Implementation of Positive Behavior Interventions and Supports With Fidelity and Decreased Use of Exclusionary Discipline

by

Jason L. Clarkson

Submitted in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education

in the

Educational Leadership Program

YOUNGSTOWN STATE UNIVERSITY

May, 2024

Implementation of PBIS With Fidelity and Decreased Use of Exclusionary Discipline

I hereby release this dissertation to the public. I understand that this dissertation will be made available from the OhioLINK ETD Center and the Maag Library Circulation Desk for public access. I also authorize the University or other individuals to make copies of this thesis as needed for scholarly research.

Signature:

_____

Jason L. Clarkson, Student Date

Approvals:

_____

Dr. Jane Beese, Dissertation Advisor Date

_____

Dr. Richard Rogers, Committee Member Date

_____

Dr. Victoria Kress, Committee Member Date

_____

Dr. Salvatore A. Sanders, Dean, College of Graduate Studies Date

ABSTRACT

Studies have shown multiple adverse effects on suspended students while showing no evidence that suspensions prevent those behaviors from occurring. Existing research also points to the inequalities in school discipline in which students of color are often suspended at higher rates than their white peers. Alternative methods such as positive behavior interventions and supports (PBIS) have been shown to improve discipline outcomes, including reducing suspensions. The purpose of this quantitative study was to examine the relationship between principals' perceptions of exclusionary discipline and their implementation of PBIS and to investigate the suspension rates of schools that were recognized for their level of PBIS implementation compared to schools that were not recognized. Data analysis included a discipline practices survey sent to high school principals in Pennsylvania and three years' worth of enrollment and suspension data from the Pennsylvania Department of Education. The results indicated a significant relationship between principal perspectives on discipline and their implementation of PBIS. The results of the suspension rates analysis showed no significant relationship between PBIS recognition and suspension rates but did point to a rise in suspensions in the return to in-person learning after the COVID-19 pandemic, as well as a continuing trend of students of color being suspended at higher rates than their white peers.

ACKNOWLEDGEMENTS

I am incredibly grateful for the many people who have offered their support and guidance through this journey. First, I want to thank my wife, Kristin, for her support through this process, for standing by my side, and for offering encouragement to keep going. I want to acknowledge my children, Camryn and Shea, for their ability to keep me grounded and remind me of my role as a parent. I would like to thank my Dissertation Chair, Dr. Jane Beese, for her encouragement and guidance throughout the entire dissertation process. I would also like to thank my committee members, Dr. Richard Rogers and Dr. Victoria Kress, for their assistance. To all my students, coworkers, and supervisors who have supported me in some manner, I extend my sincerest thanks.

I dedicate this dissertation to my grandfather, the late Dr. William C. Lauer. It was because of him that I became a teacher. He instilled in me many philosophies that guided me on my educational path. I know you would be proud of me, and I look forward to following in your footsteps as an educational leader.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Managing student behavior has been an element of schooling in the United States since colonialism. Although there is a need for agreement on behavior management and discipline, the methods and strategies used may not always be in the best interest of students. The continued use of exclusionary discipline practices is a concern for many school communities (Losen & Martinez, 2013; Morgan et al., 2014). The School Discipline Support Initiative (n.d.) defines exclusionary discipline as "any type of school disciplinary action that removes or excludes a student from his or her usual educational setting." The most common forms include in-school suspensions, out-of-school suspensions, and expulsions. According to data from the United States Department of Education, 1,578,313 public school students received at least one out-of-school suspension during the 2017-2018 school year (U.S. DOE, 2021). A total of 11,205,797 school days were missed due to out-of-school suspensions. Although policy and practice reform efforts are in place, the use of exclusionary discipline practices such as suspensions and expulsions continue to be a commonly used practice in the school administrator's discipline toolkit (Fabelo et al., 2011; Heilbrun et al., 2015; Shah & McNeil, 2013).

The increase in the use of exclusionary discipline can be traced back to the adoption of zero tolerance policies adopted in the 1980s and 1990s (Skiba, 2013). These zero tolerance policies mandated predefined consequences for discipline issues without regard to the situation or context of the event (Skiba & Peterson, 1999). Schools nationwide began implementing strict discipline policies with harsh consequences for even minor infractions (Kajs, 2006). The goal of these policies was to use harsh punishment as a deterrent to stop behavioral problems (Skiba, 2013), but research has shown that that isn't the case (Massar et al., 2015).

Exclusionary discipline has been shown to have many adverse and lasting effects on students. Removing students from the classroom presents a disruption to their learning and can lead to negative academic effects such as decreases in test scores (Lacoe & Steinberg, 2018), lower overall achievement (Arcia, 2006), and an increased likelihood of dropping out (Chu & Ready, 2018). Along with negative academic effects, students who are suspended may be the victims of labeling theory. Labeling theory states that people tend to behave according to how others label them (Crossman, 2020). Suspended students may be labeled as deviant and often interact with more delinquent peers, which leads to more behavioral problems (Jacobsen, 2020). In this case, exclusionary discipline is increasing negative behaviors instead of limiting them. Exclusionary discipline can negatively affect all students, but research has shown a disproportionate rate of exclusionary discipline among students of color. A 2019 study by De Brey et al. found that 13.7% of Black students were suspended during the 2014 school year compared to only 3.4% of their White counterparts. Although some argue that Black students are suspended because of their school environments (Jacobsen et al., 2019), racial disparities were still evident even when accounting for differences in socioeconomic status and type of school attended (Nowicki, 2018).

The racial disparity in the use of exclusionary discipline has also been shown to contribute to what has been labeled as the school-to-prison pipeline. The school-to-prison pipeline refers to the practice of removing students from the educational setting and placing them in the criminal justice system for both major and minor behavioral offenses that occur in the school setting (School Discipline Support Initiative, n.d.). Students who are suspended are more likely to be involved in criminal activity, thus contributing to the school-to-prison pipeline as well (Leban & Masterson, 2022; Rosenbaum, 2020; Wolf & Kupchik, 2017).

Current reform efforts call for reductions in the use of exclusionary discipline. The American Psychological Association (APA), along with the Consortium for Citizens with Disabilities (CCD), recommends that the U.S. Department of Education create a policy to dramatically limit the use of in-school and out-of-school suspension and implement programs such as Positive Behavior Interventions and Supports (PBIS) and Restorative Justice Practices (RJ) (CCD, 2021). Many school districts throughout the country are implementing these alternatives with varied results (Green et al., 2021). As with most reform efforts, implementation at the school level is vital for success (Steinberg & Lacoe, 2018). Reducing the usage of exclusionary discipline relies on decisions made by school-level administrators and leaders (Curran & Finch, 2021). By understanding the limitations and successes of school-level implementation of alternative discipline strategies, administrators and other school leaders can adapt and modify their discipline policies to be in line with what is best for all students.

Statement of the Problem

Schools throughout the country continue to use punitive discipline practices such as suspensions and expulsions to manage student behavior (Brent, 2019; Heilbrun et al., 2015; Skiba, 2014; Skiba & Peterson, 1999). These practices are thought to reduce discipline issues, but studies have shown that they can worsen student behaviors (Massar et al., 2015). These practices have been shown to have adverse academic effects such as lower achievement (Arcia, 2006; Morris & Perry, 2016), a decrease in test scores (Lacoe & Steinberg, 2018), and an increased likelihood of dropping out (Chu & Ready, 2018; Noltemeyer et al., 2015). Students who are subjected to exclusionary discipline may also experience multiple social problems. One such concern is the student being labeled as a deviant as a result of being suspended (Gerlinger et al., 2021). Additionally, students who are suspended are more likely to engage in deviant

behaviors (Jacobsen et al., 2019; Novak & Krohn, 2021). In the worst-case scenario, experiencing exclusionary discipline may lead to a greater chance of being arrested or incarcerated as adults (Bacher-Hicks et al., 2021; Fabelo et al., 2011; Rosenbaum, 2020; Wolf & Kupchik, 2017).

The use of exclusionary discipline disproportionately affects Black students with Black students being more likely to be suspended than their White peers (de Bray et al., 2019). Much of this unequal treatment may be the result of implicit bias among staff and administrators (Graham & Lowery, 2004; Inan-Kaya & Rubie-Davies, 2022; Peterson et al., 2016; Staats, 2016). Federal reform efforts have been recommended by the U.S. Department of Education through a Dear Colleague letter (Lhamon & Samuels, 2014) as well as in a joint statement from the American Psychological Association and the Consortium for Citizens with Disabilities (CCD, 2021). These recommendations for the use of PBIS and restorative justice practices have been provided due to their ability to reduce the need for exclusionary discipline while also improving the racial disparity in discipline practices. The state-level implementation of any reform varies greatly with many states putting the responsibility in the hands of individual districts (Curran & Finch, 2021). The implementation of discipline reform falls on the decision making of district and school-level leaders. When faced with decisions to enact new strategies, many administrators lean toward keeping the status quo (Fixsen et al., 2005; Horner et al., 2017). These school leaders also often lack the tools and knowledge to enact new strategies (Murray, 2014; Shen et al., 2012; Sun et al., 2016). Administrators cannot effectively make decisions regarding discipline policies without the knowledge of the current research regarding school discipline (Mayworm & Sharkey, 2014).

Purpose Statement

The purpose of this research study was to investigate the barriers that exist in reducing the use of exclusionary discipline. Positive Behavior Interventions and Support (PBIS) systems have shown the capacity to reduce the use of exclusionary discipline (Eiraldi et al., 2019), but implementation of these systems with fidelity remains a difficult task (Kittelman et al., 2019). The researcher focused on the role of school-level administrators in adopting research-based strategies by evaluating the fidelity of the implementation of PBIS systems and the effects on the use of exclusionary discipline. The results may support other school-level administrators in their efforts to implement new discipline policies.

Research Questions

This study furthers research into how schools can reduce the use of exclusionary discipline. The study aimed to address the topic by gathering an understanding of the principal's perception of exclusionary discipline and examining how the implementation of PBIS programs affect the use of exclusionary discipline. The research questions are as follows:

Research Question 1. To what degree does the school principal's level of perception on exclusionary discipline vary among schools with and without a PBIS system in place?

Research Question 2. How does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system in place?

Research Question 3. To what extent does the implementation of a PBIS program affect the suspension rates of students of color and students with disabilities?

Methodology

The sample consisted of high schools from the Western Region of Pennsylvania. The schools were broken into two groups. The first group consisted of schools that have been

recognized as having sustained implementation of a PBIS system with fidelity. The second group consisted of a randomly selected group of schools from the Western Region who were not recognized by PaPBS. The number of schools chosen from each county represented remained the same for each group. For example, if there were eight schools that were recognized in Allegheny County, a random group of eight schools from Allegheny County was chosen for the second group.

To assess principal opinions on exclusionary discipline, a survey was sent to principals to assess their opinions on exclusionary discipline. The survey was aimed to compare how the perceptions of principals related to the use of exclusionary discipline in a specific school building. The principal responses were compared to the school discipline data from the respondents' schools. In addition to the principal's perception, a section of the survey focused on barriers to reduce exclusionary discipline.

To assess the relationship between the implementation with the fidelity of PBIS systems and the utilization of exclusionary discipline, data from the Pennsylvania Department of Education (PADOE) and Pennsylvania Department of Health and Human Services' PaPBS Network was used to identify school sites with continued implementation with fidelity of a School-Wide PBIS program. The PaPBS Network identifies and distinguishes sites that have shown successful implementation of PBIS. Schools are able to submit an application each fall. To be considered for recognition, a school must be in good standing with the PaPBS Network, must be supported by a PaPBS Network facilitator, and must have submitted the required data relating to their PBIS program. Suspension data from the two sample groups were collected and compared to each other as well as overall state and national suspension data to determine the relationship of implementation with fidelity and the use of exclusionary discipline.

Significance of the Study

There is significant research showing the negative effects of exclusionary discipline on students. Research has shown that PBIS systems have the capacity to reduce the use of exclusionary discipline and improve student behavior (Baule, 2020; Noltemeyer & Mcloughlin, 2010; Runge et al., 2021). This study aimed to add to existing research by examining the school principal's perspective on exclusionary disciplinary practices and the barriers they perceive in reducing the use of these practices. The study also aimed to provide additional research into the effectiveness of PBIS systems by examining the relationship between the implementation with the fidelity of PBIS and its effects on exclusionary discipline. The research presented in this study provided principals and other administrators with information that will help them recognize the barriers to reducing exclusionary discipline while also providing insight into how schools that have implemented PBIS systems with fidelity have been able to address exclusionary discipline practices.

Role of the Researcher

In this study, I assumed the role of surveying and analyzing data from a variety of sources. Throughout my educational career, I have remained committed to equity and fairness for students. For 10 years, I taught in a small K-8 school in southern New Jersey followed by two years in a much larger middle school in central New Jersey. In both of these school districts, the perception was that student suspensions were used as a last resort for behaviors, or in extreme cases, such as students bringing a weapon or drugs to school. Following a relocation to the Pittsburgh, Pennsylvania area, I was employed at a K-5 elementary school. In my only year there, I experienced many students being suspended for behavioral issues. I felt that many of the discipline problems did not warrant such extreme punishment. It was also my feeling that

students of color were suspended more than their peers. After moving to the high school in the same district, I noticed the same pattern of inequitable discipline. My experience with students who have experienced inequitable discipline has led me to pursue this research. In this research, I must recognize my own personal bias and not let it affect the results.

Assumptions, Limitations, and Delimitations

The first assumption made was relying on the respondents to be truthful when describing their views on exclusionary discipline. The researcher assumed that the principals surveyed had the awareness and knowledge of their school's discipline policies and experience with student discipline. The researcher also assumed that publicly available discipline data from the Pennsylvania Department of Education had been correctly reported. The study also assumed that the schools chosen by the PaPBS Network accurately represented the PBIS program when applying and that the evaluations by PaPBS effectively measured the implementation with fidelity.

The external validity of this study may be a limitation. The study's sample was limited to public high schools from only the Western Region of Pennsylvania and may not be representative of all schools. Some concerns can be alleviated as the schools chosen represent populations from a wide range of socioeconomic backgrounds and represent urban, suburban, and rural communities. The schools selected as implementing PBIS with fidelity were selected from a list compiled by the PaPBS Network. This list included all schools that met their criteria for PBIS implementation with fidelity. The selection of schools from the PaPBS Network that were recognized as implementing PBIS with fidelity was a limitation due to schools needing to apply for recognition. Other schools may have implemented PBIS with fidelity but may not have applied for recognition. The time and resources that are needed to apply for and earn the

distinction from PaPBS may be a limiting factor for schools that are implementing a PBIS program but are limited in their resources. Further research can expand on the results of this study by including a broader range of schools from a large geographic area as well as including schools of all grade levels. Additional research could expand the results into non-public schools, alternative schools, and specialized schools for children with disabilities.

The researcher chose the smaller sample size to represent the region of Pennsylvania where he is employed. The researcher's experience in the high school setting led to the decision to limit the study to the high school setting.

Definition of Terms

Exclusionary Discipline refers to a disciplinary response that removes a child from the typical educational or classroom setting (Noltemeyer & Mcloughlin, 2010). The most frequently used methods include in-school suspension, out-of-school suspension, and expulsion.

Fidelity explains the degree to which an intervention or practice is implemented as intended (Harn et al., 2013). In research, understanding the degree of fidelity of any intervention as prescribed is vital in ensuring that the measured results are truly a result of the intervention, not other causes (Gresham, 2009).

Positive Behavior Interventions and Supports or PBIS is a tiered framework of evidence-based interventions aimed at providing behavioral, social, emotional, and academic health for all students (Sugai & Horner, 2009). The interventions are broken into three tiers based on the population targeted (Grasley-Boy, Reichow et al., 2021). Tier 1 interventions apply to all students. Tier 2 interventions are targeted at students whose negative behaviors continue despite Tier 1 interventions being in place. Tier 3 interventions are reserved for students in need

of individualized interventions when the previous tiers fail to improve behaviors (Grasley-Boy, Reichow et al., 2021).

Zero tolerance policies refer to school discipline policies that utilize a series of predetermined severe consequences for specific discipline issues (Skiba, 2013). The policies rely on the assumption that the threat of consequences, along with an increased use of authority and force will deter students from engaging in negative behaviors (Skiba).

Summary

As school districts continue to address concerns regarding student discipline, schools are choosing to implement innovative programs aimed at reducing the use of exclusionary discipline. When implementing any new program, it is vital to examine the success of the implementation using a framework to ensure that the program is working as intended (Nilsen, 2015). The fidelity of implementation of PBIS is used to determine how well districts or schools are implementing their PBIS program using a tiered fidelity inventory to ensure all aspects of the program are addressed appropriately (Algozzine et al., 2014). The school principal plays a leading role in implementing PBIS or any other program or policy, but many principals lack the tools and knowledge to do this successfully (Shen et al., 2012; Sun et al., 2016). This study aimed to address the barriers to implementation while also offering support for working toward implementation with the fidelity of PBIS.

A major goal of this study was to determine the degree to which a principal's perception of exclusionary discipline affects the suspension rates in their schools, as well as the barriers that they perceive in reducing exclusionary discipline. Principals were given surveys to address their perceptions and their responses were compared to the publicly available discipline data from the Pennsylvania Department of Education. This study also sought to add to the body of evidence in

support of PBIS programs by analyzing discipline data from schools that have shown successful implementation of PBIS with fidelity compared to other schools throughout Western Pennsylvania.

Discipline data from schools that were recognized for their implementation of PBIS with fidelity were compared to a sample of other schools in the region. The data were compared to regional, state, and national discipline data. Further analysis sought to break down the results according to student demographics, including race and gender. The results of this study provide a background for schools and principals looking to adopt a PBIS program to address discipline concerns. Additionally, this study provides the foundation for further research on the implementation of PBIS with fidelity and the reduction of exclusionary discipline in schools.

