year-end reporting format as well as with the ODR groupings used in other research studies.

Table 2

Number of ODRs per Month by Year

	2004-2005	2005-2006	2006-2007
August	2	12	4
September	100	116	94
October	96	141	63
November	56	101	69
December	46	51	57
January	73	68	33
February	129	34	61
March	62	28	32
April	63	47	46
May	35	34	15
Total	662	632	474

The findings for the number of students who received ODRs per 100 students (see Figure 8) indicated that in all three years, the same percentage of students, 12% or 12 out of 100 received just one office referral. The percentage of students receiving two to five ODRs was 11% during the baseline year dropping to 7% in year 3. The percentage of students who received six or more ODRs remained stable. These findings indicate that, while the percentage of students with one referral and with six or more ODRs remained steady, there was a decline in the percentage of students who were issued two to five ODRs.

Referrals in Total Student Population by Grouping

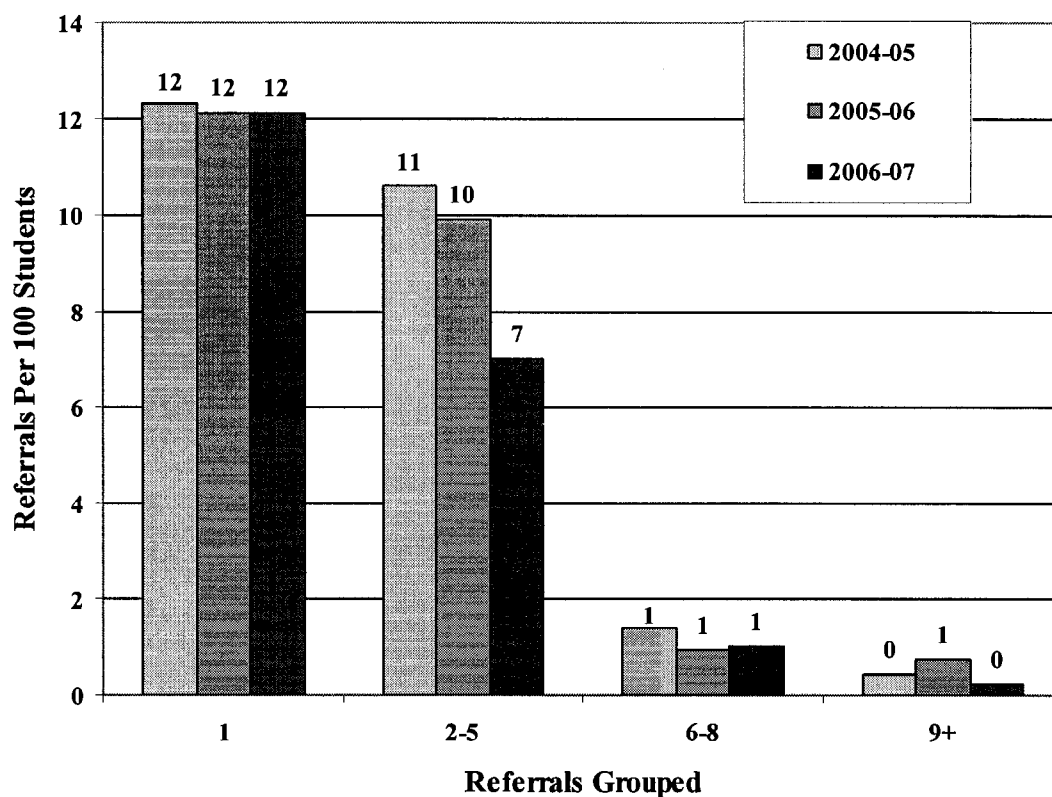


Figure 8. Referrals per 100 students in total student population by referral grouping (1, 2-5, 6-8, 9+) and by year.

Table 3 contains almost identical information to Figure 8 and is important because it includes the numbers of students with *zero* referrals—898 in the baseline year, 899 during the first intervention year, and 945 during the second intervention year. As you can see, the percentage of students with zero referrals rose 5%. Considering the three-year averaged enrollment of 1,187, this equates to 59 students who have moved into the group that exhibits school-appropriate behavior. The universal level of a SWPBS system focuses on all students within the school with a central goal of reinforcing existing

school-appropriate behaviors and thus establishing behavioral competency across the student body. It provides reinforcement for students who usually “do the right thing” and rarely receive recognition.

To reiterate the information about categories that contain more than one referral, the percentage of students who received two to five referrals dropped by 3.6% while the percentage with 6 or more ODRs remained stable. Although the number of students in the six or more ODR categories is fairly constant, keep in mind that they generate a large number of referrals.

Table 3

Number and Percentage of Students in Each ODR Grouping by Year

Grouped ODRs	2004-05		2005-06		2006-07	
	N	%	N	%	N	%
0	898	75.2	899	76.3	945	79.6
1	147	12.3	143	12.1	144	12.1
2 to 5	127	10.6	117	9.9	83	7.0
6 to 8	17	1.4	11	0.9	12	1.0
9 and up	5	0.4	9	0.8	3	0.3
Total	1194	100	1179	100	1187	100

To ascertain the number of referrals each day during a given month, the number of days school was in session was utilized. Referrals per day per month analysis revealed that, overall, the highest numbers of ODRs per day were issued from the beginning of the

school year in August to the December holiday break. The mean disciplinary referrals per day per year were 3.83 in 2004-05, 3.65 in 2005-06, and 2.76 in 2006-07—an average decrease over the 3 year period of 1.07 referrals per school day (see Table 4). Noting the numerous peaks and valleys in numbers of ODRs per day, it would be interesting to know exactly what occurred in the school, in the community, in the country, and in the world at those times and to determine if a correlation exists between current events and the number of discipline occurrences in high schools.

Table 4

ODRs per School Day by Month by Year

	2004-2005	2005-2006	2006-2007
August	0.29	1.71	0.67
September	4.76	5.52	4.70
October	4.80	7.05	3.00
November	3.29	5.61	4.06
December	3.54	4.25	4.07
January	3.65	3.24	1.74
February	6.79	1.79	3.21
March	3.65	1.65	1.88
April	3.32	2.61	2.60
May	1.75	1.70	0.71
Mean per Day	3.83	3.65	2.76

Section 2: Incidence by Grade Level

Ninth grade students received 40.6% (717) of the total referrals over the three year period of the study; tenth grade students received 27.7% (490); eleventh grade students received 21.1% (373); and twelfth grade students received 10.6% (188) (see Figure 9). The downward trend in referrals across grade levels reveals a 74% decrease in overall referrals from ninth to twelfth grade over the three year span. This result may reflect the developmental process in students (Infantino & Little, 2005).

Total decreases in ODR incidence noted at each grade level were as follows: 18% for ninth grade; 39% for tenth grade; 34% for eleventh grade; and 27% for twelfth grade. These results indicate that ninth grade students might benefit from specific intensive grade-wide PBS prevention and intervention strategies. The ODR incidence totals for all three years are displayed in the last row of Table 5.

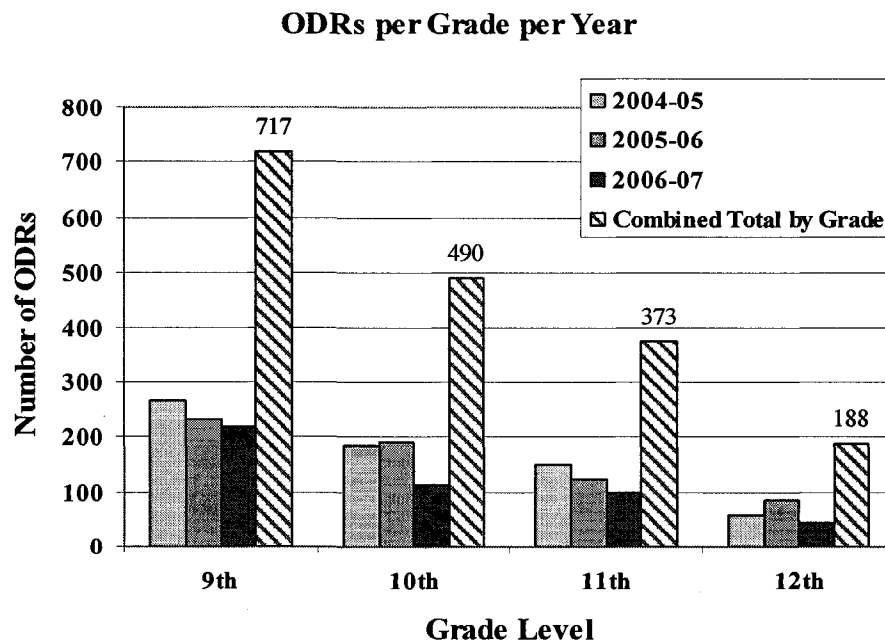


Figure 9. Comparative summary of ODR incidence per year by grade level and by the three-year combined total by grade level.