Organization of the Dissertation

Chapter II presented a review of the current literature that is central to the research study. Chapter III described the research methodology including the research design, the sample being used, data collection, data analysis procedures, the limitations of the study, and the validity and reliability of the results. The results and data analysis were given in Chapter IV. Chapter V provided a summary of the results as well as a discussion of the implications and recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

The management of student behavior has been a key part of American school systems since their inception. A series of events through the 1980s and 1990s led to many schools adopting zero tolerance discipline policies with severe consequences for many student behaviors (Kajs, 2006; Skiba & Peterson, 1999; Skiba, 2013). These policies led to an increase in the use of suspensions and expulsions, or what has been commonly referred to as exclusionary discipline (Losen & Martinez, 2013). The assumption is that the risk of strict penalties deters students from engaging in specific behaviors, but that is not the case. In fact, students who are suspended are at risk for increased behavioral problems (Jacobsen, 2020). The use of exclusionary discipline has been shown to have negative academic and social effects on many students. The academic effects include a reduction in test scores, lower achievement results, and an increased likelihood of dropping out.

Positive behavior interventions and supports (PBIS) have been shown to improve academic and behavioral problems as well as reduce the use of suspensions (Elrod et al., 2022; James et al., 2019; Noltemeyer, 2019; Öğülmüş & Vuran, 2016). PBIS has also shown to be effective at reducing the racial disparity in discipline (Gage et al., 2019; McIntosh, Girvan, Fairbanks Falcon et al., 2021). Even though PBIS systems have shown these positive results, implementing them with fidelity may take up to four years (Elrod et al., 2022; Kittelman et al., 2019). Implementation with fidelity also relies heavily on administrative leadership at the school and classroom level (Kittelman et al., 2019; Matthews et al., 2014). Like many other innovations, successful implementation or adoption relies on school-level administrators and educators. Unfortunately, administrators are charged with making well informed decisions regarding

strategies even though they may lack the tools and knowledge to do so (Shen et al., 2012; Sun et al., 2016). It is vital to understand what knowledge and strategies are necessary for administrators to adopt equitable discipline policies that are in the best interest of the students.

Theoretical Framework

The study of how to implement research-based innovations relies on evaluating the factors related to successfully implementing a new innovation or strategy. As Berman and McLaughlin (1974) found, the failure of many innovations is not a result of the innovation itself but deficiencies in the implementation process. In school discipline- related issues, it is also important to draw attention to the racial disparities in discipline outcomes (de Brey et al., 2019; Gregory, Skiba et al., 2010; Nowicki, 2018). Looking at this issue through the lens of implicit racial bias may provide insight into how to better address racial inequality in discipline practices. These foundational theories will provide a framework for looking at the barriers preventing the adoption of alternatives to exclusionary discipline.

Implementation Science

For many years, the education community has been caught in a cycle in which reforms are introduced, abandoned, and implemented again without any lasting effect on student outcomes (Detrich, 2014; Ferguson, 2022; Slavin, 2017). The field of implementation science can provide a framework for understanding and explaining how and why implementation succeeds or fails (Nilsen, 2015). Implementation science can be defined as the study of methods to improve the uptake of research findings to promote evidence-based practice (Eccles et al., 2006). The roots of implementation theory come from the movement toward using evidence-based practice in the healthcare field but has found a way into other professional fields such as education (Eccles et al., 2006). The Change Agent Study conducted by the RAND Corporation

(Berman & McLaughlin, 1974) represents a crucial moment in the convergence of implementation science with educational research. The study recognized that the failures of many innovations may be due to the failure in the implementation process and not the innovation itself. By looking at school discipline reform through the lens of implementation theory, there may be a clearer picture as to why some discipline reform efforts and alternative programs succeed or fail.

Nilsen (2015) posited that theoretical approaches in implementation science can be broken down based on three goals or aims: translating research into practice, understanding what influences the outcomes of implementation, and evaluation of implementation (Nilsen). The approach to understanding what most effectively influences outcomes can be broken down further into determinant frameworks, classic theories, and implementation theories. The classic theories can provide the framework needed to investigate the implementation of Positive Behavior Interventions and Support and Restorative Justice as alternatives to exclusionary discipline.

Organization theory and diffusion of innovation theory are two of the most commonly referenced classic theories in implementation science (Birken, Bunger et al., 2017). Organizational theory offers an explanation based on internal and external factors that influence successful implementation (Birken, Bunger et al.). Among those factors are financial change, new legislation, policy changes, and other environmental shifts. By further understanding the organizational factors that influence implementation, potential barriers can be proactively identified and focused on to improve implementation fidelity.

Diffusion of Innovation refers to the process in which people adopt a new idea, practice, or strategy (Kaminski, 2011). Everett Rogers (2003) popularized the use of adopter categories to

describe the adoption of new innovations. Rogers identified the categories as Innovators, early adopters, early majority, late majority, and laggards. Rogers (2003) posited that new innovations are diffused among populations until the point of saturation. The greatest influencers on success are the early adopters who start the adoption process (Rogers, 2003). In striving to be an early adopter while understanding and meeting the needs of all adopter categories, school leaders can improve the likelihood of successful implementation of new policies and programs.

Implicit Bias

With research showing a gap in discipline between racial groups (de Brey et al., 2019; Gregory, Skiba et al., 2010; Nowicki, 2018), it is important to ask how the implicit bias of teachers affects discipline outcomes. Greenwald and Banaji (1995) defined implicit bias as "introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action toward social objects" (p. 8). More simply, it referred to the actions and decisions that we make based on unconscious associations and judgments. The unconscious nature means these decisions may be difficult to control or recognize. Unlike explicit bias, implicit bias occurs behind the scenes where its effect on decision making goes unnoticed (Hyman, 2017). For example, a Black student may be disciplined for disrupting the class when speaking out, while similar behavior from white students does not elicit the same response. In this case, the teacher's implicit bias relating to the behavior of Black students leads to an unfair discipline response. The estimation of age and perceived innocence may also lead to more severe punishments for Black students. Adults tend to overestimate the age of Black children and perceive them to have less innocence than their White peers (Goff et al., 2014).

In the school setting, implicit bias may manifest in the teacher's perception of subjective behaviors such as disrespect, excessive noise, or disruption (Staats, 2016). Research by Inan-Kaya and Rubie-Davies (2022) found that implicit bias in the classroom exists in differential nonverbal interactions, differential academic interactions, and differential interactions under the same conditions. In the same study, eye contact, smiling, and tone of voice were the most prominent nonverbal communications in the classroom. Among all participants, nonverbal behaviors were not evenly distributed to students, leading to a perception of favoritism among students (Inan-Kaya & Rubie-Davies., 2022). Additionally, the teachers involved were observed monitoring student progress but were more attentive to the needs of specific students while ignoring others who required more assistance. Lastly, many teachers responded differently and made different decisions when triggered by a student perceived as favored or non-favored (Inan-Kaya & Rubie-Davies, 2022). Although not entirely based on race, the results of this study showed the noticeable implicit bias among classroom teachers. Regarding racial bias, Okanofua and Eberhardt (2015) found that teachers were more likely to label a Black student as disruptive after a second disciplinary infraction when compared to white students exhibiting the same behaviors. Additionally, teachers felt that the discipline response for Black student behaviors should be more severe than that of White students. Similar bias can be seen in the teacher's perceptions of behaviors based on gender. For example, physical violence tends to be attributed more to male students while more subtle and more relational violence is attributed to females (Lunneblad & Johansson, 2021). According to the authors, violent behaviors by females are often downplayed or overlooked whereas more subtle and relational behaviors, such as verbal abuse by males, is often disregarded. From a student standpoint, pressure to adhere to the gender norms led to an increase in school misconduct among male adolescents (Heyder et al., 2021).

Essentially, boys who felt pressured to live up to the stereotype of boys misbehaving more frequently were more likely to exhibit those behaviors in school.

One may think that current teacher education programs are making efforts to address implicit bias, but a recent study found that White preservice teachers have more implicit bias than their nonwhite counterparts (Kumar et al., 2022). However, teacher education programs that are grounded in the principles of social justice are effective in reducing bias in teachers from the racial majority and minority groups (Stephens et al., 2022). To understand why the racial inequality in school discipline exists, white teachers may need to be introduced to how their potential bias contributes to the inequality despite their best intentions for treating students equitably (Capatosto, 2015). One may think that a teacher's educational or demographic background is a contributing factor to the discipline gap, but Denessen et al. (2022) found that this was not the case except under two conditions. Teachers from a stigmatized group tend to have more positive attitudes toward their own group (Denessen et al., 2022). In addition, teachers who received specialized training to work with specific groups view those groups more positively (Denessen et al., 2022). For many administrators, providing training for all staff would mitigate implicit bias.

Federal policy guidelines released in 2014 acknowledge implicit bias as a contributor to the racial disparity in school discipline (Staats, 2016). These same guidelines highlighted the need for further training on implicit bias and racial stereotypes in their recommendations for schools. Unfortunately, most training only involves making educators aware of implicit bias (Shah et al., 2021). In doing so, the assumption is that awareness of their own biases will prevent educators from exhibiting biased behaviors and decision making. This strategy may have the opposite effect. Making people aware of their own bias often leads to defensive reactions that

diminish any positive steps toward reducing bias (Rothman et al., 2022). As more research emerges on how to reduce implicit bias in education, administrators bear the burden of making sure their staff is not only aware of their implicit bias but are able to implement strategies and methods to reduce implicit bias in their classrooms.

Summary

In recent years, the role of the school level administrator has become more complex (Neumerski et al., 2018; Pollock et al., 2015). Many administrators are unprepared to make the decisions necessary (Minkos et al., 2017; Murray, 2014; Shen et al., 2012; Sun et al. 2016). Administrators will need support and assistance to implement new discipline policies (Reed et al., 2020). Understanding the factors that are hindering the implementation of any new policies may aid administrators in focusing their efforts where needed. Addressing the potential implicit bias that exists in school discipline will help ensure that any new policies are implemented in an equitable fashion.

Literature Review

A recent editorial in a local newspaper brought attention to the Pittsburgh Public School district's proposal to extend their ban on suspension to include fourth and fifth grades (The Editorial Board, 2021). The district initially instituted a ban on suspensions from grades preschool through three in 2017, becoming the first school system in the state to ban out-of-school suspensions for young students. The suspension ban led to a 35% reduction in suspensions between the 2015-2016 school year and the 2018-2019 school year (Schneider, 2021). However, a major issue remained regarding the racial disparity in suspensions. Although Black students made up 50% of the student population, they accounted for 80% of the district's out-of-school suspensions.

As much as this story aims to put a positive spin on the news, one must wonder why these students were suspended in the first place. Could these young students really be that great of a threat to school safety that they needed to be removed from an academic setting? How has school discipline evolved to get to a point where student learning at the youngest and most formative years is sacrificed based on behavioral issues that are deemed worthy of having a student excluded from the education process. How did school discipline arrive at this point and what can be done to rectify this problem?

There is no debate on the importance of managing school discipline in providing a safe learning environment. Teachers, staff, and administration have a responsibility to keep children safe while also creating a learning environment that is free of disruptions. Although there is agreement on the purpose of school discipline, the methods that are used have created some controversy. A nationwide trend toward the use of zero tolerance policies and the effects they have had have caused many to rethink the way that schools manage disciplinary concerns. With the current trends in accountability, it is important to ask if zero tolerance policies have been effective in reducing school discipline and to investigate the effects these policies have had on students. By looking at the history of discipline policies and exploring the issues surrounding them, it can be argued that reforms need to be made to shift the focus from the punitive practices that have been put in place to a system based on Positive Behavior Interventions and Supports (PBIS) and restorative practices.

When a student struggles with math, they are provided with extra support. When students struggle to read, they are given fluency and decoding strategies. When students struggle to write, they are taught how to construct organized sentences and paragraphs. If the same logic was

applied to behaviors, schools would focus more on supporting students in improving their behaviors rather than removing them from the learning environment.

A Brief History of School Discipline

Addressing problematic student behaviors in public education is not a new concept. Managing student behavior has been an integral part of the American education system since its inception in colonial times. During the 17th and 18th centuries, religious philosophy led to an authoritarian role of the teacher to enact harsh punishment (Travers, 1980). Often, the disciplinary theory of colonial times is explained with the use of the modern-day proverb, "Spare the rod, Spoil the child," and its perceived relation to the Bible was used to support the use of capital punishment (Baron, 2005). The phrase is often attributed to Proverbs 13:24 which states, "Whoever spares the rod hates his son, but he who loves him is diligent to discipline him" *(English Standard Version Bible,* 2001). Due to multiple translations, there is some debate as to the relevance of this passage to corporal punishment or instead on guiding them toward what is right or wrong. In the latter, the term rod may also refer to a rod used by shepherds to guide sheep and not as an implement of punishment (Blevins, 2018). The phrase can also be attributed to a 17th century narrative poem titled *Hudibras: The Second Part* in which two lovers use the term to describe the practice of sadomasochism (Butler, 1704). Whether the phrase accurately expresses the disciplinary practice of the time period can be debated. However, it is more important to understand that early discipline was commonly used as a basis for the teaching of morality in a religious context (Kaestle, 1978).

As the country progressed toward the 19th century, school discipline shifted toward creating an industrious and subordinate workforce. The focus in schools was on the production of model citizens through the establishment of order and procedure (Kaestle, 1978). New

pedagogical schemes, such as the highly regimented monitorial system and the graded school, emphasized that the structure and procedures of schools would themselves shape appropriate character. As such, the role and authority of the teacher as a disciplinarian shifted from one based on moral principles of the Bible to one based on creating model citizens.

Following the decision to make school attendance mandatory in 1910, children were placed in the daily care of teachers, leading to a shift in teacher roles toward parental disciplinarians (FindLaw, 2016). During the 1940s and 1950s, Maslow's Hierarchy of Needs led to changes in discipline approaches due to the new understanding that basic needs must be met before students can learn effectively (Mcleod, 2017). If the student's basic needs were not met, discipline issues could arise (Mcleod, 2017). Thus, a shift was made toward creating school environments in which meeting the basic needs of students could be used to lower the need for harsh discipline.

In subsequent decades, school discipline took a turn toward the prevention of crime and violence in schools. Due to an increase in school violence in the 1960s and 1970s, Congress requested that the National Institute of Education (NIE) conduct a study to determine the number of schools affected by crime or violence, the type and seriousness of the crime, and how school crime can be prevented (National Institute of Education, 1978). The main findings of this report identified that safety devices such as special locks and alarms, along with security personnel, were effective in reducing crime, and that "the single most important difference between safe schools and violent schools was found to be a strong, dedicated principal who served as a role model for both students and teachers, and who instituted a firm, fair, and consistent system of discipline" (NIE, 1978, p. iv). During this time, school discipline was becoming a nationwide issue.

In response to the national awareness of school violence and discipline, schools began to enact strict disciplinary policies that aimed to punish all offenses, even those considered minor. In addition, schools adopted strict codes of conduct with predetermined discipline outcomes based on the infraction (Skiba & Peterson, 1999). These so-called "Zero Tolerance" policies have contributed to a school disciplinary system that favors a one size fits all approach that has had long-lasting negative impacts on many students.

The Rise of Zero Tolerance Policies

A series of events in the 1980s and 1990s led schools throughout the country to officially enact zero tolerance policies regarding school discipline (Skiba, 2013). The term zero tolerance rose to national attention during President Ronald Reagan's administration and the War on Drugs initiative. The first use of the term zero tolerance was in the Anti Drug Abuse Act of 1986 (1986). This legislation enacted mandatory penalties for minor drug offenses and started a shift toward the use of harsh punitive methods on a broad range of issues, "ranging from environmental pollution and trespassing to skateboarding, homelessness, and boom boxes" (Skiba & Peterson, 1999, p. 373). The first official introduction of zero tolerance policies in education took place starting in 1989 when schools in California, New York, and Kentucky instituted mandatory expulsions for drugs, fighting, and gang related activity (Skiba, 2014; Skiba & Knesting, 2001). As the use of zero tolerance policies spread, the issue took stage on the national level when the Clinton Administration signed the Gun-Free Schools Act of 1994. This legislation required mandatory expulsion for one year of any student who was caught bringing a gun, knife, or other weapon into a school. Any schools not following the mandate were at risk of losing federal funding (Gun-Free Schools Act of 1994, 1994). By 1996-97, at least 79% of schools adopted zero tolerance policies for violence, firearms, weapons, alcohol, drugs, or

tobacco (DeVoe et al., 2002). Even though the juvenile crime rate peaked in 1994 and continued to decline for the next two decades (Puzzanchera, 2021), the fear of an increase in violent crime among adolescents continued thanks in part to the introduction of the Super Predator theory proposed by criminologist John Dilulio (Kang-Brown et al., 2013). DiLulio predicted a significant increase in violent crime committed by what he referred to as morally impoverished super-predators who would commit violent crimes without remorse (DiLulio, 1995). In response, he advocated for tougher law enforcement and an increase in the incarceration of juveniles. The perceived rise in juvenile violence spread to the education system, with many schools toward discipline policies that relied heavily on exclusionary discipline practices such as suspensions and expulsions. As a result, the percentage of secondary students receiving an out-of-school suspension rose from 8% in 1972-1973 to 11.3% in 2009-2010 (Losen & Martinez, 2013). Although the overall increase may not seem substantial, it is concerning that the suspension rate for Black students rose from 11.8% to 24.3%. Correspondingly, the suspension rate for White students increased only 1.1% from 6% in 1972-1973 to 7.1% in 2009-2010. This racial disparity has continued to plague our education system (de Brey et al., 2019; Gregory, Skiba et al., 2010; Heilbrun et al., 2015). Under the guise of school safety, zero tolerance policies were enacted without research and have shown adverse effects, especially among some of the most at-risk groups. The lasting negative effects that these policies have on students, schools, and communities continue to be supported as more research comes to light.

The Effects of Zero Tolerance and Exclusionary Practices

The rise of zero tolerance policies in school discipline has led schools to follow a one-size-fits-all approach to behavior management that brushes aside common-sense practice in exchange for an inflexible set of predetermined consequences for specific behaviors (Kajs,

2006). Although it can be argued that zero tolerance policies provide a level of discipline structure, their use runs the risk of creating a restrictive environment that ignores students' need for support (Gregory & Cornell. 2009; Rodriguez, 2017). Perhaps the biggest effect of these policies lies in the increased use of exclusionary discipline policies. The School Discipline Support Initiative (n.d.) defines exclusionary discipline as, "any type of school disciplinary action that removes or excludes a student from his or her usual educational setting" (p. 1). The most common forms include in-school suspensions, out-of-school suspensions, and expulsions. These practices have become a key aspect of student discipline for many schools (Fabelo et al., 2011; Heilbrun et al., 2015; Shah & McNeil, 2013). The theory behind these policies was to remove the students causing behavior problems while keeping the students remaining in school safe. The central philosophy of zero tolerance policies is that the fear of strong enforcement and punishment will discourage students from engaging in problematic behaviors (Skiba, 2013). Although some research has shown that strict discipline policies relating to smoking, drinking, and fighting can reduce those behaviors, students who are punished for those behaviors are still at a greater risk for future misconduct (Zimmerman & Rees, 2014). Harsh policies may deter certain behaviors, but the discipline response to those behaviors, particularly the use of exclusionary discipline, does not prevent future misconduct. The use of exclusionary discipline would seem justified if the removal of these students led to better outcomes for all students, but the research clearly states otherwise.