Table 5

ODR Incidence per Month by Year by Grade Level

	2004-2005				2005-2006				2006-2007			
	9 th	10 th	11 th	12 th	9 th	10 th	11 th	12 th	9 th	10 th	11 th	12 th
August	0	0	1	1	4	3	2	3	1	1	2	0
September	42	23	25	10	22	44	39	11	31	23	23	17
October	41	26	21	8	55	36	27	23	39	11	8	5
November	24	12	11	9	45	32	11	13	39	12	14	4
December	17	13	9	7	19	13	12	7	26	23	6	2
January	29	27	15	2	30	25	6	7	9	9	14	1
February	44	41	32	12	11	11	10	2	28	13	13	7
March	32	18	10	2	14	8	4	2	13	11	5	3
April	24	15	18	6	22	11	4	10	25	10	10	1
May	14	10	9	2	10	9	7	8	7	0	5	3
Total	267	185	151	59	232	192	122	86	218	113	100	43

Section 3: Incidence by Gender

Males incurred more than twice as many referrals (69.5%) as females (30.5%) despite an equal proportion of males and females within the total student population (see Table 1, Appendix A). This was consistent throughout the study (see Figure 10). A downward trend in number of referrals is apparent for both genders with a 27% drop for males and a 33% drop for females over the course of the study.

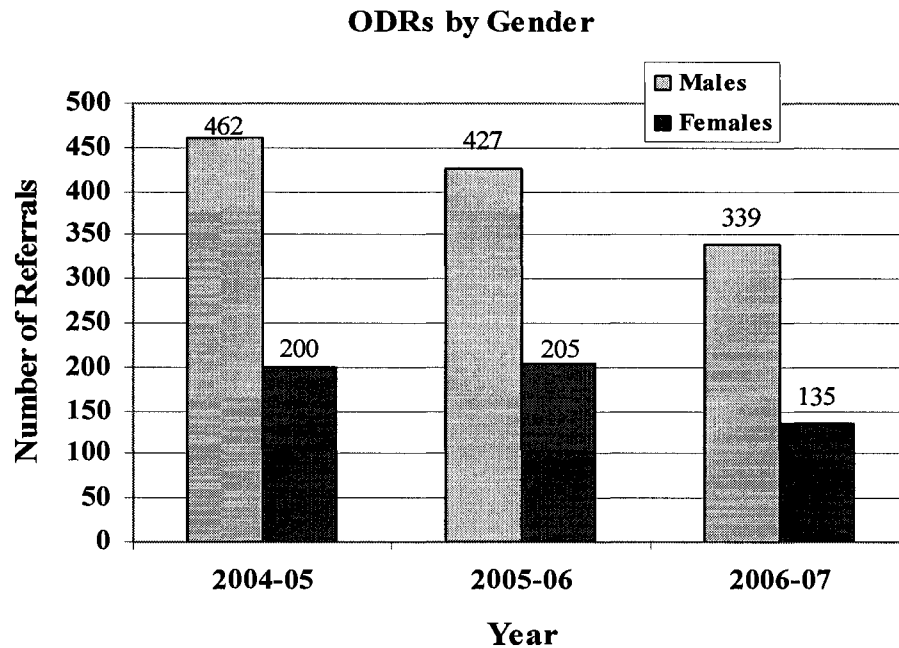


Figure 10. Number of ODRs per gender by year.

Section 4: Incidence by Specific Problem Behavior

Defiance/Disrespect/Insubordination/Non-Compliance

The incidence of *defiance/disrespect/insubordination/non-compliance* ODRs revealed an increase from the baseline year through the first intervention year with a decrease of 30% between the first and second intervention years. The over-all decrease was 15% (see figure 11).

Fighting/Physical Aggression

The discipline category *fighting/physical aggression* showed an increase every year from the baseline year through the second intervention year (year 3). The school administration team changed its policy on ODRs for fighting and physical aggression during the 2006-07 school year. The new policy included writing ODRs for *fighting/physical aggression* for every student bystander at a fight. The hope was that without an audience fewer fights would occur. This change in policy explains, in part, the 96% increase in *fighting/physical aggression* ODRs from 2004 to 2007. Data aggregated by combining all ODRs for each individual fight and counting them as one “fight incident” (see Table 6) revealed a 63% increase in *fighting/physical aggression* over the three year period.

Skippping Class/Truancy

Skippping class/truancy behaviors followed much the same pattern as the *defiance/disrespect/insubordination/non-compliance* category with an increase from baseline year to the first intervention year and a decrease to below baseline levels in the second intervention year. The decrease in *skippping class/truancy* ODRs from the first intervention year to the second was 43%. An overall decrease of 29% was noted.

The three-year incidence of *defiance/disrespect/insubordination/non-compliance*, *fighting/physical aggression*, and *skipping class/truancy* is shown in Figure 11. Table 6 (p. 79) displays frequency and percentage information for the three discipline categories named above by year and grade level.

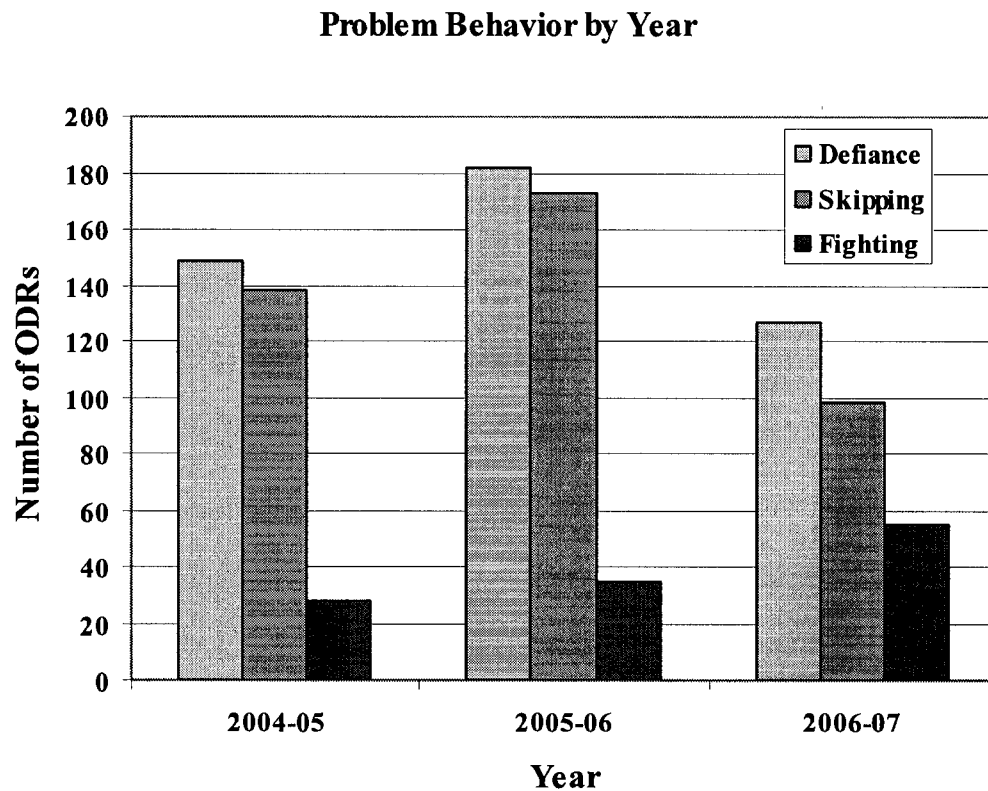


Figure 11. Three-year comparative summary of problem behavior incidence.

Table 6

ODR Data Pertaining to Discipline Categories from 9th through 12th Grade

2004-05			2005-06		2006-07	
Defiance/Disrespect/Insubordination/Noncompliance						
Grade	Count	%	Count	%	Count	%
9 th	65	43.6	65	35.7	52	40.9
10 th	40	26.8	63	34.6	46	36.2
11 th	34	22.8	32	17.6	22	17.3
12 th	10	6.7	22	12.1	7	18.1
Total	149	100.0	182	100.0	127	100.0
Fighting/Physical Aggression						
Grade	Count	%	Count	%	Count	%
9 th	7	25.0	16	45.7	33	94.3
10 th	7	25.0	8	22.9	12	21.8
11 th	9	32.1	7	20.0	6	10.9
12 th	5	17.9	4	11.4	4	7.3
Total	28	100.0	35	100.0	55	100.0
“Fight Incidents”	19		23		31	
Skipping Class/Truancy						
Grade	Count	%	Count	%	Count	%
9 th	63	45.6	67	38.7	38	38.8
10 th	34	24.6	59	34.1	19	19.4
11 th	31	22.5	32	18.5	31	31.6
12 th	10	7.2	15	8.7	10	10.2
Total	138	100.0	173	100.0	98	100.0

Section 5: Fidelity of Implementation

Needs Assessment

In May of 2005, at the end of the baseline year, prior to implementation of SWPBS, a needs assessment that included both the Effective Behavior Support–Self-Assessment Survey (EBS-SAS) and the School-wide Evaluation Tool (SET) was administered.

Effective Behavior Support–Self-Assessment Survey (EBS-SAS)

The results of the initial Effective Behavior Support–Self-Assessment Survey EBS-SAS indicated the following: 30% of the respondents felt that school-wide positive behavior supports were already in place; 44% thought that they were partially in place; and 25% did not think that any positive behavior supports were in place. From May 2005 to May 2006, the *In Place* and *Partially in Place* percentages rose, while there was an 11% drop in *Not in Place*. In May 2007, there was a 1% rise in the *In Place* and a 4% drop in the *Partially in Place* percentages; the *Not in Place* percentage rose by 3%. Figure 12 displays EBS-SAS results for the three years of the study.

Survey Results EBS-SAS

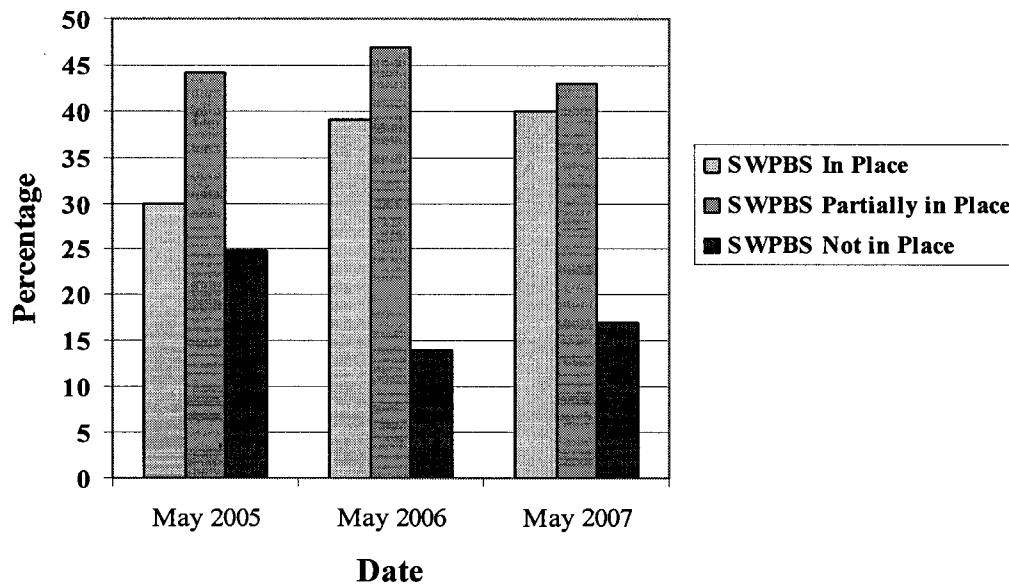


Figure 12. Three-year comparative summary of EBS-SAS data. From <https://www.pbssurveys.org/SelfAssessment/SaComparativeCharts.aspx>

School-wide Evaluation Tool (SET)

Initial School-wide Evaluation Tool (SET) results yielded an implementation average of 58% with the lowest scores in *Expectations Defined* (50%), *Expectations Taught* (10%), and *Reward System in Place* (0%). SET scores for year 2 suggested an increase in SWPBS implementation with an *Implementation Average* of 85%. The subscale scores for the third year yielded a slightly higher *Implementation Average* of 88%, largely due to a greatly increased score on the *Violation System in Place* subscale. Decreases in implementation, possibly due to a reduced emphasis on all-staff PBS review and refresher training throughout the year, were noted in the *Expectations Taught* (a 30% decrease) and the *Reward System* (a 16.6% decrease) subscales. As previously stated, the

Expectations Taught subscale, in conjunction with the *Implementation Average* subscale, is considered to be critical to successful implementation. Scores of 80% on both the *SET Total (Implementation Averages)* and *Expectations Taught* subscales are considered to suggest that SWPBS universal or primary prevention practices are being implemented (Horner et al., 2004). SET results for the three years of the study are summarized in Figure 13.

Summary of EBS-SAS and SET Data

The three-year comparative summary of the EBS-SAS results revealed a 9% growth from 2005 to 2006 in the number of staff members who deemed school-wide positive behavior supports to be in place. A smaller, 1%, growth rate was noted from 2006 to 2007. This final result indicated that 40% of the staff viewed SWPBS as being *In Place* in May 2007.

The SET three-year comparison revealed *Implementation Averages* of 58%, 85%, and 88% and *Expectations Taught* averages of 10%, 100%, and 70% in 2005, 2006, and 2007, respectively. Horner et al. (2004) suggest that SWPBS universal level practices are being fully implemented when both the *Implementation Averages* and the *Expectations Taught* subscales are at least 80%. In 2006, both of these scores exceeded the 80/80% criterion (Horner et al.). In 2007, although the *Implementation Average* was 88%, the 70% *Expectations Taught* score, a drop of 30%, indicated a decrease in an important aspect of successful implementation.

School-wide Evaluation Tool (SET) Comparative Summary

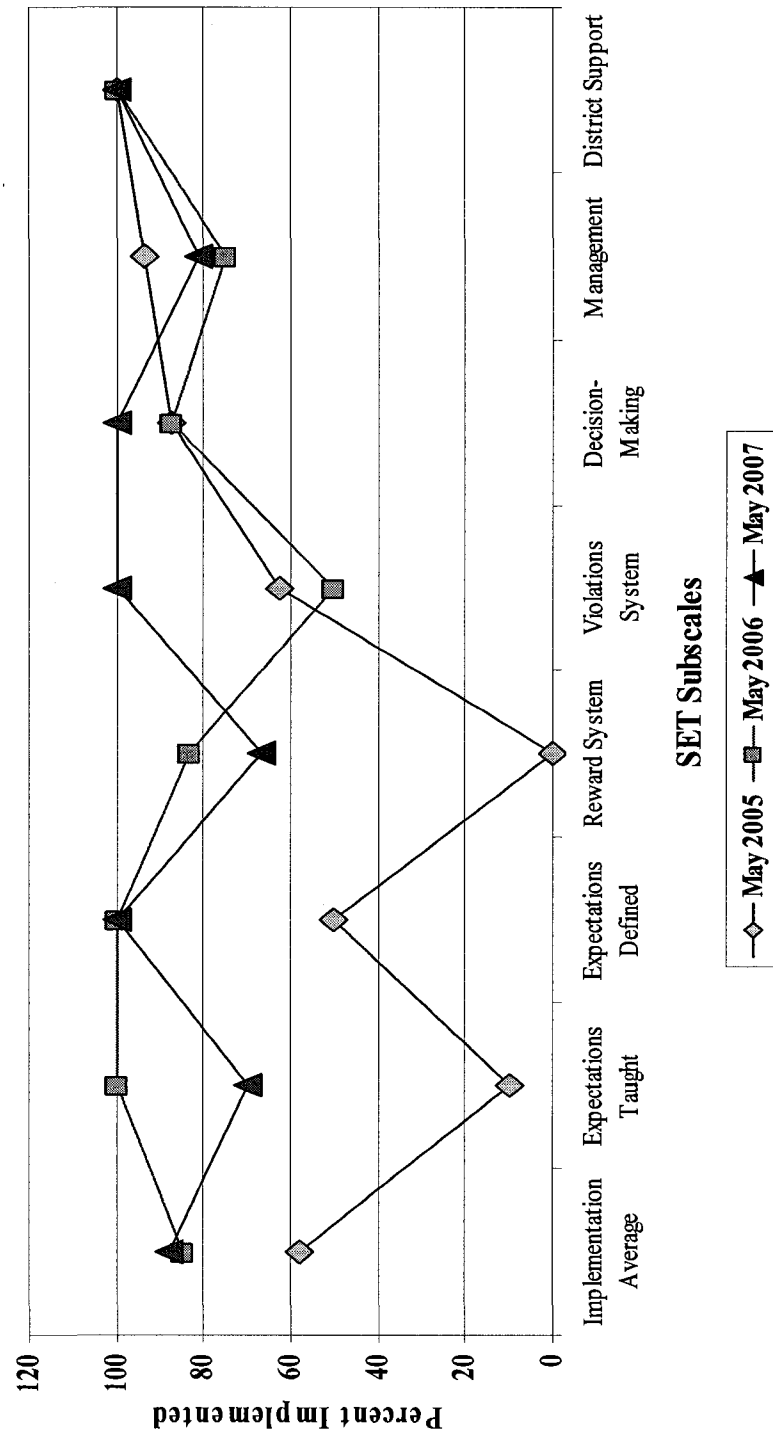


Figure 13. Comparative summary of SET data from May 2005, 2006, and 2007. From <https://www.pbssurveys.org/SelfAssessment/SaSchoolwideAnalysisCharts.aspx>

Section 6: Auxiliary Findings

Data by Year, Grade, and Gender

Examination of the composite ODR data by year, grade, and gender reveals a pattern similar to the previously discussed information. There is an obvious downturn in ODR incurrence for both genders as students progress to higher grade levels (see Figure 14). The only group to show an increase in percentage of ODRs over the course of the study were twelfth grade females with an increase of 44%. In contrast, twelfth grade males showed a 40% decrease in ODRs. Ninth grade males had an overall decrease of 13% in referrals, while ninth grade females experienced an overall decrease of 28%. Tenth grade males showed an overall decrease of 41%; tenth grade females showed a 34% decrease. There was a 25% decrease for eleventh grade males and a 53% decrease for eleventh grade females.