There is scant evidence to show that removing problematic students affects the safety of their peers, and these exclusionary practices have little effect on future behavioral problems (Massar et al., 2015). Furthermore, research has shown that these policies have long-lasting negative effects on the recipients (Lacoe & Steinberg, 2018; Massar et al., 2015; Skiba &

Sprague, 2008). The American Psychological Association (2008) mirrors this thinking when it states:

> The duty of schools to preserve the safety and integrity of the learning environment is incontrovertible: to preserve a safe climate, to encourage a positive and productive learning climate, to teach students the personal and interpersonal skills they will need to be successful in school and society, and to reduce the likelihood of future disruption. It is the means to these ends that have created controversy around zero tolerance policies. Ultimately, an examination of the evidence shows that zero tolerance policies as implemented have failed to achieve the goals of an effective system of school discipline. (p. 860)

This is not to say that exclusionary discipline is not warranted in extreme situations, but districts and schools should use caution when administering these punishments. The use of these policies should be discontinued except for situations where there is no other option (Wolf & Kupchik, 2017). Education, training, and understanding of the long-term negative effects of current zero tolerance and exclusionary discipline policies must be considered when evaluating and administering school discipline.

Exclusionary Discipline and Academic Success

Being present in class is necessary for academic success, so it makes sense that removing or excluding a student from school would negatively impact their academic progress. As defined by the School Discipline Support Initiative (n.d.): "Exclusionary discipline describes any type of school disciplinary action that removes or excludes a student from his or her usual educational setting and are used to punish undesired behaviors, deter similar behaviors by other students and promote appropriate behavior."

For learning and growth to take place, a student needs to be present in the classroom. Excluding students from the classroom not only alienates them from instruction but may lead to student disengagement which leads to poor academic performance and the possibility of dropping out of school (Noltemeyer et al., 2015). Suspension of students has been shown to decrease achievement on standardized test scores in both math and English Language Arts (ELA) (Lacoe & Steinberg, 2018). In addition, another study found that "in semesters where they were suspended, students passed 3% fewer math credits and 4% fewer English credits and were 2.1% more likely to drop out in the following semester" (Chu & Ready, 2018). Students who have lower scores on standardized testing are poorer students overall and may be more likely to be suspended. Arcia (2006) found a clear relationship between students' reading achievement and suspension rates with lower achieving students having a greater likelihood of suspension. In addition, the same study recognizes that the more days that those students spent suspended, the fewer gains they made in reading achievement compared to their peers (Arcia, 2006). Students who are suspended and show a drop in academic growth after one suspension may lead down a path of continued poor performance, even if the student is not suspended again (Morris & Perry, 2016). The academic effects of exclusionary discipline necessitate a move toward alternative methods of discipline management.

Graduation from high school leads students down a path toward improved civic engagement and increases the chance of economic self-sufficiency (Zaff et al., 2017). Students who fail to graduate are at a higher risk of poor physical and mental health (Lee et al., 2016). Acknowledging these negative effects raises the question of how suspensions relate to the failure to earn a high school diploma. Students who experience a suspension in the first three semesters of high school were 18% less likely to graduate in four years and 17% less likely to graduate in 5

or 6 years (Chu & Ready, 2018). Additionally, students who were suspended by the age of 12 had a higher likelihood of dropping out before the age of 18 (Chu & Ready, 2018). Even when controlling for student demographic variables and attitudes, the relationship between suspensions and dropout remained significant (Lee et al. 2011). It is clear that exclusionary discipline policies have a negative impact on student achievement, but simply abolishing the practice without making further reforms that support positive student outcomes is unlikely to be a remedy.

Labeling Effect

Another concern with the use of exclusionary discipline is what is often referred to as the labeling effect or labeling theory. Labeling theory states that people come to identify and behave in ways that reflect how others label them (Crossman, 2020). As a result of labeling theory, an increase in delinquent outcomes can be attributed to labeling effect and not necessarily student behaviors (Gerlinger et al., 2021). When students are suspended and acquire a deviant identity, they are at a higher risk of future disciplinary responses (Widdowson et al., 2021). Suspended students, especially those suspended multiple times, are also more likely to disengage from their friends and to interact more with delinquent friends (Jacobsen, 2020). In the school setting, the suspension of students can also lead to a reduction in their prosocial interactions with peers in the short and long term leading to more deviant behaviors (Jacobsen et al., 2019; Novak & Krohn, 2021). In making disciplinary decisions, school leaders need to be aware of the labeling effect that suspending students can have on further deviant behavior ensuing response.

Exclusionary Discipline and Students With Disabilities

Exclusionary discipline for regular education students is likely to be counterproductive; but when the cause of the behavior is related to a student's disability, removing them from the educational setting makes even less sense (Underwood, 2020). Schools have discipline policies

in place for all students, but special considerations are in place for students with disabilities or students with special needs.

According to data provided by the United States Department of Education from the 2015-2016 school year, students with disabilities account for 12% of enrollment but make up 26% of out-of-school suspensions and 24% of expulsions (U.S. DOE, 2018). The national statistics show a large discrepancy in the use of exclusionary discipline for students with disabilities compared to their regular education counterparts, but that doesn't tell the whole story. A study in Maryland during the 2012-2013 school year found that 11.2% of students with disabilities were suspended compared to only 4.4% of students without disabilities (Camacho & Krezmien, 2020). However, the authors found that the suspension rate varied greatly by district with percentages ranging from 5% up to 21.5% (Camacho & Krezmien, 2020). Even though the overall suspension has decreased since 2004, students who were identified as having a learning disability (LD), emotional disturbance (ED), or other health impaired (OHI) were at a greater risk for discipline referrals and suspensions (Krezmien & Camacho, 2018). A similar study conducted by Sullivan et al. (2014) found similar results in a large midwestern school district where 8.8% of students with disabilities were suspended at least once and 10.7% were suspended twice or more during a single school year. Although multiple suspensions were infrequent among certain disability categories, 30% of students classified as ED were suspended multiple times.

In addition to the school's discipline policy, procedures and protections are in place for students who are eligible for service under Section 504 of the Rehabilitation Act (U.S DOE, 2010) and the Individuals with Disabilities Education Act (IDEA) (2004).

Under Section 504 of the Rehabilitation Act (2010), schools that receive federal financial assistance from the U.S. Department of Education are prohibited from discriminating against

students based on disability. Although there are no specific requirements relating to discipline, courts throughout the country have interpreted the statute to prohibit schools from disciplining students for behaviors that are clearly related to or a result of their disability (Underwood, 2020).

The IDEA, unlike Section 504, provides specific disciplinary sections. According to the IDEA (2004), schools may remove a student with a disability from his or her current placement for no more than 10 consecutive school days. Placements may include alternative education settings or suspensions. Within 10 days of a decision to alter the placement of a student with a disability for discipline reasons, a manifestation hearing is held to determine if the behavioral issue was a direct result of the student's disability or failure of the school to meet the accommodations of the student's IEP (Wright & Wright, 2016). Students with disabilities may be legally afforded these protections, but many administrators struggle to balance the individual rights of students with disabilities while ensuring school safety (Reed et al., 2020, Skiba, 2002). Although most administrators are familiar with special education and school discipline laws, programs aimed at incorporating research-based practices such as restorative Justice and PBIS are more beneficial than those focusing on legal compliance in addressing discipline (Reed et al., 2020).

Disciplinary Disparity Based on Race and Ethnicity

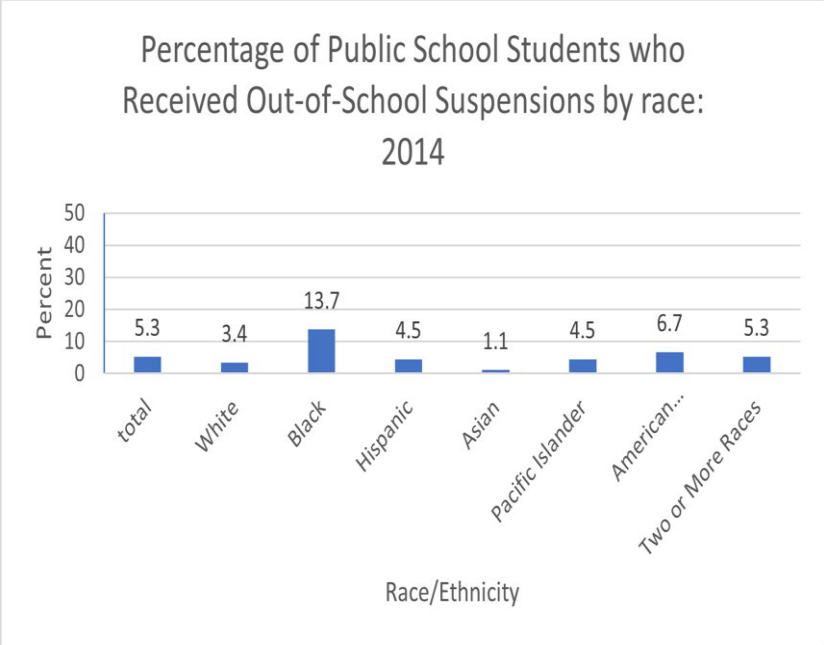
Perhaps the most worrisome data involving the use of zero tolerance policies and exclusionary practices is the large disparity in the use of these practices between students of color and their white counterparts. The disparity in discipline between White and Black students has been evident for years and has been commonly referred to as "the discipline gap" (Gregory, Skiba et al., 2010, p. 60). Schools with a larger disparity in Black-White achievement also have a larger disparity in Black-White discipline (Pearman et al., 2019). This provides evidence of the

relationship between discipline and achievement, framed as “two sides of the same coin” (Gregory, Skiba et al., 2010, p. 59).

A 2019 study indicated that out of 2.6 million students, 5.3% received one or more out-of-school suspensions (de Brey et al., 2019). As seen in Figure 1, a higher percentage of Black students (13.7%) were suspended compared to all other ethnic groups (de Brey et al., 2019). American Indian/Alaska Native students made up 6.7%, followed by students of two or more races (5.3%), Hispanic students (4.5%), White (3.4%), and Asian (1.1%). The racial disparity extends beyond suspensions to expulsions. Black students only account for eight percent of enrollment but make up 23% of expulsions (de Brey et al., 2019). The disparity is clear, but some argue that these students are not disciplined because their behavior is more severe, but because they are victims of their schools or environments (Jacobsen et al., 2019; Wright et al., 2014). However, a report by Nowicki (2018) found that these racial disparities in discipline persisted even when accounting for differences in the type of discipline, level of school poverty, or type of public school attended.

Figure 1

Percentage of Public School Students Who Received Out-of-School Suspensions by Race: 2014



Note. Adapted from Status and Trends in the Education of Racial and Ethnic Groups 2018 (NCES 2019-038). U.S. Department of Education. By de Brey, C., Musu, L., McFarland, J., Wilkinson-Flicker, S., Diliberti, M., Zhang, A., Branstetter, C., and Wang, X. 2019.from https://nces.ed.gov/pubs2019/2019038.pdf, p. 96.

While the racial composition of schools and the behavior differences among student populations may contribute slightly to discipline disparities, the difference in treatment and support of Black students by staff has shown to be a much greater influence on the disparity in discipline responses (Anderson & Ritter, 2017; Fenning & Rose, 2007; Owens & McLanahan, 2020). Much of this uneven treatment can be explained by implicit bias which is described as the unconscious attitudes, stereotypes, and associations that affect our actions (Staats, 2016). Culturally-bound concepts such as behavior and school discipline policies are traditionally based on the perspective of the dominant group and bring with them a history of implicit bias (Katz-Amey, 2019). Although administrators and educators may not explicitly recognize their roles in

contributing to these disparities, implicit bias of these decision makers results in behaviors being perceived as more severe in underrepresented populations (Graham & Lowery, 2004; Inan-Kaya & Rubie-Davies, 2022; Peterson et al., 2016).

Teacher interactions with students of color may also account for the racial disparity in some disciplinary cases. A recent study among middle schoolers found that Black students felt that they were specifically being picked on for behaviors and felt they were reprimanded more for the same behaviors as their white counterparts (Carter-Andrews & Gutwein, 2020). When White teachers interact with students of color regarding discipline, defiant reactions may be the result of microaggressions (Baker, 2019). These microaggressions can be described as unconscious acts that reinforce stereotypes or inequitable social norms (Williams, 2017). For example, a teacher commenting on the continuously changing hairstyles of a Black girl may seem innocuous from the teacher's perspective, but to the student this may feel like they are being singled out because of their race. (McTernan, 2018). In school discipline, microaggressions are often a result of deficit thinking by teachers who unconsciously believe that Black students are not as well behaved as their white counterparts (Baker, 2019). Although unintentional, the teacher's actions are seen as discriminatory in nature. In addressing the racial disparities in discipline, it is important for administrators to educate staff on their impact on this issue. For example, Williams et al. (2020) found that for every percentage increase in the number of novice teachers employed, the number of suspensions for Black students increased by 36.93%. Although these teachers may not be inherently racist, their potential implicit biases must be addressed through training and education. Even experienced staff can benefit from further education relating to their role in discipline. Professional development through teacher training focused on using rigorous curricula, holding high expectations for student achievement, and

using a prevention-oriented model of discipline are effective in reducing the racial disparity in the exclusionary discipline (Gregory, Hafen et al., 2016). Research clearly shows a disparity in the way discipline policies impact students while they are in school, but the effects extend beyond the school environment.

The School-to-Prison Pipeline

Zero tolerance policies and exclusionary discipline disproportionately affect students of color. It must also be noted how these policies contribute to what has been called "the school-to-prison pipeline." The school-to-prison pipeline refers to the practice of using discipline to remove students from the educational setting and placing them in the criminal justice system for nonviolent or minor infractions such as smoking cigarettes or using cell phones in schools (School Discipline Support Initiative, n.d.). The increased threat of school violence and the adoption of zero tolerance discipline policies has led many urban schools to increase the use of surveillance and security measures such as school resource officers and metal detectors (Mallett, 2016). This has contributed to the school to prison pipeline by creating a prison-like learning environment for these urban schools that consist mostly of students of color (Mallett, 2016). Some believe that stricter discipline policies are a possible solution, but research showed that juveniles who attend schools that adopt stricter disciplinary policies, along with higher usage of suspensions, are significantly more likely to be arrested or incarcerated as adults (Bacher-Hicks et al., 2021). Similarly, a study of students across Texas by Fabelo et al. (2011) illustrated that students who were subjected to exclusionary discipline were three times more likely to be involved in the criminal justice system. Research indicated that being suspended leads to a greater likelihood of victimization, criminal activity, and being incarcerated as an adult (Leban & Masterson, 2022; Rosenbaum, 2020; Wolf & Kupchik, 2017). Furthermore, when students are

suspended, they spend more time in unsupervised settings, increasing the likelihood of them engaging in deviant activity (Gerlinger et al., 2021; Widdowson et al., 2021). Once students become involved in the juvenile justice system, they are more likely to remain involved and are more likely to become incarcerated as adults (Petrosino et al., 2010; Sanders et al., 2020). Although the school-to-prison pipeline is a complicated issue with many variables, the role of exclusionary discipline cannot be understated.

Fortunately, evidence has shown that schools working toward a collaborative model including all stakeholders can reduce suspensions and arrests while increasing graduation rates (Teske et al., 2013). Students who are at risk or have already been involved in the criminal justice system can benefit from increased support and supervision before and after any exclusionary discipline experience (Novak & Fagan, 2022). By building relationships, understanding social-emotional learning, enhancing learning opportunities, and responding more appropriately, administrators and educators can affect students' pathways to the pipeline (Basford et al., 2020; Coggshall et al., 2013). Despite the linear perception of the school-to-prison metaphor, the pipeline is not linear in nature and includes many opportunities to intervene (Muniz, 2021). Taking a broader look at how discipline policies and their usage affect students beyond school should be paramount if districts are looking to reform their current policies and put an end to the school-to-prison pipeline.

National and Statewide Reform Efforts

Research data regarding zero tolerance policies and exclusionary discipline have been brought to the national spotlight and have prompted many states to reexamine their existing discipline recommendations and policies. On a national level, reform efforts were established in 2014 when the Department of Education (DOE) published a Dear Colleague letter that

recognized the disparity in exclusionary practices and discipline. The letter aimed to assist states, districts, and schools in creating strategies and practices to improve school climate while also ensuring that those policies comply with federal regulations (Lhamon & Samuels, 2014). The letter also asserts that intentionally disciplining students based on race violates Title IV and Title VI of the Civil Rights Act of 1964 and goes further in federal actions if discipline policies resulted in a disparate impact on students of color. This major step in discipline reform was then rescinded by the DOE under President Trump's administration in 2018 (Kenneth & Dreiband, 2018). The updated letter provides that:

> States and local school districts play the primary role in establishing educational policy, including how to handle specific instances of student misconduct and discipline, and in ensuring that classroom teachers have the support they need to implement appropriate discipline policies. States and local school districts must also comply with the antidiscrimination protections contained in federal law, including Title VI. (U.S. DOE, 2018, p. 2)

In essence, schools are still required to follow federal anti-discrimination laws in their use of discipline policies. The federal government's role in overseeing these policies has been reduced. As a result, any reform efforts will need to be focused on the state and local levels.

State level reforms and legislation regarding the use of exclusionary practices have been mixed. Although efforts have been made to reduce the number of suspensions and expulsions for more minor behaviors, 40 states allow suspensions for disruptive behavior, 36 states for physical harm, 26 states for drug use or possession, and 12 states for bullying issues (Rafa, 2019). Many states have taken the opportunity to update their legislation and guidance regarding school

discipline policies, but others have shown more reluctance to adapt to new methods and practices. According to a review of state discipline policies, Rafa (2019) found the following:

- About 16 states and the District of Columbia limit the use of exclusionary discipline by grade level.
- Several states limit the use of exclusionary discipline to specific violations and prohibit the use of suspension for attendance or truancy issues.
- At least 30 states and the District of Columbia encourage the use of non-punitive and more supportive discipline practices.
- Twenty-seven states and the District of Columbia prohibit the use of corporal punishment, while 19 states allow the use of physical force or corporal punishment based on decisions made at the local level. (pp. 6-7)

In states that have not updated their guidance or legislation, districts and schools may still be implementing their own policies at the local level. Legislation and policy reform have the ability to influence district student codes of conduct, but implementation relies on buy-in from principals and teachers at the individual school level to be effective (Curran & Finch 2021).

In a review of discipline policies and procedures from the three largest school districts in each of the 50 states and the District of Columbia, district policies were compared to a checklist based on research regarding best practices. This checklist is referred to as the Checklist for Analyzing Discipline Policies and Procedures for Equity (CADPPE) (Green et al., 2021). The results show that the majority of these policies do not include most of the CADPPE recommendations to create equitable school discipline practices regarding the use of exclusionary practices. Additionally, a study in the School District of Philadelphia found that reform efforts were effective in reducing the use of out-of-school suspensions (Steinberg &

Lacoe, 2018). However, individual schools that only partially complied with new policies showed lower student achievement and attendance compared to schools that fully implemented these policies (Steinberg & Lacoe, 2018). Even after state and local reforms to reduce exclusionary discipline practices in California, researchers found that several larger districts actually increased their suspension rates, and many districts with the largest racial gaps continued to suspend students of color at alarming rates (Losen & Martinez, 2020). A study in Oregon also found that the number of disciplinary actions increased after reforms were implemented in 2015, and disproportionately high numbers of students of color continued to be harshly disciplined (Nishioka et al., 2020). Reforming and revising discipline policies has shown the potential to reduce the use of exclusionary discipline and thus reduce the negative effects of these practices. The evidence given above points to a gap in federal, state, and local discipline policy and what is being practiced at the school level.

Although reform efforts are in place, many schools are still using discipline policies with roots in zero tolerance without implicitly recognizing it. According to Curran (2019), few states (14%) and few school districts (12%) have explicit zero tolerance laws or policies. However, the majority of states (98%) and districts (67%) do have mandatory expulsion laws/policies (Curran, 2019). Schools and districts may be able to circumvent legislation by reporting that they do not use zero tolerance as a policy but may still use it in practice. Thus, any reform efforts should include investments in data collection to accurately report and analyze the usage and results of any discipline reforms (Anderson & Ritter, 2017). As reform efforts to limit exclusionary discipline grow, alternative discipline practices must be explored.

Current discipline laws in Pennsylvania give much of the decision-making power regarding discipline to the individual public school leaders. According to Pennsylvania Code

Title 22, Chapter 12 § 12.6. Exclusions from school, the governing board shall define and publish the types of offenses that would lead to exclusion from school. Furthermore, this regulation states that suspensions may be given by the principal or person in charge of the public school. Without any further regulation of the use of exclusionary discipline, the use of alternative methods of discipline is in the hands of individual schools and districts. A 2021 report of the Pennsylvania Advisory Committee to the U.S. Commission on Civil Rights (Hopson-Shelton et al., 2021) recommends that Pennsylvania schools ban the use of suspensions for elementary students, while providing districts with resources to improve school climate through the use of non-punitive supports and services for students. These services include programs to address students' social, emotional, mental, and physical health needs. The commission continues in recommending that the Pennsylvania Department of Education (PDE) seeks additional funding for schools to implement positive interventions to minimize the use of exclusionary discipline. In response to the school-to-prison pipeline, the commission states the following:

> The committee recommends that the Commonwealth actively work toward ending the school-to-prison pipeline. This can be done by monitoring and limiting use of police in schools, 158 and clarifying and reducing requirements for police involvement. 159 Rather than investing in an increased presence of School Resource Officers (SROs) and police officers, Pennsylvania should incentivize school districts to divest funds from law enforcement and reinvest in students, including behavioral health and positive behavior supports. 160 Laws should also reduce or eliminate the imposition of summary offense citations and arrests on students to decrease school referrals to the justice system. (p. 27)

Although these recommendations have been made, they rely on state officials to enact new legislation and seek new funding, which in the current political climate seems to be a tall

order. Much like many other reform efforts, the efforts of individual schools have the best chance of enacting change. If school leaders wish to address the problems related to exclusionary discipline, they can enact local policy that limits harsh discipline policies in favor of alternative systems such as Positive Behavior Interventions and Supports (PBIS).

Alternatives to Exclusionary Discipline

There is a need to move beyond exclusionary discipline practice, especially when these practices disproportionately affect already marginalized populations (Skiba, 2013). Discipline is a complex issue and simply removing exclusionary practices, especially those that affect the most at-risk students, will not suffice (Harper, 2020). To expand toward a complete policy reform approach, the American Psychological Association (APA), along with the Consortium for Citizens with Disabilities (CCD), recommends that the U.S. Department of Education create policy to dramatically limit the use of in-school and out-of-school suspension and implements programs such as Positive Behavior Interventions and Supports (PBIS) and Restorative Justice Practices (RJ) (CCD, 2021).

Restorative Justice

The terms restorative justice (RJ), restorative discipline, and restorative practices are often used interchangeably. All three terms describe an approach in which the focus is on repairing harm instead of punishing inappropriate behavior (Lustick, 2021). Restorative justice is based on a philosophy that people are more likely to change their behavior when those in authority work with them rather than for them (Lustick, 2021). Restorative justice-based discipline practices give voice to those harmed, heal and repair relationships, encourage accountability, reintegrate students into the community, and create caring climates (Mullet, 2014).

In schools, strategies used in restorative justice programs are similar to those used in the criminal justice system (Payne & Welch, 2015). Typical strategies to implement restorative justice include group conferences, victim-offender mediation conferences, and restorative or peacemaking circles (Fronius et al., 2019). All these strategies include the victim, the offender, and a facilitator but may include other community members such as witnesses, friends, or family. After a discipline issue, RJ allows for all stakeholders to discuss the problem behavior, the harm it has caused, and how that harm can be repaired (Kline, 2016). To restore the harm caused by a behavior, these strategies rely on the offending student reconciling the relationship with the individual whose trust was violated (Payne & Welch, 2015). The success of these strategies relies on building relationships between students, staff, and the community (Skrzypek, 2020). The strengthening of teacher-student relationships through RJ leads to more equitable disciplinary responses (Gregory & Clawson, 2016; Rainbolt et al., 2019)

Schools or districts can prepare for implementing an RJ program by exploring the four P's (Person, Place, Practice, and Plan) framework to determine where restorative practices can be focused (Restorative Practices Working Group, 2014). Person refers to the way staff interact with each other and the community. Place describes the environmental factors that affect the interactions of various individuals (Restorative Practices Working Group). Practice indicates opportunities in which educators can resolve challenges and mediate conflict (Restorative Practices Working Group). Lastly, Plan refers to the school's plan for embedding restorative practices into the school culture (Restorative Practices Working Group). Once a decision is made to implement RJ, meetings and forums that include parents and other community stakeholders should be held. If the school or district believes that an RJ program will help their community, they can begin to implement it in the classroom.

A five-stage model for RJ implementation is provided by Morrison et al. (2005). The stages can be seen in Table 1. The goal of the first stage is to gain commitment from the school community. Once a commitment has been established, the next stage is about establishing a clear vision for the school, including arriving at a desired outcome. Once that is complete, the leadership team can develop the knowledge and strategies that will be used by providing ongoing training, monitoring, and assessment. The final stage expands restorative justice to the whole school by taking a holistic approach to policy and practice. It is in this step the RJ is embedded into the culture of the school. The policies and procedures that have been in place are looked at through a critical lens to determine if they fit within the school's restorative justice culture (Morrison et al.). If they do not fit, the policies and practices are changed. The effectiveness of the first stages will be limited unless there are efforts made to develop professional relationships within the school community. Restorative justice requires a culture change that requires a communal effort by the school community (Morrison et al.).

The implementation of a restorative justice program can be undertaken in other ways, but all approaches rely on building a school culture of trust, respect, inclusion, and understanding (Schiff, 2018; Teasley, 2014).

Table 1

Stages of Implementation

Stage 1: Gaining Commitment	1. Making a case for change 1.1. Identifying the need (the cost of current practice) 1.2. Identifying learning gaps 1.3. Challenging current practice 1.4. Debunking the myths around behaviour management and what makes a difference 1.5. Linking to other priorities 2. Establishing buy-in
Stage 2: Developing a Shared Vision	1. Inspiring a shared vision 2. Developing preferred outcomes aligned with the vision 3. Building a framework for practice 4. Developing a common language
Stage 3: Developing Responsive and Effective Practices	1. Developing a range of responses 2. Training, maintenance, and support 3. Monitoring for quality standards
Stage 4: Developing a Whole School Approach	1. Realignment of school policy with new practice 2. Managing the Transition 3. Widening the lens
Stage 5: Professional Relationships	1. Promoting open, honest, transparent, and fair working relationships 2. Using restorative processes for managing staff grievance, performance management and conflict 3. Challenging practice and behaviour – building integrity
Note. Adapted from "Practicing restorative justice in school communities: Addressing the challenge of culture change," by Morrison, B., Blood, P., & Thorsborne, M. (2005). *Public Organization Review,* 5(4), p. 344	

Introducing RJ practices can involve overcoming a series of roadblocks including school district buy-in, politicization of the practice, lack of resources and training, and the entrenched culture surrounding school discipline (Schiff, 2018). Training time, staff buy-in, and additional staff work time require resources that traditional discipline practices do not impose on schools. Additionally, confusion remains on what RJ is and a lack of consensus about how to best implement it (Fronius et al., 2019). Principals who are looking to implement RJ must remain cognizant of these challenges and intentionally plan for mitigating them.

Although restorative justice has shown the ability to reduce problematic behaviors, the implementation and evaluation of those frameworks remain dependent on individual schools and districts (Gonzalez et al., 2019; Katic et al., 2020). The success of any restorative justice program relies on universal implementation throughout the school or else the programs lose their power (Song et al., 2020). Like other reform efforts, successful implementation and adoption of a restorative justice program has shown promise in reducing exclusionary discipline but relies on school level implementation to be successful (Gonzalez et al., 2019; Katic et al., 2020).

Positive Behavior Interventions and Supports

Positive Behavior Interventions and Supports (PBIS) or SWPBIS (for School-Wide) is "an evidence-based three-tiered framework to improve and integrate all of the data, systems, and practices affecting student outcomes every day" (Center on PBIS, n.d.-a). The PBIS framework aims to improve the school environment through improving systems, making data-based decisions, and implementing evidence-based practices (Bradshaw et al.,2015).

Evolution of PBIS

As of 2018, there were more than 25,000 schools across the United States using PBIS (Center on PBIS, n.d.-c). The effects of PBIS have been highlighted in different schools, grades,

and regions. A review of studies from the United States and other countries found that PBIS systems improve positive academic and behavioral impact in the school setting (James et al., 2019; Öğülmüş & Vuran, 2016).

A 2012 study of 12,344 students found that children in PBIS were 33% less likely to receive an office discipline referral than those in the comparison schools (Bradshaw et al., 2012). The effects tended to be strongest among children who were first exposed to PBIS in Kindergarten. PBIS has a significant impact on children's behavior when schools adopt a PBIS-based discipline policy that is enacted through all grade levels (Elrod et al., 2022; Noltemeyer, 2019). PBIS has also shown to be effective in improving student achievement (Noltemeyer, 2019; Sugai & Horner, 2020). Along with the reductions in suspensions and improvement in achievement, teachers who participated in a PBIS system also reported fewer incidences of bullying and peer rejection compared to schools without a PBIS system in place (Waasdorp et al., 2012). PBIS systems are also capable of increasing student attitudes toward school, improving student motivation, and creating a more positive school environment (Elrod et al., 2022; Petrasek et al., 2022) A study by Pas et al. (2019) found that the implementation of PBIS was shown to increase math and reading proficiency at both the elementary and secondary level.

The implementation of PBIS systems has also shown promise in reducing the racial disparity in discipline between white and non-white students (Gage et al., 2019). PBIS systems that include staff training regarding explicit and implicit bias have been successful in reducing the racial gap in exclusionary discipline, while also improving racial equity in all school disciplinary responses (McIntosh, Girvan, McDaniel et al., 2021). Additionally, in one Midwest urban school district, the use of PBIS had a significant effect on reducing suspensions and even though a disparity between Black, multiracial, and white students existed, the disparity decreased

after implementing PBIS in the school (Baule, 2020). PBIS has not completely closed the gap but has allowed for a marked improvement in this important area.

PBIS Tiers

In the school setting, PBIS provides three levels of intervention as seen in Table 2. Primary-tier interventions are directed toward all students. Secondary-tier interventions are directed toward specific groups such as an individual classroom. Tertiary-tier interventions are directly focused on individuals who are not responsive to primary or secondary interventions (Horner et al. 2020; Sugai & Horner, 2009).

Table 2

Core Elements of Each of the Three Tier of the PBIS Framework

Prevention Tier	Core Elements
Tier 1	• Behavioral Expectations Defined • Behavioral Expectations Taught • Reward system for appropriate behavior • Clearly defined consequences for problem behavior • Differentiated instruction for behavior • Continuous collection and use of data for decision making • Universal screening for behavior support
Tier 2	• Progress monitoring for at risk students • System for increasing structure and predictability • System for increasing contingent adult feedback • System for linking academic and behavioral performance • System for increasing home/school communication • Collection and use of data for decision-making • Basic-level function-based support
Tier 3	Functional Behavioral Assessment (full, complex) • Team-based comprehensive assessment • Linking of academic and behavioral supports • Individualized intervention based on assessment information focusing on (a) prevention of problem contexts, (b) instruction on functionally equivalent skills, and instruction on desired performance skills, (c) strategies for placing problem behavior on extinction, (d) strategies for enhancing contingence reward of desired behavior, and (e) use of negative or safety consequences if needed. • Collection and use of data for decision-making

Note. Adapted from "Is school wide behavior support and evidence-based practice?" ,https://assets-global.website-files.com/5d3725188825e071f1670246/60bf970915720b202ceafcd8_Evidence%20Base%20PBIS%20043020.pdf

Tier 1 implementation entails creating a behavior management system that includes explicit instruction for students on behavioral expectations. It also requires training for teachers on how to reinforce positive behaviors and strategies to respond to problematic behaviors (Grasley-Boy et al., 2021). By implementing Tier 1 interventions, schools were able to reduce both the number of office discipline referrals (ODR) and the number of out-of-school suspensions (Eiraldi et al., 2019; Malloy et al., 2018). In a study by Estrapala et al. (2021), implementation of Tier 1 interventions at different schools varied, but all schools reported a reduction in ODRs. Ensuring that adequate and appropriate Tier 1 interventions and supports are in place will improve the fidelity of the implementation of Tiers 2 and 3 interventions and supports (Van Camp et al., 2021).

Students who do not respond to Tier 1 interventions, or who are in need of further support, are referred to Tier 2. Students who have been identified due to risk factors such as social-emotional concerns and continued presentation of problem behaviors are referred for Tier 2 interventions and supports (McDaniel et al., 2022). The number of ODRs in a given time period is typically used to refer students to Tier 2 but using more than one screening tool should be considered because students needing Tier 2 interventions may also struggle in academics and social-emotional areas (Cho Blair et al., 2021). Tier 2 interventions tend to target multiple skill areas in various settings and involve multiple stakeholders such as parents, teachers, and mentors (McDaniel et al., 2022; Yong & Cheney, 2013). The most common group interventions for Tier 2 are the creation of emotional-behavioral small group classes and group counseling (Nese, Kittelman et al., 2021). Other interventions may include, but are not limited to, training in social skills, self-management strategies, and using the check-in/check-out (CICO) strategy (McDaniel et al., 2022).

While social skills training and self-management strategies can be applied in group settings, the CICO model relies on individual students checking in with a staff member each morning, carrying a behavior report card (BPR) to their classes, and checking out at the end of the day (Hawken et al., 2014; Rodriguez et al., 2016). The student checks in with a staff member to ensure they are emotionally and physically prepared for the day. Throughout the day, teachers provide written and verbal feedback and award points in the student's BPR. When checking out, the student returns their BPR, and the staff member tallies the points and provides verbal feedback to the student. The staff member then prepares a home report to communicate whether the student met the goals of the BPR. Although multiple Tier 2 strategies exist, the CICO model is especially successful because it aligns to the Tier 2 goals of providing feedback, collecting data, and monitoring student progress (Hawken et al., 2014; McDaniel et al., 2022; Weber et al., 2019). Although much attention is paid toward the group-wide Tier 1 interventions and the individualized Tier 3 interventions, students at the Tier 2 level who are more at risk due to their baseline level of social-emotional and behavioral risk benefit most from Tier 2 PBIS interventions (Bradshaw et al., 2015).

When students do not respond to Tier 1 or Tier 2 interventions, they are referred for more intensive interventions at the Tier 3 level. Typical criteria for Tier 3 interventions related to academics include failing grades or a decrease in grade point average (GPA) (Lane et al., 2014). For behavior concerns, the number of ODRs and social-emotional risk screening tools are frequently used to identify students in need of Tier 3 interventions (Lane et al., 2014). The most common Tier 3 supports include behavior support plans, individualized counseling, and safety plans (Nese, Kittelman et al., 2021). As the interventions and supports become more targeted and specific at the Tier 3 level, the need for teacher support and training in the use of interventions

and supports is necessary for implementation (Lane, Peia Oakes et al, 2015; Oakes et al., 2014; Oakes et al., 2018).

Implementation

Implementation of a PBIS framework can be a daunting task. Thankfully, multiple resources exist to aid in effective implementation. The implementation of PBIS can be broken down into four steps: exploration, installation, initiation, and full implementation (Center on PBIS, 2015; Sugai & Horner, 2020).