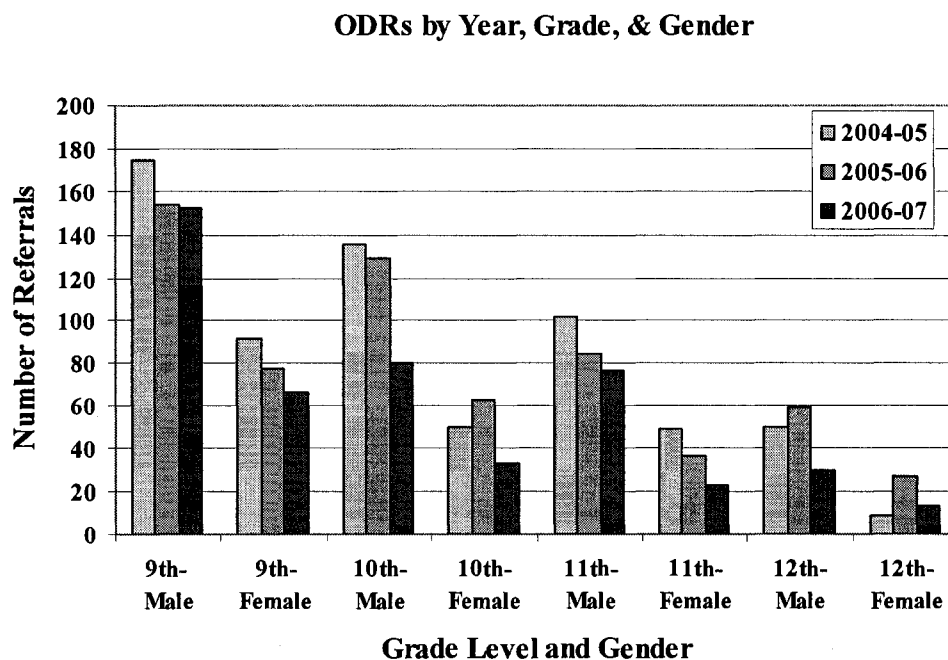


Figure 14. Incidence of ODRs by year, grade, and gender.

Students with Six or More ODRs

Over the three years of data compilation, the 57 students who were issued *six or more ODRs* during a given year received 434 ODRs (see Table 7). Stated in percentages, 1.6% of the total number of students received 24.5% of the ODRs in the school. In fact, though, the percentage of ODRs that they incurred decreased by 31.5% from the baseline year to the second intervention year. This indicates that the universal level of SWPBS may impact this population of students. Utilized in combination with secondary and tertiary interventions, a further decrease would be anticipated.

Table 7

Mean and Total ODRs for Students with Six or More Referrals

	2004-05	2005-06	2006-07	Total
Students with 6+ ODRs	22	20	15	57
Total ODRs Issued to 6+ Students	165	156	113	434
Mean ODRs per 6+ Student	7.5	7.8	7.5	7.6
Total ODRs	662	632	474	1768
Total Students	1194	1179	1187	3560

Data Summary

ODR data compiled over a three-year period, one year of baseline and two years of intervention, revealed a decrease in ODRs for students at a public high school following institution of the universal level of a SWPBS system. Although the number of students and the number of referrals in the *one ODR category* remained static, a larger percentage of referrals were issued to students with one referral (see Figure 15). This is due to the decrease in the number of referrals (474) issued during the 2006-07 school year as compared to the number of referrals in the two previous years (662 and 632) so the distribution of referrals has changed. The largest effect over the three years was seen in the *two to five ODRs* category where there was a decrease of 133 referrals, a 38% decrease from baseline year referrals. As shown in Figure 15, there was a decrease of 52 ODRs or a 31.5% decline from the baseline year for the *six or more ODRs* category.

Data from all three years is compiled in Figure 15 on the following page. The reader should be forewarned that there are two separate scales on this graph—the one on the left is the *Number of Referrals by Grouping*, while the one on the right is the *Number of Students and Referrals by Year*. The legend explains the graph. This graph was created to visually describe and perhaps simplify the various complex numerical data resulting from examining discipline patterns in one high school over a three year period.

Conclusion

Examination of discipline patterns in a high school was conducted to provide a detailed description of the processes and outcomes during a SWPBS implementation. Resulting data yielded a baseline for ODRs and, over the course of the study, an overall

Referrals by Numeric (1, 2-5, 6+) ODR Grouping

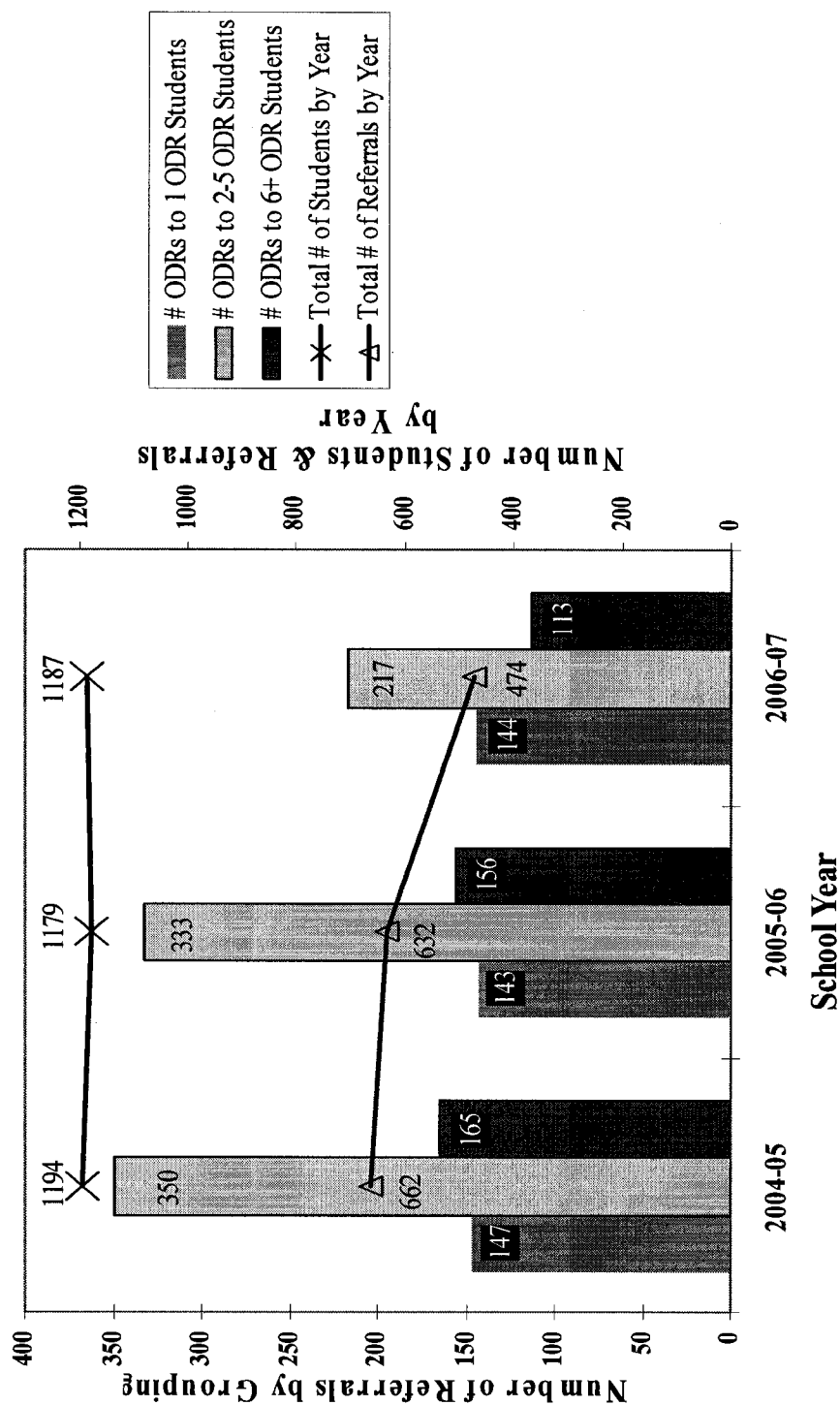


Figure 15. Comparative summary of ODR data from baseline year (2004-05) through two intervention years (2005-06 and 2006-07).

change in discipline patterns throughout the school. Aggregated and disaggregated data were analyzed to highlight variations in referral data by grade level, gender, and type of problem behavior.