Prior to any investment in a new program, stakeholders need to identify the goals and desired outcomes of that program (Horner et al., 2017). Thus, those wishing to implement a PBIS system should identify research to determine whether the new initiative will produce the desired results (Sugai & Horner, 2020). If desired results include improving behavioral outcomes and changing school culture, then a PBIS program might be beneficial for the school or district. If the program aligns with the goals and desired result, the process can continue to the next step.

Installation of the program is directed by school leadership teams that: (a) have decision-making authority, (b) are active in the implementation process, (c) represent key stakeholders, (d) secure funding and personnel for a three-to-five-year commitment and (e) commit to providing administrators, teams, and teachers with data, and professional development to facilitate the implementation process (Center on PBIS, 2015; Sugai & Horner, 2020). Initiation, or the initial implementation, relies on engaging all stakeholders within the organization with the support, training, and feedback necessary to begin the implementation process (Sugai & Horner, 2020). The goal of the initial implementation is also to collect baseline data to recognize strengths and weaknesses of the program in order to minimize risk during the entire implementation phase (Center on PBIS, 2015).

The goal of the full implementation phase is to demonstrate that the practice is functioning effectively and efficiently (Center on PBIS, 2015). Full implementation across all classrooms within the school or district involves the ongoing collection of data on student outcomes and monitoring of the implementation by the leadership team (Sugai & Horner, 2020). In order to formally analyze the effectiveness of full implementation, further information is gathered to identify the fidelity of the program implementation (Center on PBIS, 2015).

Fidelity

Fidelity can be described as the extent to which a program is implemented and can be measured by investigating adherence to the program, the quality of the program delivery, and the responsiveness of participants (Bradshaw. Koth et al., 2009). Fidelity can be measured by defining the systems, practices, and outcomes that are desired and developing reliable and valid measures to ensure that the systems and practices are in place and that outcomes are being measured (Horner et al., 2017

Although initial implementation of a PBIS program tends to lack fidelity, schools tend to reach the highest level of fidelity at year four (Kittelman et al., 2019). After the initial implementation in year one, an increase in fidelity leads to more positive outcomes observed (Elrod et al., 2022). In this case, the incidence of office discipline referrals (ODRs) decreased while the overall school climate continued to improve.

Implementing Tier 1 interventions with fidelity has shown effectiveness in reducing exclusionary discipline, specifically out-of-school suspension (Eiraldi et al., 2019). Furthermore, implementation of Tier 2 interventions was successful in addressing the behaviors of students identified to be at an intermediate at-risk level but did not improve outcomes for students at a high-risk level for problem behaviors (Eiraldi et al., 2019). When implementing all three tiers

with fidelity, a study of California schools found that there were lower rates of suspension and out-of-school incidents, as well as fewer students referred to law enforcement (Grasley-Boy, Gage et al., 2021).

Some of the most significant contributors to the fidelity and implementation of PBIS programs are district level predictors, such as the presence of district coordinators, district teaming, district team activities and district buy-in and support (Kittelman et al., 2019). Additionally, Matthews et al. (2014) identified the actions of individual teachers within the classroom as the greatest predictor of sustained implementation. Successful classroom implementation can be improved by providing staff members with PBIS specific training so that they are more prepared to respond to problem behaviors and are able to reduce the number of challenging behaviors in their classrooms (Lane, Carter et al., 2015; MacDonald & McGill, 2013). Additionally, providing teachers with strategies and practices is more effective at improving the implementation of PBIS frameworks than strictly focusing on building knowledge of the program (Bastable et al., 2021). In order to improve teacher buy-in, schools can provide professional development on more profound understanding of the PBIS framework, including a needs assessment, which leads to a higher rate of teacher buy-in and a greater decrease in behavioral problems (Bohanon & Wu, 2014). The rate at which schools and districts are successfully implementing PBIS systems varies greatly across states and school districts (Kittelman et al., 2019). This variation, along with the challenges in implementing the program with fidelity, points to the impact of district and school leaders in the successful implementation of PBIS practices.

The Pennsylvania Positive Behavior Support Network provides guidance and oversight to school districts and schools in Pennsylvania that wish to implement PBIS. In addition to tools

and resources, the Network assesses and recognizes schools based on the fidelity of implementation of their PBIS systems (PaPBS, 2022). According to an executive summary from PaPBS, the out-of-school suspension rates of elementary, 3.82%, was similar to the national average of 4.05%. Similarly, the suspension rates in PaPBS high schools, 27.28%, was similar to the national average of 25.95% (Runge et al., 2021). PaPBS Middle schools have a lower rate, 16.37%, compared to 23.54% nationally, while PreK-8 schools have a higher rate, 14.96%, compared to 9.2% nationally (Runge et al., 2021). What the study fails to account for is the fidelity of implementation of the schools in the PaPBS. Simply having a PBIS system or program in place may not be sufficient to reduce the use of suspensions. Further research should compare the suspension rates of schools that have shown sustained implementation with fidelity of PBIS systems compared to all schools participating in PaPBS in addition to state and national averages to get a clearer picture of the impact of these programs on Pennsylvania Schools.

The Role of the School Leader and the Research to Practice Gap

In recent years, the role of the school leader has become more complicated. The role of the leader has evolved from a focus on managerial tasks to one that is directly involved with teacher coaching and improving instruction at the classroom level (Neumerski et al., 2018). Additionally, some leaders may be burdened with more responsibility for the everyday operation of schools, as many districts throughout the country continue to lower their financial budgets and combine job responsibilities (Pollock et al., 2015). An administrator's evolving role is not the only challenge. Many principals have identified a large number of limitations to their work, including lack of funding, federal special education legislation, and fear of state reprimands (Martinez, 2020). Changes in demographics in schools and communities also present a challenge. In addition to changes in racial demographics, school administrators are learning how to respond to increasing

diversity that extends beyond race to socioeconomic status, student ability, and sexual orientation (Pollock et al., 2015). School administrators play a role in creating safe environments and guiding teachers to meet the needs of all students in an equitable manner, but questions remain regarding how leaders are prepared to address this challenge (Minkos et al., 2017). Administrators must be able to draw upon current research to examine existing policies, collaborate with all stakeholders, and remain committed if they want to close the racial discipline gap (DeMatthews, 2016).

Implementing research-based practice has become standard in the fields of education and psychology (Horner et al., 2017). The primary objective of research-based practice is to improve what we know and to put that knowledge into practice in order to enact change (Shapiro, 2005). School administrators are tasked with making data-informed and research-based decisions on high impact strategies but often lack the knowledge and tools to do so effectively (Murray, 2014; Shen et al., 2012; Sun et al., 2016). The tendency toward reinforcing the status quo of current structures and organizations also adds to the difficulty in implementing evidence-based practice (Fixsen et al., 2005; Horner et al., 2017). In order to move toward research-based practices regarding exclusionary discipline, school leaders will need ongoing support and assistance to implement prevention-oriented practices such as PBIS and RJ (Reed et al., 2020).

Punitive logic continues to be entrenched in school discipline despite the evidence of the negative effects of exclusionary discipline (Brent, 2019). Although limiting or removing the use of exclusionary discipline has made its way into policy, the implementation of new policies still relies on school-level decisions made by principals and teachers (Curran & Finch, 2021). Without a deeper understanding of discipline research, educators and administrators cannot

effectively choose the most appropriate discipline policies and response for their schools and districts (Mayworm & Sharkey, 2014).

Summary

The current research points to the negative long-lasting effects of exclusionary discipline. The racial discipline gap continues to be rooted in educational systems, policies, and practices. Practices such as PBIS and RJ have proven to be effective in creating more equitable school environments and lowering the use of exclusionary discipline. However, data show that students are still being suspended at an alarming rate. District and school level administrators have the capacity to enact change to reduce the use of exclusionary discipline through the use of alternative systems such as PBIS. However, successful implementation of any new practice relies on a number of factors. Based on the reviewed literature, this study aimed to address barriers that prevent administrators from using evidence-based practice when it comes to school discipline, as well as evaluating PBIS programs to analyze their effectiveness in reducing the use of exclusionary discipline and eliminating the racial disparity in school discipline.

CHAPTER III

METHODOLOGY

Introduction

This study focused on three major questions relating to the use of exclusionary discipline in Pennsylvania public high schools. The first goal was to quantitatively measure the perceptions of principals on student discipline with a particular focus on exclusionary discipline. The next goal was to assess the relationship between principal perceptions on discipline and the presence of a Positive Behavior Interventions and Support (PBIS) program in place. Lastly, student suspension data from all public high schools were collected to examine any relationship between the successful implementation of a PBIS program and the number of suspensions. In addition to overall suspension rates, suspension data were broken down by student race.

Principal perceptions were measured using the Disciplinary Practices Survey created by Skiba and Edl (2004) with additional questions about the school's implementation of PBIS. The survey was sent out digitally to principals of all traditional public high schools in the state of Pennsylvania. The results were collected and transferred into SPSS for further analysis.

Additional data were collected to examine how the level of implementation of PBIS affects the overall suspension rate of schools and how the implementation of PBIS affects the suspension rates. In addition to an analysis of overall suspension rates, suspension data were broken down according to student race. Publicly available student suspension data as well as enrollment data were collected from the Pennsylvania Department of Education (PADOE). Additional data from The Pennsylvania PBS Network (PaPBS) were used to identify schools with successful implementation at three different levels. This was compared to discipline data

from the Pennsylvania Department of Education to compare how the implementation levels of PBIS affected suspension rates among various groups. The data were analyzed using SPSS.

Research Questions

The study aimed to address three research questions.

Research Question 1. To what degree does the school principal's level of perception of exclusionary discipline vary among schools with and without a PBIS system in place?

Research Question 2. How does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system in place?

Research Question 3. To what extent does the implementation of a PBIS program affect the suspension rates of students of color and students with disabilities?

Research Hypotheses

Alternate Hypothesis (1). There is a significant statistical relationship between the school principal's perception on exclusionary discipline and the school's rate of out-of-school suspension. Principals with a more favorable view of exclusionary discipline will have a higher overall suspension rate.

Null Hypothesis (1). There is no significant difference between the principal's perception of exclusionary discipline and the school's suspension rate.

Alternate Hypothesis (2). There is a statistically significant relationship between a school's implementation of PBIS with fidelity compared to schools without a recognized PBIS system in place. Schools that implement a PBIS system will have lower suspension rates compared to schools without a recognized PBIS system in place.

Null Hypotheses (2). There is no statistically significant relationship between a school's suspension rates based on whether or not they had a recognized PBIS system in place.

Alternate Hypothesis (3). There is a significant statistical relationship between a school's level of implementation of PBIS and the suspension rates of students of color and students with disabilities.

Null Hypothesis (3). There is no statistical difference in the suspension rates for students of color and students with disabilities based on a school's implementation of PBIS,

Participants

The first goal of this study was to investigate principal perceptions on exclusionary discipline and how these perceptions relate to the suspension rates of the schools where they work. The participants in this study were Pennsylvania public high school principals who were employed during the 2022-2023 school year. The surveys were sent out to these principals during the Spring of 2023. There are a total of 895 public high schools in the state. This sample was considered a convenience sample because the e-mail surveys were sent to all high school principals who were listed in the Pennsylvania Department of Education Educational Names and Addresses (EdNA) database. A sample size calculator was used to figure that ensuring a 95% confidence level with a 5% error rate, 269 responses are needed (*Qualtrics*, 2023). A survey response rate of 30% was needed to ensure that at least 269 responses were received.

The second goal of the study was to compare the suspension rates of Pennsylvania schools that have been recognized for implementation with fidelity of a PBIS system compared to schools that have not been recognized for implementation. The successful implementation of educational practices such as PBIS benefits from assessing the fidelity relating to the features that are in use (Horner et al., 2017). Pennsylvania schools looking to be recognized for their implementation of PBIS can apply to the Pennsylvania Positive Behavior Support Network (PAPBS). Each year, PaPBS recognizes schools throughout the state that have successfully

implemented PBIS. Schools wishing to be considered for recognition must be in good standing with the PaPBS Network, supported by a PaPBS Network facilitator and have submitted annual data as required by the PaPBS Network program evaluator (PaPBS, 2020). Based on a series of criteria set forth in the PBIS District Systems Fidelity Inventory (Algozzine, 2014), schools are recognized at four levels of implementation. The first level, Universal (Tier 1) Initial Implementation With Fidelity and the second level of Universal (Tier 1) Sustained Implementation With Fidelity are given to schools that successfully implement Tier 1 Universal PBIS features (PaPBS, 2022). The third level, Universal (Tier 1) and Targeted (Tier 2) Implementation With Fidelity, is awarded to schools who were previously recognized for their Tier 1 universal supports but have also implemented Tier 2 targeted supports (PaPBS, 2022). The fourth level, Implementation Fidelity at Tiers 1, 2, and 3, is for schools that were previously recognized for Tier 1 and Tier 2 but have also implemented more intensive Tier 3 targeted individual supports (PaPBS, 2022).

Two sources were used to create the sample. First, a list of schools provided by Pennsylvania Positive Behavior Support (PaPBS) was compiled using the data available on the PaPBS network. Starting in 2011, the PaPBS implementers forum has recognized schools that are implementing PBIS with fidelity.

The suspension rates of the recognized schools were compared with the discipline rates of all other Pennsylvania high schools that were not recognized by PaPBS for their implementation of a PBIS system. These data are provided by request through the Pennsylvania Department of Education.

Data Collection

The survey was emailed to all sample schools with a letter introducing the study and a link to the survey. The survey was created and sent using SurveyMonkey. All responses were kept confidential and no identifying information was used to report the findings. Survey data were made secure by selecting an option to not collect identifying information such as e-mail or IP addresses. Survey data were downloaded from the secure SurveyMonkey website and then stored on a password protected drive to ensure security. An online consent form was created at the start of the survey along with a description of the research goals.

Instrumentation and Measurement

Three separate data sources were collected for this study. The first data source consisted of a survey that was used to assess principal perceptions of exclusionary discipline. The second data source consisted of data collected regarding the recognition of schools for their implementation of PBIS with fidelity. Lastly, suspension data for all high schools in the state of Pennsylvania were collected from the Pennsylvania State Department of Education (PADOE).

The Disciplinary Practices Survey

The Disciplinary Practices Survey (DSP) was developed by Skiba and Edl (2004) to investigate the perspectives of Indiana principals regarding school discipline. The original survey they developed consisted of 42 questions organized into seven content areas. Those areas are (a) awareness and reinforcement of disciplinary procedures, (b) beliefs concerning suspension/expulsion and zero tolerance, (c) beliefs about responsibility for handling student misbehaviors, (d) attitude toward differential discipline of disadvantaged students or students with disabilities, (e) resources available for discipline, and (f) attitude toward and availability of prevention strategies as an alternative to exclusion. Thirty-one of the questions consisted of items

assessing principal opinions based on a five-point Likert Scale (1 = strongly disagree to 5 = Strongly Agree). Permission was granted by the original author to use and/or modify this survey for the current investigation. Participants in the survey were scored using a total score on all questions with a lower score meaning more favorability toward exclusionary discipline and zero tolerance policies with a higher score relating to a favorability for alternative methods of discipline.

The data from the original Disciplinary Practices survey were analyzed using a cluster analysis to classify principals into three types based on common responses to survey questions (Skiba & Edl, 2004). Principals were classified as having a prevention orientation, support for suspension and expulsion, and pragmatic prevention. Principals in the prevention orientation group were more likely to agree on questions related to taking critical steps in making decisions before suspensions are given and also believe that discipline should be adapted to meet the needs of disadvantaged students and students with disabilities (Skiba & Edl, 2004). These teachers were also more likely to believe that suspension and expulsion are unnecessary. These teachers believed that the purpose of school discipline is to teach appropriate behaviors and that the goal is to keep all children in school (Skiba & Edl, 2004). The second group, support for suspension and expulsion, agreed on the use of zero tolerance policies in maintaining order. These principals were more likely to blame discipline issues on outside variables such as home situations. They agreed that there was little time to implement prevention programs and were more likely to believe that removing persistent troublemakers would solve discipline problems (Skiba & Edl, 2004). Finally, the last group, pragmatic prevention, included principals who agreed that suspension makes students less likely to misbehave and agreed that their teachers were adequately trained in behavior management (Skiba & Edl, 2004). They also shared a belief that

discipline was strictly enforced at their schools, but there was nothing the school can do if students do not take responsibility for their behavior (Skiba & Edl, 2004). A follow-up study by Skiba et al. (2012) used the same survey but used cluster analysis to divide the participants into a group favoring preventative strategies and a group with a favorable attitude toward exclusionary discipline. Heilbrun et al. (2015) used the questions relating to zero tolerance policies to assess principal attitudes regarding zero tolerance and racial disparities in discipline Their analysis used a scale score based on the responses to rank participants based on their responses. A higher score related to more favorable opinions of zero tolerance (Heilbrun et al., 2015).

For the purposes of this study, the survey was shortened to 30 questions by eliminating questions related to available resources at their school. For the purposes of this study, the researcher modified the survey to include demographic questions asking the participants to identify whether their school has implemented a PBIS program. The modified survey also asked participants whether their school had a PBIS system in place and whether they had been recognized by PaPBS for their implementation, along with what level of implementation they were recognized for.

For the purposes of this study, a scaled approach was used to rank teacher attitudes toward exclusionary discipline. With permission from the author, the survey was modified to remove questions that were specific to an individual school. A number of questions needed to be reverse coded to ensure that the scores were representative of the principal's attitudes toward exclusionary discipline. A factor analysis was conducted to determine the validity of the survey and its ability to measure a principal's perception of exclusionary discipline or preventative discipline.

PBIS Implementation Data

To identify schools that were recognized for their implementation of PBIS, data were collected from the Pennsylvania PBS (PaPBS) Network's website. Each year PaPBS accepts applications from schools seeking recognition that include annual reports, an action plan, and a self-assessment survey. The data are used to recognize schools on four different levels of implementation. The data for selected schools are made public on the website. A list of schools was compiled for three consecutive school years from 2018-2019 to 2020-2021.

Student Discipline Data

Publicly funded schools in Pennsylvania upload student-level data into the Pennsylvania Information Management System (PIMS). The Pennsylvania Department of Education (PADOE) compiles data for all schools in the state. Enrollment data for all schools are reported by October 1 of each year. This information is publicly available in the form of Excel spreadsheets from the PADOE website. The data were added to SPSS for analysis.

Suspension data were also collected from the PADOE. According to the Pennsylvania Education Law Center (2022), a suspension is defined as "an exclusion from school for one to 10 school days in a row." Additionally, a suspension, even for a part of a day constitutes one day of suspension. A suspension may be imposed by a principal or other person in charge at a school. Schools are required to report individual student data, including any suspensions, to the PADOE through the Pennsylvania Information Management System (PIMS). Reported suspensions consist of both in-school and out-of-school suspension. To obtain copies of student suspension data, a request was made to the PADOE for aggregated suspension data for all schools broken down by race/ethnicity. The request was accepted, and all data were delivered in the form of an Excel spreadsheet that was saved on a secure drive. The data included the name of each school,

the school district they belonged to, and the number of suspensions for each of the seven reported ethnicities: American Indian/Alaskan Native, Asian, Black or African American, Hispanic, Multi-Racial, and Native Hawaiian or other Pacific Islander. The data included this information for three consecutive school years from 2019 through 2022. No identifying information for individual students was given. The data were uploaded into SPSS for further analysis. To calculate overall enrollment data that were used to calculate suspension rates. Data were downloaded from the National Center for Education Statistics (NCES) for the same school years as the PADOE data.

Data Analysis

The process of data analysis consisted of two distinct analyses based on the research questions and the data collected. The first analysis consisted of the results from the Disciplinary Practices Survey. The second analysis consisted of data from the PADOE and the PaPBS Network.

Analysis of Disciplinary Practices Survey

Participants electively completed the web-based disciplinary practices survey. Responses were downloaded from the secure online platform SurveyMonkey. Data were downloaded in the form of a Microsoft Excel spreadsheet. The data were then uploaded into the statistical analysis program, SPSS, and prepared for analysis. Respondents' answers were ranked using a five-point Likert scale with lower numbers corresponding to a favorable attitude toward zero tolerance and exclusionary discipline and higher numbers corresponding to an unfavorable opinion on exclusionary discipline and a belief in a preventative discipline framework. Respondents were also asked to self-report their school's implementation of a PBIS program. General descriptive statistics including mean, median, mode, standard deviation, skewness, and kurtosis were

calculated for all questions. Inferential statistics were also conducted on the data. An independent samples t-test was conducted to determine any differences in the survey scores for schools that had a PBIS program in place against those who did not. The purpose of this analysis was to explore the relationship between a principal's disciplinary perceptions and the implementation status of a PBIS program at their school.

Analysis of PBIS and Suspension Data

Discipline data from the Pennsylvania Department of Education was downloaded in the form of a Microsoft Excel spreadsheet and consequently uploaded into SPSS for analysis. Data from the PaPBS Network were used to classify schools based on their level of implementation of a PBIS program. Schools were classified as 1) not recognized, 2) Initial Tier 1 implementation with fidelity, 3) Tier 1 Sustained Implementation with fidelity, 4) Tier 1 and 2 Implementation with fidelity, and 5) Implementation with fidelity at all three tiers. Descriptive statistics were calculated to determine the mean, median, mode, standard deviation, skewness, and kurtosis for suspension rates of all schools. Overall suspension rates were calculated and were further broken down categorically by race/ethnicity and disability status. A simple ANOVA was run to compare the suspension rates of schools based on their PBIS classification.

Assumptions and Limitations

The first assumption made was relying on the respondents to be truthful when describing their views on exclusionary discipline. The researcher assumed that the principals surveyed had the awareness and knowledge of their school's discipline policies and experience with student discipline. It was also assumed that publicly available discipline data from the Pennsylvania Department of Education had been correctly reported. The study also assumed that the schools

chosen by the PaPBS Network accurately represented the PBIS program when applying and that the evaluations by PaPBS effectively measured the implementation with fidelity.

The selection of schools from the PaPBS Network that were recognized as implementing PBIS with fidelity was a limitation due to schools needing to apply for recognition. Other schools may have implemented PBIS with fidelity but may not have applied for recognition. Further research can expand on the results of this study by including a broader range of schools from a large geographic area as well as including schools of all grade levels. Additional research could expand the results into non-public schools, alternative schools, and specialized schools for children with disabilities.

Research Ethics

To minimize any risk to participants in this study, all survey responses have been kept anonymous and confidential. No identifying information was collected from any survey respondents. As a result, there was no invasion of privacy or risk of harm in any way to the participants. All participants were asked to agree to an informed consent form prior to completing the survey (Appendix B). All participants were given the option to withdraw at any time. A clear description of the research goals was also included in the consent letter of the survey (Appendix B). Participation in the survey was voluntary.

The student level data did not present any ethical risks. All data were publicly available and included no identifying information. School data regarding PBIS was obtained from the PaPBS website where it was publicly available. All participating schools applied for recognition, knowing the results would be made available to the public.

Details of the research study were submitted to the Youngstown State University Institutional Review Board for approval. Approval from the IRB is found in Appendix A.

Summary

This study examined two areas related to the use of exclusionary discipline in Pennsylvania High Schools. The first area of focus investigated the relationship between principal perceptions and attitudes toward exclusionary discipline related to their implementation of PBIS with fidelity. A survey was sent to all high school principals in the state and results were collected for analysis. The results of the modified disciplinary practices survey were analyzed to examine a possible relationship.

A second focus examined the statistical relationship between the suspension rates of schools that were recognized for their implementation of PBIS compared to schools that did not receive recognition. Suspension and enrollment data were collected from the Pennsylvania State Department of Education. A list of schools that were recognized for their implementation of PBIS at various levels of fidelity was compiled from the PaPBS Network's website. These data were analyzed to investigate relationships between the suspension rates of schools with and without PBIS recognition in the general student population as well as with students of color and students with disabilities. The results of this study can assist districts in addressing the use of exclusionary discipline through the implementation of PBIS.

CHAPTER IV

RESEARCH FINDINGS

Introduction

The purpose of this study was to investigate three research questions related to the implementation of Positive Behavior Interventions and Support (PBIS) and the use of exclusionary discipline in the form of school suspensions. For this study, suspension data included both in-school and out-of-school suspensions. Each suspension was for a single day of school lost due to a disciplinary incident and not for a single individual. An individual suspended for multiple days or involved in multiple incidents may account for multiple suspensions. A modified version of the Discipline Practices Survey was sent to all public high school principals in Pennsylvania. Additionally, a list of schools recognized for implementing PBIS was compiled from publicly available data from the Pennsylvania Positive Behavior Support (PaPBS) Network. Schools that chose to apply could be recognized at four levels based on the fidelity of their implementation. The lowest level of recognition was for schools recognized for their initial implementation of Tier 1 interventions and supports, followed by schools with sustained implementation at the Tier 1 level. Schools could then be recognized for implementation of Tier 1 and Tier 2 interventions and supports with the highest award going to schools who successfully implemented Tiers 1, 2, and 3 interventions and supports. Suspension and enrollment data for all high schools in Pennsylvania were collected from the Pennsylvania Department of Education in the form of a Microsoft Excel Spreadsheet. Data were imported into IBM SPSS Version 28.0.1.1 for statistical analysis. Several analyses were conducted in relation to the three research questions. The following sections describe the data, analyses, and results for each research question.

Research Question 1

To what degree does the school principal's level of perception of exclusionary discipline vary among schools with and without a PBIS system in place?

Discipline Practices Survey

The Discipline Practices survey was sent to 570 high school principals in the state of Pennsylvania. Principal e-mails were obtained by acquiring a list of all traditional high schools in the state and collecting email addresses from those schools' websites. Out of 570 e-mails sent, 75 principals responded to the survey. Of these 75, 23 responded to the first question stating they were not interested in participating; 52 principals chose to continue with the survey. Only 43 principals completed the survey. This equates to a response rate of 7.5%.

The first three questions in the survey related to whether the principal's school implemented a PBIS program and whether that program was recognized by the PAPBS Network. Descriptive data for those questions are found in Table 3.

Table 3

Descriptive Data for PBIS Survey Questions

		Frequency	%
Does your school currently implement a PBIS program?	Yes	25	58.1
	No	18	41.9
	Total	43	100.0
At what level was your school recognized for PBIS implementation?	Tier 1 Initial	7	16.3
	Tier 1 Sustained	4	9.3
	Tiers 1 and 2	4	9.3
	Tiers 1,2, and 3	2	4.7
	Total Recognized	17	39.5
	Unrecognized	26	60.5
	Total	43	100.0

Table 3 showed that 25 out of 43 respondents (58.1%) currently implement a PBIS program. Out of those respondents, seven principals (9.3%) responded that they were recognized

for Tier 1 initial level. An equal number of respondents stated that they were recognized at a Tier 1 sustained level or a Tier 1 and 2 level. Only two respondents stated they were recognized at Tier 1, 2, and 3 levels. Twenty-six respondents stated that their school was not recognized.

The survey contained 27 questions related to the respondents' agreement with several statements regarding school discipline practices. Responses were gathered to measure a principal's favorability toward zero tolerance practices and exclusionary discipline. Questions were ranked on a five-point Likert-type scale ranging from 1 Strongly Disagree to 5 Strongly Agree. Questions 4, 5, 6, 8, 9, 12, 17, 18, 21, 22, and 25 were reverse-coded. A low score relates to a favorability toward zero tolerance policies and the use of exclusionary discipline, with higher scores being less favorable toward exclusionary discipline and more favorable toward alternative discipline strategies. Descriptive statistics for individual survey responses are found in Table 4. To determine the internal consistency of the survey, Cronbach's Alpha was calculated with a result of $\alpha = 0.66$.

Table 4

Descriptive Data for Discipline Practices Survey Questions

	Mean	*SD*	Variance	Skewness	Kurtosis
1. Out-of-school suspension makes students less likely to misbehave in the future	2.95	0.93	0.86	0.29	-.48
2. Zero tolerance makes a significant contribution to maintaining order at my school.	3.40	0.98	0.96	0.07	-0.95
3. I believe suspension and expulsion allow students time away from school, that encourages them to think about their behavior.	3.40	0.96	0.91	-0.03	-0.92
4. Suspension and expulsion do not really solve discipline problems.	3.33	0.89	0.80	-.29	-1.02
5. Out-of-school suspension is a necessary tool for maintaining school order.	2.30	0.94	0.88	1.33	1.95
6. Zero tolerance sends a clear message to disruptive students about appropriate behaviors in school.	2.98	1.01	1.02	0.05	-0.84
7. Students who are suspended or expelled are only getting more time on the streets, that will enable them to get in more trouble.	3.21	0.94	0.88	0.10	-0.19

8.	I believe suspension is unnecessary if we provide a positive school climate and challenging instruction.	2.65	0.92	0.85	1.15	0.14
9.	Regardless of whether it is effective, suspension is virtually our only option in disciplining disruptive students.	3.23	1.21	1.47	-0.22	-1.11
10.	Certain students are not gaining anything from school and disrupt the learning environment for others. In such a case, the use of suspension and expulsion is justified to preserve the learning environment for students who wish to learn.	2.67	1.04	1.08	.31	-0.91
11.	I feel it is critical to work with parents before suspending a student from school.	4.28	0.73	0.54	-00.88	0.80
12.	Regardless of the severity of a student's behavior, my objective as a principal is to keep all students in school.	3.77	1.13	1.28	-0.97	0.18
13.	The primary purpose of discipline is to teach appropriate skills to the disciplined student.	3.93	0.91	0.83	-0.65	-0.17
14.	It is sad but true that, in order to meet increasingly high standards of academic accountability, some students will probably have to be removed from school.	2.91	0.97	0.94	0.03	-0.93
15.	The majority of this school's discipline problems could be solved if we could only remove the most persistent troublemakers.	3.09	1.04	1.09	-0.46	-0.36
16.	Schools cannot afford to tolerate students who disrupt the learning environment	2.60	0.96	0.91	-0.14	-0.84
17.	I believe that putting in place prevention programs (e.g., bullying programs, conflict resolution, improved classroom management) can reduce the need for suspension and expulsion.	4.05	0.79	0.62	-1.32	4.17
18.	Time spent on prevention programs or individualized behavior programming is wasted if students are not willing to take responsibility for their behavior.	2.77	1.07	1.14	-0.13	-1.34
19.	Prevention programs would be a useful addition at our school, but there is simply not enough time in the day.	3.00	1.00	1.00	0.00	-0.76
20.	I have noticed that time spent in developing and implementing prevention programs pays off in terms of decreased disruption and disciplinary incidents.	3.47	0.77	0.59	-0.71	1.52
21.	Students with disabilities who engage in disruptive behavior need a different approach to discipline than students in general education.	3.88	0.91	0.82	-0.97	1.47
22.	Repeat offenders should receive more severe disciplinary consequences than first time offenders.	2.12	0.70	0.49	0.72	1.28
23.	A student's academic record should be taken into account in assigning disciplinary consequences.	2.65	1.11	1.23	0.09	-1.03
24.	Disadvantaged students require a different approach to discipline than other students.	3.37	1.05	1.10	-0.82	0.01
25.	Suspension and expulsion are unfair to minority students.	2.49	.88	0.78	-0.07	-0.63

26. Disciplinary consequences should be scaled in proportion to the severity of the problem behavior.	4.35	.70	0.52	-2.25	10.00
27. Conversations with students referred to the office are important and should be factored into most decisions about disciplinary consequences	4.19	.76	0.58	-1.68	6.06

Total scores for all participants were calculated, with higher scores showing favorability toward zero tolerance policies and exclusionary discipline and lower scores indicating more agreement with prevention-based solutions to discipline. Descriptive statistics for the total score are found in Table 5.

Table 5

Descriptive Statistics for Total Score

	Minimum	Maximum	*M*	*SD*	Skewness	Kurtosis
Total Score	71.00	110.00	87.02	8.03	.11	.41

Table 5 showed that the minimum total score was 71, with a maximum of 110. Levels of skewness and kurtosis were acceptable. Total scores broken down by level of PBIS recognition are found in Table 6.

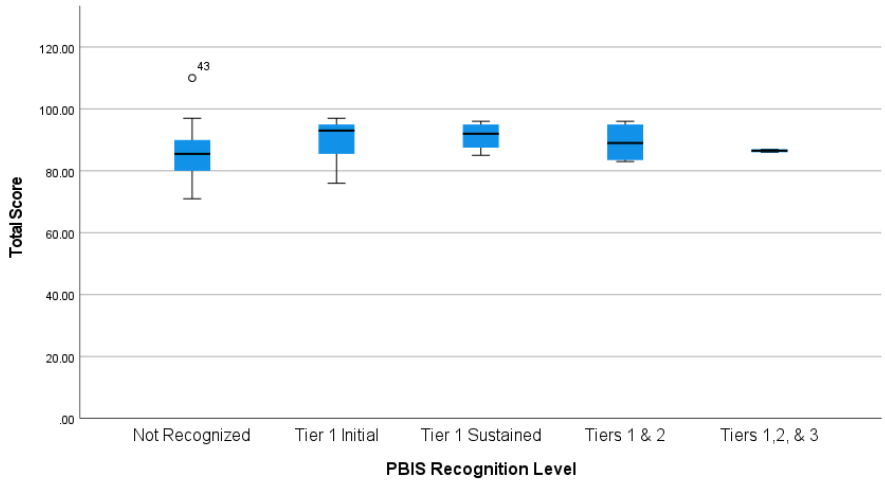
Table 6

Discipline Practices Survey Scores by PBIS Recognition Level

PBIS Recognition Level	*N*	Range	Minimum	Maximum	*M*	*SD*
Not Recognized	26	39.00	71.00	110.00	85.23	8.64
Tier 1 Initial	7	21.00	76.00	97.00	89.57	8.22
Tier 1 Sustained	4	11.00	85.00	96.00	91.25	4.86
Tiers 1 & 2	4	13.00	83.00	96.00	89.25	6.70
Tiers 1,2, & 3	2	1.00	86.00	87.00	86.50	0.71

Figure 2

Boxplot of Discipline Practices Survey Scores



Based on Table 6 and Figure 2, it can be observed that most scores fell between 80 and 100, with Means ranging from 85.23 to 91.25. Although the Mean score for the Not Recognized group is the lowest, it should be noted that that group contained the highest range of scores, including the highest (110) and lowest (71) overall scores.

An independent Samples t-test was used to examine Mean scores for the principals whose schools were not recognized for PBIS and those whose were. The initial test found there was not a significant difference in scores for schools not recognized (M = 85.23, SD = 8.64) and schools that were recognized (M = 89.53, SD = 6.34); t (41) = 1.76, p = .086). After removing the outlier high score of 110 from the Not Recognized group, an independent sample t-test found there was a significant difference between the Not Recognized (M = 84.24, SD = 7.15) and the Recognized

(M = 89.53, SD = 6.34) groups; t (40) = 2.46, p = .018. The independent samples t-test revealed a t-statistic of 2.46, with df = 40> The effect sizes was medium with a Cohen's d of .77. The group of principals whose schools were recognized for their PBIS implementation had a higher mean total score. A higher overall score showed less favorability toward zero tolerance policies and exclusionary discipline and a higher favorability toward alternative discipline options.

To further analyze the relationship between PBIS recognition level and principals' scores on the discipline Practices Survey, a linear regression was calculated to predict the overall score on the Discipline Practices survey based on the level of PBIS recognition. It was found that PBIS recognition did not significantly predict scores on the Discipline Practices survey (β = 1.56, p = .09).

Research Question 2

How does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system in place?

Suspension data were collected from all traditional public high schools in Pennsylvania (N = 585). Descriptive analyses for suspension data consisted of data from three consecutive school years: 2019-2020, 2020-2021, and 2021-2022. It should be noted that many schools did not report suspension data for the 2020-2021 school year due to closures because of the COVID-19 pandemic. The reported data included the total number of suspension days. This number is based on the number of suspension days, not individual students, meaning a single student who is suspended for 10 days would account for 10 suspensions. If that same student were suspended for an additional 10 days, they would account for 20 suspensions. Total enrollment data represented the total number of students enrolled for each identified ethnic category. Finally, a

suspension rate was calculated for all schools with reported enrollments for each ethnic group. If a school reported no enrollments for a specific group, no rate was calculated for that year.