The data analysis from this study supports the viability of a SWPBS system in this particular high school. Fluctuations in the incidence of ODRs at the school are apparent; however, the nonexperimental nature of the study does not allow attribution solely to the SWPBS implementation. As Gottfredson (2001) so succinctly stated, “In this type of environment, it is impossible to disentangle the effects of the program elements to determine which element or combination of elements was responsible for positive change” (p. 266). Information gleaned from this research sheds light on the current state of discipline in this school as well as on high school student behavior.

CHAPTER FIVE: DISCUSSION

The chapters preceding this section presented the research problem, a review of the literature, a description of the study methodology, and the results of the data analysis. This chapter presents an overview of the findings for this research as they relate to implementation of a SWPBS system at one high school. Like Chapter 4, this chapter is divided into sections. They are as follows: Findings; Limitations; Implications; Suggestions for Future Research; and Concluding Remarks.

Section 1: Findings

Findings from this study provide information that deepens understanding of the utility of a positive system-wide disciplinary system at the high school level. This study provides unique ecological information about disciplinary patterns at one school during the first three years of a SWPBS system implementation. Findings are reported in terms of the research questions and in order of the associated research question.

Research Question One

The first research question asked what the incidence of ODRs was during the first three years of implementation—one year of baseline and two years of intervention. These findings were examined from several different perspectives. The findings for the three years of the study revealed an overall 28.4% decrease in ODRs while the number of referrals per 100 students went down from 55.4 per hundred to 39.9 per hundred by the end of the periods studied. These findings indicate that both the percentage of ODRs and

the percentage of students receiving referrals declined. The mean disciplinary referrals per day per year confirm the decrease in ODRs over the three year span.

A two-phase frequency polygon, exploring ODR patterns by month for all three years of the study, corroborated the earlier evidence of a decrease in ODRs over the course of the study. The sectioning of this chart into baseline and each of the intervention years visually revealed that while ODR patterns showed a slight increase during the baseline year, there was a sharp downward trend during the first intervention year, reflecting the spike in problem behavior in September and October of 2005, followed by a shallower decline in the second intervention year. In essence, ODR patterns were stable during the baseline year and reductions in ODR incidence during the two intervention years were reflected in the ensuing downward trend. A stable baseline, which shows no or little trend, allows later variations in trend to be interpreted as changes in intervention effects (Kazdin, 2001).

The above findings are consistent with prior research investigating ODR incidence following a SWPBS implementation. For example, Taylor-Greene et al. (1997) found a 42% reduction in ODRs at a rural middle school and in a follow-up study five years later found that the school had sustained a 68% reduction in discipline referrals from the original 1994-95 levels (Taylor-Greene & Kartub, 2000). An inner city middle school study showed a 20% decrease in ODRs (Warren et al., 2006). This dovetails with an urban high school study (Bohanon et al., 2006) that also found a 20% reduction in average daily ODRs during intervention. Little published research is available pertaining to utilization of SWPBS in high schools, and no studies on suburban high schools were found.

The distribution of ODRs across the entire school population by numerical category (e.g., *one ODR*, *two to five ODRs*, *six or more ODRs*) revealed that 12% of students received just *one referral* during each of the three years of the study. The percentage rates for ODRs in the *two to five ODR* category decreased by 4%, and the percentage of students who received *six or more ODRs* remained stable. It appears that the largest change was in the *two to five ODR* category. The percentage of students in the *zero ODR* category rose by 5% providing evidence of growth in the number of students who demonstrate compliance with SWPBS norms.

SWPBS has the potential to affect all students in the school. As is shown in Table 3, the percentage of referrals in the *two or more ODR* category has decreased while the percentage of referrals in the *one ODR* category has increased. This result is the change pattern that schools that implement a positive behavior system want—students moving toward the school’s normative behavior pattern. The stability of the number of students who receive just one referral might reflect behavioral experimentation, a one-time impulsive behavior that does not recur because of the resulting consequence, an ODR. It might also reflect decreasing problem behavior as students move from higher referral numbers to just one referral.

Research question 1a. Research question 1a asked about ODR incidence for each grade level, ninth through twelfth, for each year of the study. Findings for research question 1a reveal that ninth grade students consistently received the highest number of ODRs with seniors receiving the lowest number. There appears to have been an almost continuous decrease in ODRs from ninth grade to twelfth grade across all three years. The decline in ODRs in the baseline year prior to SWPBS implementation indicates a

cross-grade change in behavior. Infantino and Little (2005) stated that this may be a reflection of maturation and social development as students progress through high school. It should be noted that there was a downward trend in referrals within each grade level from the baseline year through the second year of the intervention as well as across grade levels. This is indicative of positive change in discipline patterns. Previous studies have not reported data disaggregated by high school grade level.

As previously noted, ninth grade students incurred the highest number of ODRs and experienced the smallest decrease in ODR incidence over the course of the study. The above findings indicate that ninth grade students at this school might benefit from specific developmentally appropriate prevention and intervention activities to increase their sense of community and belonging. A plethora of research supports the above statement. Schlossberg (2001) found that guidance lessons planned specifically for ninth grade students can improve student behavior as well as attitudes about school. As was previously stated, students who feel a sense of belonging and are engaged at school are more likely to progress behaviorally and academically (Blankemeyer et al., 2002; Resnick et al., 1993; Resnick et al., 1997; Rosenfeld et al., 2000). Because the U.S. education system emphasizes cognitive functioning and deemphasizes personal connections, it is important that schools facilitate life skills development (Morrison & Furlong, 1994). Fullan (2007) agrees with this and emphasizes the relevance of students' connections and relationships within the school and the effect that they have on the motivation to practice and learn new behaviors.

Research question 1b. Research question 1b asked about ODR incidence by gender. Males consistently incurred over twice as many referrals as females across grade

levels and throughout the course of the study. In addition, they showed a smaller decrease in the number of ODRs over the course of the study than the females. Although a difference between genders regarding the amount of externalized antisocial behavior was not unexpected (Kazdin, 1995), the magnitude of the difference between the genders was surprising.

This finding suggests that perhaps males would benefit from differentiated teaching of behavioral expectations. Males have been found to react in very different ways from females when given behavioral redirects. For example, public redirects tended to embarrass girls and to decrease the occurrence of socially inappropriate behavior, males seemed to enjoy the attention from the redirect and the resulting social reinforcement from their peers, and problem behavior increased (Infantino & Little, 2005). No high school research pertaining to SWPBS and gender distribution was found.

Research Question Two

Research question two asks about the incidence of *defiance/disrespect/insubordination/non-compliance*. The profile for these behaviors was interesting with an increase in this category of ODRs the first intervention year and a 30% decrease the following year. This disciplinary pattern change indicates an alteration in student behavior in this category. In a study with a similar time frame to this one—a baseline year followed by two years of implementation—McCurdy et al. (2003) found a 46.4% decrease in disruption and non-compliant behaviors in three years of SWPBS data collection at an elementary school. No high school research was found for this behavior category.

Research Question Three

Research question three asks about the incidence of *fighting/physical aggression*. This category of problem behavior showed a substantial increase in each of the three years of the study, increasing by 96% over the course of the study. When ODRs issued for each fight were combined and counted as just one “fight incident” results showed a 63% increase in fighting. McCurdy et al. (2003) found the opposite in an elementary school SWPBS study where fighting decreased by 55%. Again, no high school data for this behavior category was found.

The increase in fighting and physical aggression at the school was thought to have been an artifact caused by a new policy requiring that onlookers at fights also receive ODRs for fighting however, an increase was still found when only “fight incidents” were counted. This scenario reveals why it is sometimes difficult to conduct research in a large, constantly evolving organization like a high school. Dynamics fluctuate with administrator, teacher, student, and policy changes. Responses to various events are influenced and controlled by multiple forces external and internal to the building.

Research Question Four

This question focuses on the skipping class/truancy behavior category. Suspension and expulsion are often considered as the major contributors to lost instructional time however, equal focus should be on skipping class and truancy. These behaviors are also deleterious; they are disruptive, and they detract from instructional time. The large numbers of truant students reported in the literature could ostensibly account for more lost instructional time than either suspension or expulsion.

Skipping class/truancy behaviors followed a pattern similar to *defiance/disrespect/insubordination/non-compliance* with an increase between the baseline year and the first intervention year and a decrease of 43% in the second intervention year. This decrease may have been affected by the introduction of a “hall sweep,” a new truancy intervention during the second intervention year (Rickert, 2005). Adults were stationed at strategic points in hallways to encourage students to get to class on time, and loitering students were escorted to class. Students were required to have passes to be out in the halls, and teachers restricted the use of passes during class time. This strategy appears to have had a positive effect on ODR incidence for *skipping class/truancy*. Conversely, in a multiple baseline study, Johnson-Gros, Lyons, and Griffin (2008), found that active supervision in hallways in a 450 student rural high school yielded mixed results.

Other Findings

Implementation Fidelity

Implementation fidelity was assessed throughout the course of the study through annual administration of the Effective Behavior Support–Self-Assessment Survey (EBS-SAS) and the School-wide Evaluation Tool (SET). Results revealed good levels of implementation for the two years of intervention.

Effective Behavior Support–Self-Assessment Survey (EBS-SAS). The EBS-SAS was required as part of the end-of-the-year checkout for both classified and certified staff. Results of that on-line survey revealed that staff perceptions of SWPBS implementation rose from the baseline year through the first intervention year. The second intervention year results suggest a decline in the perceived implementation of the SWPBS system. This indicated that teacher commitment was not as strong as it was previously.

School-wide Evaluation Tool (SET). SET data were used to evaluate implementation integrity of the universal level of a SWPBS system. Doolittle (2006) found that quality implementation and sustainability is directly affected by administrative leadership paired with data-based decision making. SET results for this study revealed that these parameters were in place.

Of concern was the 30% drop in the *Teaching Expectations* subscale during the second intervention year. This subscale is considered to be vital to successful implementation (Doolittle, 2006; Horner et al., 2004). The *Implementation Average* rose to 88% which indicated full implementation, but this increase was largely due to a 50% increase the *Violations System* subscale. Although the mean of the *Teaching Expectations* and the *Implementation Average* was 79%, a question can be raised about the veracity of the school being at full implementation during the 2006-07 school year, especially when the combination of the drop in *Teaching Expectations* and the results of the EBS-SAS are considered. This may have implications for continued fidelity of implementation and sustainability within this school.

Section 2: Limitations and Strengths

Limitations

The setting is both a strength and a weakness. On one hand, the research took place in a natural setting and findings reflected actual ecological conditions. On the other hand, overall ecological consistency was a problem. Control was an issue contributing to maintenance of research validity and reliability.

Multiple confounding variables including human development issues and environmental influences within the school can affect internal validity. These included

personnel turnover, interobserver consistency in writing ODRs, student mobility, and student population changes. Concurrent programs and practices not specific to the SWPBS system may have positively or negatively influenced outcomes. Academic intervention teams that were active in the school at the time of the study were a unique confounding variable because academic improvement has been found to positively affect student behavior (Najaka et al., 2001). As Carr et al. (2002) stated, SWPBS research “entails balancing a concern with internal validity with the realities of conducting research and practice in complex naturalistic contexts in order to achieve ecological validity” (p. 7).

Strengths

Extant discipline data, such as ODRs, have historically been used to collect information pertaining to behavior and discipline patterns in schools (Sugai, Sprague, et al., 2000; Wright & Dusek, 1998). In this study, existing pre- and post-intervention ODR data provided specific, quantifiable information about this particular school and disciplinary events occurring within its walls. Retrospective analysis of this type of data does not cause unintended behavior change in either staff or students (Miltenberger, 2008).

SWIS, the web-based software program used to compile the discipline data was designed for the purpose of monitoring and documenting school disciplinary records. It has been found to be a valid system for data-based decision making when implementing positive school-wide disciplinary systems in schools (Irvin et al., 2006). Stable baselines were established contextually. According to Wright and Dusek (1998), baselines established in this manner allow predictions of future ODR patterns.

Section 3: Implications

In general, the findings from this study suggested that SWPBS may have been beneficial to this school. They lend support to the utility of SWPBS implementation in high schools. The AB design of this study does not allow determination of causal effect “in a way that meets the rigors of experimental research” (Kazdin, 2001, p. 143) however, interested parties can utilize information from this study by comparing contextual similarities and differences and making case-by-case determinations regarding applicability of the data (Gall, Gall, & Borg, 2003; Lincoln & Guba, 1985). Trend analysis indicated a change in ODR patterns—a stable baseline year followed by a downward slope during the intervention years. This as well as the longitudinal nature of the study increased confidence that fluctuations in ODR incidence may be related to the SWPBS system (Anderson & Kincaid, 2005).

Study findings indicated a reduction in the incidence of ODRs over the two years of SWPBS intervention in the student population as a whole as well as by grade level, by gender, and by specific behavior category—with the exception of the *fighting/physical aggression* category. An accompanying increase in the number of students with zero referrals was noted. The decline in overall ODRs as well as decreases by grade level and specific behavior category are supported by findings from previous SWPBS studies (e.g., Bohanon et al., 2006; McCurdy et al., 2003; Taylor-Greene et al., 1997). It should be noted that the majority of previous SWPBS studies have been implemented at the elementary and middle school levels.

An interesting outcome was the change in referral distribution which showed students moving from categories containing high numbers of referrals (two ODRs or

more) per student to categories containing lower numbers of referrals. This indicates improved disciplinary patterns across the school population. By the end of the second intervention year, 79.6% of the students in this school exhibited behavior within the normative two-thirds of the PBS triangle.

Only 1.6% of the students, an average of 19 students per year, were responsible for almost 25% of the ODRs generated over the course of the study. The data displayed their disproportionate impact—a mean of approximately 7.5 referrals each year resulting in 434 ODRs out of the three year total of 1,768 ODRs. These findings indicate that this particular school would probably benefit from implementation of secondary and tertiary interventions for this at-risk group. Repercussions from such an action could have a large positive effect on the behavioral culture of the school.

A surprising number of ODRs across the three years was issued in September and October. This may reflect the transition from summer break to school, and during autumn of 2005, is possibly due to greater focus on behavior because of the SWPBS implementation. Conversely, in an urban high school SWPBS study, Bohanon et al. (2006) found the greatest decrease in referrals during September with an even lower number of ODRs occurring per day per month in October.

Because of the large percentage of ODRs that occurred in the months of September and October, the school would probably benefit from opening day training for students (Taylor-Greene et al., 1997) combined with an on-going, intensive, developmentally-appropriate curriculum for teaching normative school behavior. An opening day activity was implemented during orientation for freshmen and then again on the first day of school during the first intervention year. SWPBS activities were

incorporated into fall orientation again during the second intervention year, but the opening day kick-off was discontinued as was the teaching of behavior expectations. This probably contributed to the decrease in the staff's perception of efficacy of implementation, as shown on the EBS-SAS and SET three-year summary.

Findings from this study indicate that prevention/intervention strategies focused on ninth graders would probably yield positive results because ninth graders incurred more ODRs than any other grade level. They also showed less movement toward positive behavior than any other segment of the school population. In view of the ninth grade inflated ODR rate, activities and curriculum should probably be prepared that encompass the appropriate developmental level rather than utilizing materials that are intended to meet the needs of all grades. The goal for these activities: to increase ninth graders intrinsic motivation to follow school-appropriate standards of behavior. The importance of teaching, modeling, and practicing behavioral expectations must be emphasized to staff (Doolittle, 2006; Horner et al., 2004). If students do not view behaviors such as disrespect or noncompliance as problem behavior, that behavior is not likely to change (Infantino & Little, 2005).

Gender differences in relation to ODR incidence yielded another surprise. Although the literature supports the fact that males display more externalizing behaviors than females (Kazdin, 2001), the gap between the frequency of ODR incurrence for males and females was unexpectedly large. As previously stated, this might indicate a need for differentiated behavior curriculum for males and females as well as differentiated responses to problem behavior.

Disciplinary patterns in both the *defiance/disrespect/insubordination/non-compliance* and the *skipping class/truancy* categories of behavior were similar. The overall finding was an ODR decrease in both behavior categories. These findings indicated that SWPBS might be influential in decreasing the frequency of these groups of behaviors—considered to be the most disruptive and burdensome by staff. It will be interesting to see if future studies of positive behavior systems in high schools yield similar results—an initial increase in frequency of ODRs followed by a decrease.

The incidence of *fighting/physical aggression* increased markedly over the three years, as explained above. This was probably partially due to a policy change requiring that student bystanders at fights receive ODRs, however when “fight incidences” rather than individual ODRs were counted, *fighting/physical aggression* still showed an increase in frequency.