For the 2019-2020 school year, there were 56,245 reported suspensions (M = 96.15, SD = 153.15) with a total enrollment of 495,205 (M = 846.50, SD = 606.39). The calculated suspension rate for 2019 – 2020 was 0.11 days suspended per each student enrolled (M = 0.11, $S.D.$ = 0.15). For the following year, only 15,378 (M = 26.29, SD = 44.28) suspensions were reported, with enrollment growing slightly to 498,927 students (M = 852.87, $S.D.$ = 619.65). The large decrease in number of suspensions resulted in a suspension rate of 0.03 suspensions per student enrolled (M = 0.04, $S.D.$ = 0.06). Several schools, including all schools in the School District of Philadelphia, did not report suspension data for the 2020-2021 school year due to school closings related to the COVID-19 Pandemic. For 2021-2022, the total number of suspensions grew to 86,474 (M = 147.82, SD = 213.85), with enrollment increasing to 501,430 students (M = 857.15, $S.D.$ = 635.14). The suspension rate also increased to 0.17 suspensions per student enrolled (M = 0.17, $S.D.$ = 0.20). Descriptive statistics for total suspensions can be found in Table 7.

Table 7

Pennsylvania Enrollment and Suspensions

		Total	Mean	*S.D.*	Skewness	Kurtosis
2019 - 2020	Number of Suspensions	56,245	96.15	153.45	3.48	16.35
	Enrollment	495,205	846.50	606.39	1.92	5.61
	Suspension Rate	0.11	0.11	0.15	3.71	22.06
2020 - 2021	Number of Suspensions	15,378	26.29	44.28	4.12	24.53
	Enrollment	498,927	852.87	619.65	2.01	6.63
	Suspension Rate	0.03	0.04	0.06	5.11	45.28
2021 - 2022	Number of Suspensions	86,474	147.82	213.85	4.09	28.18
	Enrollment	501,430	857.15	635.14	2.06	7.18
	Suspension Rate	0.17	0.17	0.20	3.26	16.18

In addition to suspension and enrollment data, the researcher collected data on schools that were recognized for their implementation of a PBIS program. The data were collected from the Pennsylvania Positive Behavior Support Network (PaPBS). Schools can apply to be recognized for their implementation of PBIS with fidelity at four levels: Tier 1 Initial, Tier 1 Sustained, Tiers 1 and 2, and Tiers 1, 2, and 3. PaPBS opted to continue the 2019-2020 recognition levels through the 2020-2021 school year due to disruptions and closings due to the COVID–19 pandemic. Table 8 showed the number of schools recognized at each level.

Table 8

Number of Schools Recognized for PBIS Implementation

	Not Recognized	Tier 1 Initial	Tier 1 Sustained	Tiers 1 & 2	Tiers 1,2, &3
2019 - 2020	565	9	15	3	2
2020 - 2021	565	9	15	3	2
2021 -2022	554	11	16	3	1

An analysis was conducted for each consecutive school year from 2019 through 2022. Starting with the 2019 – 2020 school year, a Pearson correlation coefficient was performed to

evaluate the relationship between the level of PBIS implementation and the suspension rate for all three years. The results are found in Table 9.

Table 9

Correlation Results for PBIS Implementation and Suspension Rate

Year	Pearson Correlation	*p*	*CI*
2019 - 2020	0.13	.751	-.07, .09
2020 - 2021	-.017	.675	-.10, .06
2021 - 2022	.138	.001	-.06, .22

As seen in Table 9, there was no significant relationship between the level of PBIS implementation and suspension rate for the 2019 – 2020 and 2020 – 2021 school years. There was a significant but very weak correlation between the level of PBIS implementation and the suspension rate for the 2021 – 2022 school year. To further examine the relationship between PBIS recognition and suspension rates, an independent *t*-test was conducted to compare schools not recognized for PBIS implementation and those recognized at all levels. Results are found in Table 10.

Table 10

Independent T-Test Results for Suspension Rates Based on PBIS Implementation

Year	PBIS Recognition	*N*	*Mean Suspension Rate*	*SD*	*t*	*p*	*CI*
2019 - 2020	Not Recognized	554	0.11	.14	.897	.377	-.02, .09
	Recognized at any level	29	0.15	.23			
2020 - 2021	Not Recognized	554	0.04	.06	-.147	.884	-.02, .02
	Recognized at any level	29	0.04	.05			
2021 - 2022	Not Recognized	550	0.16	.18	3.564	.045	.01, .25
	Recognized at any level	31	0.29	.33			

As illustrated by Table 10, there was no significant effect on PBIS recognition for the 2019 – 2020 and 2020 – 2021 school years. For the 2021 – 2022 school year, the 31 schools that

were recognized for their PBIS implementation ($M = 0.29$, $SE = 0.06$) compared to the 550 schools that were not recognized (M = 0.16, SE = .01) had a significantly higher suspension rate t (579) = 3.56, p = .001).

A simple linear regression model was used to test if the PBIS implementation level significantly predicted the suspension rate for the 2021 – 2022 school year. A significant regression equation was found (F (1, 579) = 11.27, p = .001). After reviewing the residual plots, it was determined that the assumption of homoscedasticity was violated. A log transformation was used on the suspension rate variable, and a second linear regression model was used to test if PBIS implementation significantly predicted the log-transformed suspension rate for the 2021-2022 school year. PBIS implementation was not significant (β = 0.14, $SE = 0.10$, p = .190.).

Research Question 3

To what extent does the implementation of a PBIS program affect the suspension rates of students of color?

Results

A descriptive analysis was completed on suspension and enrollment data according to reported ethnicity to analyze suspensions further. All schools' enrollment and suspension data were broken down by the seven reported ethnic groupings: American Indian/Alaskan Native, Asian, Black or African American, Hispanic, Multi-Racial, Native Hawaiian or other Pacific Islander (not Hispanic), and White. The PADOE reports these ethnic groups and are consistent with the requirements set forth by the National Center for Educational Statistics. Descriptive Statistics for Enrollment by Race are found in Table 11.

Table 11

Pennsylvania Enrollment by Ethnicity

Year	Ethnicity	Enrollment	*M*	*S.D.*
2019-2020	American Indian / Alaskan Native	721	1.23	1.85
	Asian	19,870	33.97	77.06
	Black or African American	56,917	97.29	183.68
	Hispanic	51,271	87.64	246.29
	Multi-Racial	15,988	27.33	35.09
	Native Hawaiian or other Pacific Islander	1,123	1.92	28.30
	White	349,315	597.12	429.05
2020 - 2021	American Indian / Alaskan Native	725	1.24	1.98
	Asian	20,413	34.89	80.02
	Black or African American	58,144	99.39	185.79
	Hispanic	55,038	94.08	264.83
	Multi-Racial	17,158	29.33	35.81
	Native Hawaiian or other Pacific Islander	1,199	2.05	30.33
	White	346,250	591.88	427.17
2021 - 2022	American Indian / Alaskan Native	950	1.62	8.13
	Asian	20,287	34.68	80.16
	Black or African American	59,007	100.87	189.60
	Hispanic	59,804	102.23	281.84
	Multi-Racial	18,831	32.19	34.61
	Native Hawaiian or other Pacific Islander	1,404	2.40	28.69
	White	341,147	583.16	421.47

Based on the data in Table 11, White students made up the largest enrollment for all three years, followed by Black or African American and Hispanic students. Black or African American students were the second largest group in the first two years but were overtaken by Hispanic students in the 2021 – 2022 school year. Asian students were the next largest group, followed by multi-racial, Native Hawaiian, or other Pacific Islander. American Indian/Alaskan Native students had the lowest enrollment. Descriptive data regarding the number of suspensions and suspension rates can be found in Table 12.

Table 12

Suspensions and Suspension Rates by Reported Ethnicity

	Ethnicity	Suspensions	Suspension Rate
2019 - 2020	American Indian / Alaskan Native	164	0.23
	Asian	550	0.03
	Black or African American	16,945	0.30
	Hispanic	9,234	0.18
	Multi-Racial	3,247	0.20
	Native Hawaiian or other Pacific Islander	73	0.07
	White	26,032	0.07
2020 - 2021	American Indian / Alaskan Native	50	0.07
	Asian	111	0.01
	Black or African American	1,572	0.03
	Hispanic	1,493	0.03
	Multi-Racial	806	0.05
	Native Hawaiian or other Pacific Islander	12	0.01
	White	11,334	0.03
2021 - 2022	American Indian / Alaskan Native	206	0.22
	Asian	1,125	0.06
	Black or African American	23,388	0.40
	Hispanic	14,592	0.24
	Multi-Racial	5,719	0.30
	Native Hawaiian or other Pacific Islander	57	0.04
	White	41,387	0.12

Table 12 showed that White students made up the largest number of total suspensions each year. Black or African American students made up the second largest group based on total suspensions. However, Black or African American students were suspended at a higher rate than their White peers. For the 2019 - 2020 school year, Black or African American students made up approximately 11% of the population but represented 30% of suspensions, with White students making up 71% of the population and only 46% of suspensions. In 2020 – 2021, data showed that Black or African American students made up 12% of enrollment but accounted for only 10% of suspensions, with white students making up 69% of the population and 75% of suspensions.

This can be attributed to the lack of suspension data from the School District of Philadelphia, which happens to have the largest population of Black or African American students in the state. The 2021 – 2022 data more closely resembled data from 2019 – 2020, with Black or African American students making up only 12% of student enrollment but accounting for 27% of suspensions, with White students making up 68% of the population and only 48% of suspensions.

To determine the relationship between PBIS implementation and suspension rates of students of color (ethnicities other than White), several analyses were conducted for the three consecutive school years from 2019 – 2020 through 2021 – 2022. To test for correlation between PBIS implementation level and suspension rates by ethnicity, a Pearson Correlation Coefficient was performed for all three school years. Results from this analysis are listed in Table 13.

Table 13

Pearson Correlation Coefficient for PBIS Implementation Level and Suspension Rate

	Ethnicity	*M* Suspension Rate	Pearson Correlation	Sig.	CI *LL*	CI *UL*
2019 - 2020	American Indian/Alaskan Native	.14	.036	.535	-.078	.149
	Asian	.03	-.015	.745	-.101	.073
	Black or African-American	.26	.069	.105	-.014	.151
	Hispanic	.16	-.014	.738	-.096	.068
	Multi-Racial	.20	-.001	.983	-.107	.105
	Hawaiian or other Pacific Islander	.12	.023	.734	-.112	.158
	White	.07	.009	.834	-.073	.090
2020 - 2021	American Indian/Alaskan Native	.06	-.027	.643	-.140	.087
	Asian	.01	-.019	.676	-.106	.069
	Black or African-American	.07	.095*	.025	.012	.177
	Hispanic	.06	-.032	.448	-.114	.051
	Multi-Racial	.08	-.021	.626	-.103	.062
	Hawaiian or other Pacific Islander	.02	-.042	.706	-.159	.109
	White	.03	-.024	.557	-.105	.057
2021 - 2022	American Indian/Alaskan Native	.24	.166*	.004	.054	.274
	Asian	.05	.089*	.044	.002	.174

Black or African-American	.39	.013	.755	-.070	.096
Hispanic	.24	.031	.455	-.051	.114
Multi-Racial	.28	.047	.266	-.036	.129
Hawaiian or other Pacific Islander	.14	.057	.404	-.077	.188
White	.13	.151*	<.001	.07	.230

Note. *Correlation is significant at the .05 level (two-tailed)

According to Table 13, there were only four instances where a significant relationship was found. For the 2020 – 2021 school year, there was a significant but weak positive relationship between the level of PBIS implementation and suspension rate for Black or African American students [r (555) = .095, p=.025]. For the 2021 – 2022 school year, there was a weak but positive relationship between the level of PBIS implementation and suspension rate for American Indian/Alaskan Native students [r (297) = .166, p = .004]. There was also a weak but positive relationship between PBIS implementation level and suspension rate for Asian students [r (510) = .089. p = .044]. Lastly, there was a weak but positive relationship between PBIS implementation level and suspension rate for White students [r (577) = .151, p = <.001].

Based on the results of the correlation analysis, a linear regression model was used to analyze the significant results further. For the 2020 – 2021 school year, a simple linear regression analysis was calculated to predict the suspension rate for Black or African American students based on the Implementation level of PBIS. A significant regression equation was found [F (1, 557) = 5.079, p = .025] with an R^2 of .009. The predicted suspension rate for Black or African American students equaled .064 + .053(PBIS implementation level), with the suspension rate measured in the number of suspensions per student enrolled. The suspension rate increased by .053 for each increase in the level of PBIS implementation. For the 2021 – 2022 school year, a simple linear regression was used to predict the suspension rate of American Indian/Alaskan Native students based on the level of PBIS implementation. A significant regression was found

[F (1, 297) = 8.425, p = .004] with an R^2 of .028. The predicted suspension rate for American Indian/Alaskan Native students was .219 + .291*(PBIS implementation level), with the suspension rate measured in the number of suspensions per student enrolled. The suspension rate increased by .291 for each level of increase of PBIS implementation. For the same school year, a simple linear regression was calculated to predict the suspension rate of Asian students based on the level of PBIS implementation. A significant regression was found [F (1, 510) = 4.072, p = .044] with an R^2 of .008. The predicted Asian suspension rate equals .049 + .035*(PBIS implementation level), with the suspension rate measured in the number of suspensions per student enrolled. The suspension rate for Asian students increased by .035 for each level of increase in PBIS implementation. A final simple linear regression for the 2021 – 2022 school year was calculated to predict the suspension rate of White students based on the level of PBIS implementation. A significant regression was found [F (1, 576) = 13.448, p = .001] with an R^2 of .023. The White suspension rate equaled .123 + .046*(PBIS implementation level), with the suspension rate measured in the number of suspensions per student enrolled. The suspension rate increased by .046 for each unit of increase in the level of PBIS implementation.

Based on the weak levels of correlation, the low R^2 values from the linear regression model and the lack of consistency between years, it does not appear that the level of PBIS implementation is a strong predictor of suspension rates for students of color. However, it is worth exploring other possible predictors of suspension rates for students of color based on the descriptive data showing higher suspension rates for specific ethnic groups. An independent samples t-test was used to determine any difference in mean suspension rate for schools whose reported enrollment was less than or greater than 50% non-white for the same three-year period used in other tests. Results are reported in Table 14.

Table 14

Mean Suspension Rates Based on Percentage of Non-White Students

	Less than 50% Non-White			*More than 50% Non-White*					
	N	*M*	*SD*	*N*	*M*	SD	*t*	*p*	*Cohen's d*
2019 - 2020	480	.09	.10	103	.22	.26	8.65	<.001	.94
2020 - 2021	475	.04	.06	108	.01	.03	-4.90	<.001	-.52
2021 - 2022	468	.15	.15	113	.28	.29	6.56	<.001	.69

There was a significant difference in suspension rates for all three years based on the percentage of Non-White students enrolled. Based on the results from the t-test, further analysis was conducted using a Pearson Correlation to determine the relationship between the percentage of Non-White students and suspension rates. Results are found in Table 15.

Table 15

Correlations Between Percentage of Non-White Students and Suspension Rate

Year	Pearson Correlation	*p*	*CI*
2019 - 2020	.34	<.001	.27, .41
2020 - 2021	-.24	<.001	-.32,.16
2021 - 2022	.24	<.001	.17, .32

As evidenced by the data above, there was a significant correlation between the percentage of Non-White students and the suspension rate for all three years. For 2019-2020, there was a medium positive correlation, with 2021-2022 showing a slightly weaker but still significant positive correlation. For 2020-2021, there was a small but significant negative relationship between the variables. For 2019-2020 and 2021-2022, a higher percentage of Non-White enrollment correlated to a higher overall percentage rate. For 2021-2022, the percentage of Non-White enrollment correlated with lower suspension rates. It must be noted that data from 2021-2022 did not include suspension data from several schools, including the School District of

Philadelphia, the largest school district in the state. Data from this district and many other schools were not reported due to closures due to the COVID–19 pandemic. It would be expected that removing suspension data from this district and many others would influence the overall results.

Summary

This chapter presented the results of statistical analysis on two data sets. The first data set related to the first research questions included survey responses from the Modified Discipline Practices Survey. Data from the Pennsylvania Department of Education and the Pennsylvania Positive Behavior Support Network were analyzed for the second and third research questions. The first research question examined how a principal's perception of exclusionary discipline varied based on the implementation of PBIS programs. Results showed a statistically significant difference in mean scores between principals whose schools were not recognized for PBIS implementation and those who received recognition for their implementation of PBIS.

The second research question sought to examine the relationship between the suspension rates for students in schools based on the school's level of PBIS implementation. Results showed no significant difference in suspension rates for the
2019 – 2020 and 2021 – 2022 school years. For 2020 – 2021, the analysis showed a statistically significant difference between the not-recognized and recognized PBIS groups, with the recognized groups having higher suspension rates. Data from the 2020 – 2021 school year was incomplete based on the lack of data from several schools, including all schools in the School District of Philadelphia. This lack of data was due to school closures and changes in reporting due to the COVID-19 pandemic.

The third research question sought to expand the results from the second research by breaking down suspension rates based on ethnicity. Descriptive statistics showed higher suspension rates for American Indian /Alaskan Native, Asian, Black or African American, Hispanic, and Multi-Racial students compared to their White peers. Further analysis was conducted to examine any relationships between the implementation level of PBIS and suspension rates based on ethnicity. Results showed either nonsignificant or very weak but significant correlations between PBIS implementation and ethnicity. Further regression showed no significant relationship between PBIS implementation level as a predictor of suspension rates for any ethnicity.

CHAPTER V

DISCUSSION AND RESULTS

Introduction

Disciplining students has been part of the American education system since its inception in Colonial times. Throughout the following decades, social movements and discipline theories have influenced schools' methods to address student behavior. Whether it was based on religious philosophy (Travers, 1980), the production of model citizens to join the workforce (Kaestle, 1978), or Maslow's Hierarchy of needs (McLeod, 2017), school discipline practices have evolved to echo prevailing philosophies of the time. Based on the perceived increase in crime in and out of schools, school discipline policies in the 1960s and 1970s shifted toward crime prevention. Schools began to enact strict codes of conduct with specific outcomes based on the seriousness of the infraction (Skiba & Peterson, 1999). During the 1980s and 1990s, schools continued this movement toward more strict discipline policies by enacting zero tolerance policies that enacted harsh punishments for disciplinary infractions (DeVoe et al., 2002; Skiba & Knesting, 2001; Skiba, 2014). The rise of the zero tolerance philosophy has led to increased use of suspensions and expulsions to manage discipline (Fabelo et al., 2011; Kajs, 2006). The continued use of exclusionary discipline has lasting negative effects on students.