Implementation fidelity information obtained from the EBS-SAS indicated drops in staff perception of implementation. This indicated that the PBS Leadership Team should focus on specific line items from this survey in an effort to increase staff support for SWPBS and to increase the level of SWPBS implementation. The 30% decrease in *Teaching Expectations* on the SET was of concern. This finding suggested that greater focus, and perhaps a more formal curriculum, for teaching behavior expectations should be developed. Administration of the EBS-SAS and SET to students might provide another perspective to aid in SWPBS planning and implementation.

Although the implications from this study must be school specific because of the design of the study, other schools contemplating SWPBS implementation could benefit from examining these results and carefully comparing them to their initial and on-going

results. Although individual school culture and the values of the larger school community must be considered when developing a SWPBS system (Farmer, Farmer, Estell, & Hutchins, 2007), many of the suggestions embedded in this study could prove helpful to other high schools.

Section 4: Suggestions for Future Research

More research in general is needed to determine the use and effectiveness of SWPBS at the high school level. Information is also needed on efficient methods of implementation and processes that lead to sustainability. Most SWPBS research to date has been nonexperimental. As more SWPBS studies are performed, consistency of results across multiple studies will increase the value of the nonexperimental studies (Johnson, 2001).

The frequency of disciplinary referrals elicited by ninth grade students in this study raised a question about ninth grade student behavior. A study to determine if ninth grade students in a junior high school exhibit different behavior and disciplinary referral patterns than ninth grade students who attend a four-year comprehensive high school might yield information about whether ninth grade disciplinary patterns are “normal” developmental behavior or if they are ecological. Such knowledge would be invaluable as schools look to transitioning students into high school.

Research to identify effective instructional strategies and models for teaching school appropriate behaviors at the high school level is needed. These studies could help to determine types of adult responses and reinforcement that are most efficacious for different high school subpopulations to aid in development of a more peaceful, inclusive school climate.

Section 5: Concluding Remarks

This study examined discipline referral patterns in one high school providing a snapshot of ODR patterns and student behavior prior to and during a school-wide disciplinary system implementation. It highlighted areas for improvement within this specific school and indicated that SWPBS may be beneficial at the high school level. Information was provided about aggregated and disaggregated data with focus on specific subpopulations within the school, not by ethnicity, race, or socio-economic status, although that demographic information was provided, but by grade level and gender.

The incidence and distribution of ODRs changed during the three years of the study. A salient fact was that the trend of ODRs was almost horizontal during the baseline year—an indicator of stability. Following this phase a downward trend was apparent during each of the two intervention years. This information, considered in conjunction with previous SWPBS studies that provide evidence that SWPBS positively affects disciplinary patterns in schools (e.g., Bohanon et al., 2006; McCurdy et al., 2003; Luiselli et al., 2005), might lead one to make similar conclusions regarding the findings from this study.

This study can be used as an example for other high schools interested in implementing SWPBS—utilizing the information that is contextually similar and disregarding that which is not. Because there is a paucity of SWPBS research at the high school level, this study will extend the knowledge base. Findings from the study will contribute to improved educational practice and add to the research pertaining to the efficacy of utilizing SWPBS as a disciplinary framework at the high school level.

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APPENDIX A
DEMOGRAPHIC DATA

Table 1

Demographic Data Pertaining to 9th through 12th Grade Study Participants

	2004-05		2005-06		2006-07	
Gender	Count	%	Count	%	Count	%
Male	600	50.3	593	50.3	607	51.1
Female	594	49.7	586	49.7	580	48.9
Total	1194	100	1179	100	1187	100
Race/ethnicity	Count	%	Count	%	Count	%
American Indian	13	1	11	0.9	14	1.2
Asian	8	0.7	6	0.5	6	0.5
Black	19	1.6	17	1.4	25	2.1
Hispanic	143	12	177	15	199	16.8
White	1011	84.7	968	82.1	943	79.4
Other	Count	%	Count	%	Count	%
Individuals with Disabilities	114	9.5	110	9.3	105	8.8
Economically Disadvantaged	291	24.4	329	27.9	360	30.3
Mobility		15.5		16.3		18.4

APPENDIX B

HUMAN SUBJECTS EXEMPTION LETTER



Research Integrity & Compliance Review Office
Office of Vice President for Research
Fort Collins, CO 80523-2011
(970) 491-1553
FAX (970) 491-2293

Date: March 27, 2008

To: Dr. Laurie Carlson, School of Education, 1588
Cynthia Wiley, School of Education, 1588

From: Janell Barker, IRB Administrator *ESwiss for J. Barker*

Re: Using Discipline Referrals to Examine the Impact of Positive Behavior Support in High School

Thank you for your response to the IRB concerning your project entitled: "Using Discipline Referrals to Examine the Impact of Positive Behavior Support in High School." It was determined that the project does not meet the requirements of the federal definition of human subject research. "Human subject means a living individual about whom an investigator conducting research obtains data through intervention or interaction with the individual, or identifiable private information."

Since your project involves the study of anonymous secondary data, the IRB determined that it did not fall within the IRB's purview for review.

Thank you for submitting this protocol. If you have more projects that are similar, please contact us prior to submission. The IRB must determine whether a project needs to have IRB approval.

APPENDIX C
PBS POWER LOGO

CWHS

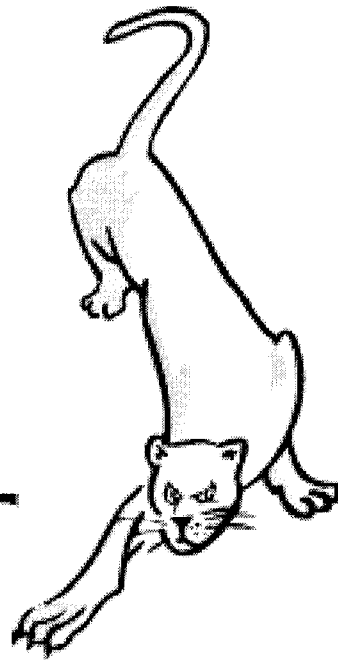
PRIDE

OWNERSHIP

WORK

EFFORT

RESPECT



APPENDIX D

PBS POWER MATRIX

POSITIVE BEHAVIOR SUPPORT MATRIX

Positive behavior support is a school-wide approach to support and teach the behaviors expected in the rules section of this handbook. All staff and students will be sharing in the use of the matrix on a daily basis to build a climate of positive behavioral choices. All students and staff at school should share in the use of this chart as a learning and teaching tool, and use the terms below to help everyone learn together about the power of positive choices.

School-Wide Rules/Expectations in the Setting/Context							
	1. Study Area		2. Common Area	3. Cafeteria	4. Parking Lot	5. Activities	6. Off Campus
P R I D E	<u>Looks</u> Celebrate academics activities	<u>Sounds</u> Encourage peers	Recognizing activities & achievements	Leaving area better than you found it	Valuing self/others property	•Attending school activities & events •Involvement	Displaying a quality image of the school
	<u>Looks</u> Leave the area better than found	<u>Sounds</u> •Be a good citizen •Pick up trash, take care of equipment •Be kind to people	Preserving the school's equipment/reporting harassment/bullying	Putting trash in appropriate place	Putting trash in appropriate place	Fostering school spirit	•Representing the school in community events •Considerate of our community and world
W O R K	•Producing quality products, creating authentic work		Dressing for work at school	Cleaning up after yourself	Following traffic laws & speed limits	•Participating in extra curricular activities •Displaying a quality image of the school	Reaching out to our community through service learning
E F F O R T	•Positive mental attitude •Challenging yourself		•Positive and encouraging social interactions •Getting to class on time	•Using inside voices. •Reminding others to pick up after themselves.	•Operating vehicle in safe manner. •Reminding others to pick up after themselves.	•Cheering for the school •Giving your best effort	Reaching out to our feeder schools to include them in our school family
R E S P E C T	<u>Looks</u> •Positive language •Quiet voice. •On task •Mindful of peers	<u>Sounds</u> •Courteous •Polite	•Using suitable language. •Maintaining personal boundaries. •Tolerating others	Using etiquette and manners	Parking in designated areas.	Displaying good sportsmanship.	Fostering healthy relationships with other schools

APPENDIX E

PBS POWER TICKETS (enlarged)



CWHS Pride

Pride
Ownership
Work
Effort
Respect



(front)

Student's Name _____

Staff Member's Name _____

Designed by: (Student Designer's Name)

(back)

APPENDIX F

CLASSROOM AND OFFICE MANAGED BEHAVIORS

Classroom Managed Behaviors	Definition
Attitude/tone	
Blurting out	
Defiance/disrespect/non-compliance	Student engages in brief or low-intensity failure to respond to adult requests
Dress Code	Student wears clothing that is near, but not within, the dress code guidelines defined by the school/district
Food or drink	
Inappropriate verbal language	Student engages in contextually inappropriate language
Information & other electronic violation	Student engages in non-serious but inappropriate (as defined by school) use of cell phone, pager, music/video players, camera, and/computer
Minor disruption	Student engages in low-intensity, but inappropriate disruption
Minor lying/cheating	
Physical contact aggression	Student engages in inappropriate physical contact/put downs/name calling/bullying
Preparedness	
Property misuse/trash	Student engages in low-intensity misuse of property
Refusing to work	
Sleeping	
Tardy/truancy	Student arrives at class after the bell (or signal that class has started)

Office Managed Behaviors	Definition
Abusive language/inappropriate language/profanity	Verbal messages directed at a teacher or student that include swearing, name calling or use of words in an inappropriate way
Alcohol/drugs	Student is in possession of or is using alcohol/drugs
Arson	Student plans and/or participates in malicious burning of property
Combustibles	Student is in possession of substance/objects readily capable of causing bodily harm and/or property damage (matches, lighters, firecrackers, gasoline, lighter fluid)
Defiance/disrespect/insubordination/non-compliance	Refusal to follow directions, talking back and/or socially rude interactions Student engages in high-intensity or on-going negative behavior
Dress-code violation	Student wears clothing that does not fit within the dress code guidelines practiced by the school/district
Fighting/physical aggression	Actions involving serious physical contact where injury may occur (e.g., hitting, punching, hitting with an object, kicking, hair pulling, scratching, etc.)

Office Managed Behaviors	Definition
Harassment/tease/taunt/threats	Student delivers harassing messages (verbal or gestural) to another person that includes threats and intimidation, obscene gestures, picture, or written notes. Harassing messages include negative comments based on race, religion, gender, age, and/or national origin; sustained or intense verbal attacks based on ethnic origin, disabilities or other personal matters
Inappropriate computer use	Student engages in repeated inappropriate (as defined by school) use of tech offensive websites containing hate-based or sexually explicit messages
Lying/cheating/forgery	Student delivers message that is untrue and/or deliberately violates rules or has signed a persons name without that person's permission
Major disruption	Behavior causing an interruption in a class or activity. Disruption includes sustained loud talk, yelling, or screaming; noise with materials; horseplay or roughhousing; and/or sustained out-of-seat behavior. Multiple behavior disruptions
Theft	Student is in possession of, having passed on, or being responsible for removing someone else's property
Tobacco	Student is in possession of or is using tobacco
Truancy/skip class	Student leaves class/school without permission or stays out of class/school without permission. Refuses to return to class
Vandalism/property damage	Student participates in an activity that results in substantial destruction or disfigurement of property
Weapons	Student is in possession of knives or guns (real or look alike), or other objects readily capable of causing bodily harm

CLASSROOM CONSEQUENCES

Below are suggestions for classroom consequences. Teachers should choose an appropriate consequence for the behavior. Documentation of the incident and the consequence is encouraged in the event administrative action becomes necessary. Prior to the following consequences, teachers are encouraged to use redirection, proximity control, non-verbal cue, verbal warning, etc.

If the student does not respond to the above action, here are the following suggestions:

1st Offense

- A. *A private student/teacher conference will be held for the infraction and/or a detention.
- B. Possible parent contact

2nd Offense

- A. A student detention will be assigned by the teacher for the second infraction (cleaning desks, boards, working during lunch, etc.)
- B. Parent contact

3rd Offense

Office discipline referral and phone call to parent.

***During conference:** Teachers should address the specific behavior, reinforce appropriate behavior and what class expectations are required, and ask student what their behavior will look like when they return to classroom.

Please complete this portion and have your son/daughter return it to the teacher.

I have read the above information and am aware that these rules and regulations will be enforced in class.

Home Phone _____

Work Phone _____

Student Signature _____

Parent/Guardian Signature _____

APPENDIX G

OFFICE DISCIPLINE REFERRAL FORM

DISCIPLINE REFERRAL FORM TO PARENTS

Student's Name _____ Grade _____ Date _____ Time _____ am/p.m.

Generated by (staff name) _____

Location: _____ Cafeteria _____ Hallway _____ Classroom _____ Library _____ Bathroom _____ Gym _____ Lobby/commons _____ Parking Lot _____ Bus loading zone _____
On Bus _____ Special Event _____ Assembly _____ Field Trip _____ Office _____ Other Location _____ Unknown Location _____

MAJOR OFFENSE

(Check all that apply - CIRCLE the ONE most relevant)

- | | |
|---|---|
| <input type="checkbox"/> Fighting/Physical Aggression (1 st degree assault/2 nd degree assault) | <input type="checkbox"/> Defiance/disrespect/insubordination/non-compliance |
| <input type="checkbox"/> Use /possession of combustible items (fireworks/ammunition) | <input type="checkbox"/> Trespassing |
| <input type="checkbox"/> Lying/cheating | <input type="checkbox"/> Vandalism (school/personal property) |
| <input type="checkbox"/> Forged note /phone; school dishonest; inappr. comp. use) | <input type="checkbox"/> Bomb threat/false alarm |
| <input type="checkbox"/> Harassment/threats/threatening behaviors (tease/taunt) | <input type="checkbox"/> Arson |
| <input type="checkbox"/> Disturb/disrupt | <input type="checkbox"/> Use/possession of dangerous weapons |
| <input type="checkbox"/> Skip Class/truancy/leaving class/attendance | <input type="checkbox"/> Other behavior |
| <input type="checkbox"/> Property damage | <input type="checkbox"/> Unknown behavior |
| <input type="checkbox"/> Forgery/theft/robbery/false rpt. /ID-ticket misuse | <input type="checkbox"/> Careless drive |
| <input type="checkbox"/> Tobacco (use/possession) | <input type="checkbox"/> Gang related |
| <input type="checkbox"/> Alcohol (distribution/use/possession) | <input type="checkbox"/> Other felonies |
| <input type="checkbox"/> Drugs (distribution/use/possession) | <input type="checkbox"/> Tardy |
| | <input type="checkbox"/> Dress Code Violation (indecentcy) |

MINOR OFFENSE

(Check all that apply - CIRCLE the ONE most relevant)

- ☐ Inappropriate /abusive verbal language (profanity)
- ☐ Physical contact (unnecessary roughness)
- ☐ Disrupt/non-compliance (safety violation/fail to serve/spitting)
- ☐ Property misuse (hall pass/littering)
- ☐ Parking violation

OTHERS INVOLVED IN INCIDENT:

_____ none _____ peers _____ staff _____ teacher _____ sub _____ unknown _____ other

List peers involved: _____

Incident description by staff member: _____

DISCIPLINARY ACTION TAKEN BY ADMINISTRATION (to be completed by Administrator)

- | | | |
|---|---|--|
| <input type="checkbox"/> In School Suspension _____ days | <input type="checkbox"/> Contract | <input type="checkbox"/> Withdraw from school |
| <input type="checkbox"/> Out of School Suspension _____ days | <input type="checkbox"/> Custodial Duty | <input type="checkbox"/> Warning (1 st offense) |
| <input type="checkbox"/> Period Detention/suspension _____ hour | <input type="checkbox"/> Drop class | <input type="checkbox"/> Warning (2 nd offense) |
| <input type="checkbox"/> Referred to Law Enforcement | <input type="checkbox"/> Home bound education | <input type="checkbox"/> Parent phone conference |
| <input type="checkbox"/> Ban from Lab/Media Center | <input type="checkbox"/> Letter of apology | <input type="checkbox"/> Car not allowed on campus |
| <input type="checkbox"/> Change Clothing | <input type="checkbox"/> Letter home | <input type="checkbox"/> Student not allowed on campus |
| <input type="checkbox"/> Conference with principal | <input type="checkbox"/> Loss of credit-test/assign | <input type="checkbox"/> Withdrawn from class (W) |
| <input type="checkbox"/> Conference with parent (date) _____ | <input type="checkbox"/> Loss of parking privilege | <input type="checkbox"/> Withdrawn from class (W/F) |
| <input type="checkbox"/> Conference with student (date) _____ | <input type="checkbox"/> Loss of privileges | <input type="checkbox"/> Athletic Suspension _____ % |
| <input type="checkbox"/> Conference with teacher (date) _____ | <input type="checkbox"/> Restitution | |
| <input type="checkbox"/> Conference with counselor (date) _____ | <input type="checkbox"/> Student sent home | |
| <input type="checkbox"/> Confiscation | | |

Parent contact date _____ Habitually disruptive _____ 1st offense _____ 2nd offense _____ 3rd offense _____

Possible Motivation: Obtain Peer attention _____ Obtain adult attention _____ Obtain items/activities _____ Avoid peers _____ Avoid adult _____
Avoid task/activity _____ Don't know _____ Other _____

Disciplinary Comments by Administrator: _____

Administrator's signature: _____

Parent conference/re-admittance: _____