Many schools have started using Positive Behavior Interventions and Supports (PBIS) to improve student academic and behavioral concerns (James et al., 2019). Evidence has shown that these programs can potentially reduce discipline problems (Bradshaw et al., 2012; Elrod et al., 2022; Noltemeyer, 2019). However, the use of suspensions continues to be a concern, especially for students of color and students with disabilities. A 2019 study indicated that of 2.6 million students, 5.3% received one or more out-of-school suspensions (DeBrey, 2019). The same study

indicated that 13.7% of Black students were suspended, the highest percentage of any ethnic group. Equally alarming was a report from the 2015-2016 school year showing that students with disabilities account for 12% of school enrollment nationwide but made up 26% of suspensions and 24% of expulsions (U.S. DOE, 2018).

The punitive logic that has led to the increased use of exclusionary discipline remains deeply entrenched in school discipline philosophy (Brent, 2019). School administrators are tasked with creating safe environments while directing staff to meet the needs of all students. However, questions remain about how educational leadership programs prepare leaders to address these challenges equitably (Minkos et al., 2017). Even though discipline reform efforts are in place at the federal and state levels, the successful implementation of research-based strategies such as PBIS relies on school-level decisions made by principals (Curran & Finch, 2021).

The purpose of this research study was based on two themes found in current literature. The first relates to how a principal's perceptions of the use of discipline relate to their schools' implementation of PBIS. The second was based on whether schools recognized for their implementation of PBIS had significantly different suspension rates. The study aimed to answer the following three research questions:

- **Research Question 1**

  To what degree does the school principal's perception of exclusionary discipline vary among schools with and without a PBIS system in place?

- **Research Question 2**

  How does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system?

- **Research Question 3**

  To what extent does the implementation of a PBIS program affect the suspension rates of students of color?

To investigate the first question, a modified version of the Discipline Practices Survey (DPS) created by Skiba and Edl (2004) was used to determine a principal's favorability toward zero tolerance and exclusionary discipline or toward alternative methods of discipline. The survey also asked principals to report on whether or not their school was recognized for their implementation of PBIS and, if so, at what level. Principals' scores on the DPS were compared to the recognized level of implementation of PBIS. For the second and third research questions, suspension data from all public high schools in Pennsylvania were collected for three consecutive school years from 2019 – 2022. Additionally, data regarding recognition for implementing PBIS were collected from the Pennsylvania Positive Behavior Support Network (PaPBS). Suspension rates for schools that were not recognized and who were recognized at four different levels of PBIS implementation were compared for all three school years. This chapter explains the study's findings, discusses the results, draws conclusions, identifies limitations to the study, and examines suggestions for further research on the topic.

Summary of Findings

Research Question 1: To what degree does the school principal’s perception of exclusionary discipline vary among schools with and without a PBIS system in place?

A survey including questions from the Discipline Practices Survey and questions about PBIS implementation was emailed to 570 high school principals in Pennsylvania. Demographic data for the respondents were not collected but would have provided further insight into any potential factors that could have influenced outcomes. Only 43 principals (9.12%) elected to

complete the survey, which was lower than the target response rate of 30%. Of the responses, 26 principals reported not being recognized, with seven reporting being recognized at Tier 1 initial, four at Tier 1 sustained, four at Tiers 1 and 2, and only two principals reporting recognition at Tiers 1, 2, and 3. PBIS interventions and supports are divided into three tiers based on the target audience and intensity of the interventions (Center on PBIS, n.d.-a). Tier 1 consists of universal supports for all students, educators, and staff to allow most (80%) of students to experience success. Tier 2 adds an extra layer of support for a smaller group (10-15%) of students who require more targeted academic and behavioral support. Tier 3 consists of intensive and individualized support for a small number (1-5%) of students who have not responded to the interventions at the first two tiers. Schools in Tier 1 Initial Implementation with Fidelity category met the PaPBS criteria of scoring 70% or above on the Benchmarks of Quality assessment that measures the fidelity of implementation of Tier 1 supports, have scored 80% or above on the School-Wide Evaluation Tool, which measures critical features of school-wide supports, and have also submitted annual data as required by PaPBS (PaPBS, n.d.). The Tier 1 Sustained Implementation group must have been recognized for Tier 1 the previous year, had a minimum of 80% staff participation on a self-assessment survey, and at least a 70% on a Tiered Fidelity Inventory (TFI) for Tier 1 with a completed walk-through from PaPBS (PaPBS, n.d.). Schools recognized at Tiers 1 and 2 Implementation must fulfill all Tier 1 requirements and score at least 70% on the TFI for Tiers 1 and 2. In addition to Tiers 1 and 2 requirements, schools recognized for Tier 3 Implementation must score at least 70% on the TFI for Tiers 2 and 3 (PaPBS, n.d.). The recognition levels reported in the survey remain consistent with what was expected based on data from PaPBS, with the highest number of recognized schools being at the Tier 1 initial level and the fewest number being recognized for implementation at all three tiers (PaPBS, 2022). For

the 2021-2022 school year, 11 schools were recognized at Tier 1 Initial, 16 were recognized at Tier 1 Sustained, three at Tiers 1 and 2, and one school was recognized at Tiers 1, 2, and 3.

The remainder of the survey contained 27 questions regarding the principal's favorability toward zero tolerance and exclusionary discipline. A higher score related to favorability to alternative methods, with a lower score relating to favorability toward zero tolerance and exclusionary discipline. Based on descriptive statistical analysis, the study found that principals who reported being recognized at any level had mean overall scores on the DPS ranging from 86.50 to 91.25. The mean score for non-recognized schools was 85.23. An independent samples t-test examined scores for non-recognized and recognized schools. This test showed no significant differences in principal scores for either group. After looking more closely at the data, it was discovered that the not-recognized group had a much greater score range than the recognized schools. Principals in the not-recognized group had much more varied perceptions of discipline, with lower mean scores showing a favorability toward the continued use of exclusionary discipline and zero tolerance policies compared to the principals whose schools were recognized for their PBIS implementation.

To investigate whether the mean scores for the not-recognized and recognized groups were significantly different, an independent samples t-test was conducted. After removing an outlier high score, the independent samples t-test found a significant difference between the Not Recognized (M = 84.24, SD = 7.15) and the Recognized (M = 89.53, SD = 6.34) groups; t (40) = 2.46, p = .018. According to these results, principals whose schools were recognized for PBIS had higher DPS scores than unrecognized schools. The higher scores related to a higher favorability toward alternative methods of discipline. Despite the small sample size, the results pointed to principals in schools where PBIS programs are recognized leaning toward using

alternative methods of discipline instead of using zero tolerance policies and exclusionary discipline. Whether those principals implement PBIS based on their own beliefs on discipline or whether implementing PBIS affects their beliefs should be discussed further.

Research Question 2: How does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system?

Suspension data for all traditional public high schools (N = 585) were collected through a data request made to the Pennsylvania Department of Education (PADOE). The data received consisted of the number of suspension days for each school broken down by the seven reported ethnicities: American Indian/Alaskan Native, Asian, Black or African American, Hispanic, Multi-Racial, Native Hawaiian or other Pacific Islander (not Hispanic), and White. These ethnic groups are consistent with the requirements set forth by the National Center for Educational Statistics (NCES). Additional enrollment data were collected from publicly available data from the NCES. These were used to calculate suspension overall suspension rates for each school.

Based on descriptive statistics, suspensions increased from 56,245 in 2019-2020 to 86,474 in 2021-2022. The suspension rate also rose from 0.11 suspensions per student in 2019-2020 to .17 suspensions per student in 2021-2022. The total suspensions and suspension rate, 15,378 and 0.03, were the lowest for the 2020-2021 school year. This can be attributed to the lack of school reporting data due to the COVID-19 pandemic. The state's largest school district, the School District of Philadelphia (SDP), did not report any suspension data for that year. The SDP has the highest enrollment and the highest number of non-white students. Based on the overall change seen over the three years, this study showed that the number of suspensions and suspension rates had grown over the three years. Some of this rise may be attributed to students

returning to in-person learning with higher levels of trauma and anxiety (Jackson, 2021; Pendharkar, 2022).

To determine the relationship between PBIS implementation and suspension rates, a list of schools recognized for implementing PBIS was compiled from a list provided by PaPBS. Out of 594 schools, only 29 were recognized for the 2019-2020 and 2020-2021 school years. For both years, nine schools were recognized at Tier 1 initial, 15 at Tier 1 sustained, three at Tiers 1 and 2, and two at Tiers 1, 2, and 3. The numbers for 2019-2020 and 2020-2021 remained the same due to PaPBS allowing schools to continue their recognition from the previous year due to school closings due to the COVID-19 pandemic. Out of 585 schools in the 2021-2022 school year, 11 were recognized at Tier 1 initial, 16 at Tier 1 sustained, three at Tiers 1 and 2, and only one at Tiers 1, 2, and 3. The number of recognized schools at the Tier 1 level increased. In contrast, the number of schools recognized at Tiers 1 and 2 stayed the same, with the number of schools recognized at all three tiers decreasing over the three years. While it would be expected that more schools would be recognized at higher levels, the effects of the COVID-19 pandemic may have influenced the number of schools applying for recognition while also navigating the return to in-person education. Additionally, this study only focused on schools recognized for their implementation and did not account for schools that may have successfully implemented PBIS but did not apply for recognition.

A Pearson correlation coefficient was performed to determine any correlation between PBIS recognition level and suspension rates. No significant correlation was found between the implementation level of PBIS and the suspension rate for the 2019-2020 and 2020-2021 school years. A positive correlation showing a higher suspension rate for schools with higher PBIS was found for the 2021-2022 school year. To further investigate, a linear regression model was used

to test whether the PBIS implementation level predicted the suspension rate for 2021-2022. The results showed that the recognition level of PBIS was not a significant predictor for suspension rate ($\beta = 0.14$, $SE = 0.10$, $p = .190$.). Based on the results of this study, implementing PBIS does not affect the overall suspension rate for high schools in Pennsylvania. At face value, this would point to the continued use of suspensions as a method of behavior management, even among schools that implement programs designed to improve student behavior. Several factors, other than the implementation of PBIS, may affect suspension rates.

Research Question 3: To what extent does the implementation of a PBIS program affect the suspension rates of students of color?

The suspension and enrollment data were analyzed to determine any relationship between PBIS implementation and suspension rates for students of color. Several patterns arose from the descriptive analysis. Based on this study's suspension and enrollment data and ignoring the 2020-2021 school year due to lack of reporting, Black students made up a disproportionately more significant percentage of suspensions than their white peers. For 2019-2020, Black students comprised 11% of enrollment but accounted for 30% of suspensions. Similar results from 2021-2022 showed that Black students made up only 12% of enrollment but made up 27% of suspensions. For the same two years, White students comprised 71% of enrollment and 46% of suspensions for 2019-2020 and 68% of enrollment and 48% for 2021-2022.

A Pearson correlation coefficient was run to determine any relationship between the level of PBIS implementation and suspension rates for each of the seven reported ethnicities. Only one result from 2020-2021 was statistically significant. For that year, there was a positive correlation between the level of PBIS and Black or African American students, $r(583) = .095$, $p = .025$. For the 2021-2022 school year, there was a positive correlation between American Indian/Alaskan

Native, Asian, and White students, $r(583) = .166$, $p = .004.$, $r(583) = .089$, $p = .044.$, and $r(583) = .151$, $p < .001$, respectively. Although significant relationships exist, they are all considered weak. To examine these results further, a simple linear regression was run for all four significant results from the Pearson correlation. For 2020-2021, a significant regression equation was found [F (1, 557) = 5.079, $p = .025$] with an R^2 of .009. The predicted suspension rate for Black or African American students equaled .064 + .053(PBIS implementation level), with the suspension rate measured in the number of suspensions per student enrolled. For American Indian/Alaskan Native students, a significant regression was found [F (1, 297) = 8.425, $p = .004$] with an R^2 of .028. For Asian students in 2021-2022, a significant regression was found [F (1, 510) = 4.072, $p = .044$] with an R^2 of .008. For White students in 2020-2022, a significant regression was found [F (1, 576) = 13.448, $p = .001$] with an R^2 of .023. Based on the weak correlations and low R^2, it does not appear that the level of PBIS implementation is a strong predictor for suspension rates of students based on ethnicity. This result indicates that several other factors are greater predictors of school suspension rates. Although PBIS may address some student discipline concerns, suspensions continue to rise, particularly among students of color.

Additional Findings

Based on the results of the descriptive analyses and the results from the Pearson correlations, an additional analysis was conducted to determine any difference in mean suspension rates for schools based on whether the percentage of non-White students was greater than 50%. For all three years, there was a significant correlation between the percentage of non-White students and suspension rates. For 2019-2020, there was a positive correlation $r = .34$, $p < .001$. There was a similar correlation for 2021-2022 with a positive correlation of $r = .24$, $p < .001$. The results for 2020-2021 show a negative correlation of $r = -.24$, $p < .001$. Again, the

2020-2021 school year does not include suspension data from the state's largest district with the highest non-White population. These results and results from the analyses related to research question three point to factors relating to ethnicity as having a greater influence on the suspension rates of schools compared to PBIS.

Summary

Based on the results of this study, principals whose schools were recognized for their implementation level of PBIS are more likely to favor alternatives to zero tolerance policies and exclusionary discipline. However, the number of schools being recognized for their PBIS implementation remains low, and the number of suspensions continues to rise. This is particularly concerning for students of color suspended at higher rates than their White peers. This study's results showed no strong evidence that schools recognized for their PBIS implementation have lower suspension rates, even when based on reported ethnicity. Despite the commitment and recognized implementation of PBIS, the use of school suspensions continues to be a concern.

Conclusions

The results of this study allow for several conclusions to be drawn about principals, schools, the implementation of PBIS, and student suspensions. Individually, the conclusions relating to each research question begin to address the implications of this study. Only when viewed holistically does the accurate picture of this research take shape. In this section, conclusions drawn from each research question are discussed, and a summary of the overall conclusions is provided.

Principal Perceptions and Recognition of PBIS Implementation

This study's results show a relationship between principals' perceptions of school discipline and the implementation of PBIS. Whether it was the principal's perception of the mindset that led to the school implementing PBIS or the PBIS influencing the principal's perceptions, the results of the study point to schools with PBIS having principals who are more favorable to alternatives to zero tolerance policies and exclusionary discipline. Additionally, not having a PBIS system or program in place does not preclude principals from having favorability toward alternative discipline programs. The highest score on the Discipline Practices Survey, indicating the greatest favorability to alternative discipline, wasi from a principal who did not have PBIS in their school.

Implications

Principal perceptions and beliefs on student discipline have been shown to influence the use of preventative practices and suspensions and expulsions (Skiba & Edl, 2004). Many aspects of PBIS implementation may be delegated to other staff members. However, the principal holds a key role in establishing and maintaining the school's vision by participating in the implementation and providing support and resources for staff members throughout the process (Rossi, 2017). It makes sense then that a principal's perceptions would also have a substantial effect on the successful implementation of a PBIS program. However, it is not just the perceptions of the principal that affect PBIS implementation. Differences in perceptions of the implementation and success of PBIS can often vary between principals and teachers, with principals often having a more positive perception of staff buy-in. With staff buy-in being recognized as one of the most often cited barriers to PBIS implementation (Pinkelman et al., 2015), having a principal overestimate staff buy-in could lead to a situation in which the

principal perceives a PBIS program as being successful but does not have the staff support to maintain fidelity.

The overall school climate may also affect successful implementation. Schools starting with a positive climate prior to implementing PBIS have been shown to be more successful in the implementation with fidelity of PBIS (Elrod et al., 2022). As the fidelity of implementation increases over time, the number of disciplinary issues has decreased (James et al., 2019). School climate is also related to a school's discipline goals and its discipline outcomes. Schools with administrators who employ fair and equitable discipline structures have been shown to have a more positive school climate and fewer suspensions (Huang et al., 2021). An assumption could be made that a principal or administrator who embraces alternatives to student suspensions would also be more successful in creating a school climate that leads to successful PBIS implementation.

The role of the school principal or other administrator in establishing a school climate cannot be overlooked. An administrator's approach to implementing PBIS is no different. Administrators who support PBIS programs by modeling and reinforcing behavioral expectations and providing administrative and organizational assistance are more likely to achieve buy-in from students and staff. Alternatively, administrators who do not communicate PBIS strategies, fail to provide sufficient professional development, and do not participate actively in the process are less likely to have support from staff and students, leading to a lack of fidelity in implementation. Principals who are in schools that currently implement PBIS or are planning on doing so in the future should maintain an active knowledge of current research on practices and strategies related to PBIS. To implement a successful PBIS program, principals and other school

administrators must understand the factors that could derail an otherwise successful implementation strategy.

There may be situations in which the school principal's perceptions of discipline may not affect the overall disciplinary process within the school. School principals are tasked with several responsibilities to ensure the successful operations of their schools. In many cases, the assistant principal is often tasked with handling student discipline (Williams et al., 2020). District directives and priorities may contribute to the choice to implement a program such as PBIS. Even if the principal believes in implementing PBIS, the district's priorities may take precedence. Many principals struggle with maintaining school-level autonomy in decision making while managing district-level mandates and expectations (Kim & Weiner, 2022; Xia et al., 2020). Principals looking to implement PBIS must ensure that the program aligns with district priorities and vision.

This study has shown a relationship between a principal's perceptions of discipline and the successful implementation of PBIS with fidelity. Exclusionary discipline and zero tolerance policies have had many detrimental effects on students, but some principals still have perceptions of favorability toward these methods. As new principals enter the profession with new perspectives, successfully implementing evidence-based practices such as PBIS will hopefully become the norm. The results of this study are promising, seeing the number of principals who favor alternatives to zero tolerance policies and exclusionary discipline.

PBIS Recognition Level and Overall Suspension Rates

Although some research has shown a connection between PBIS implementation and reductions in office referrals and suspensions (Elrod et al., 2022), this study found no correlation between schools that were recognized for PBIS and those that were not recognized. There was no

statistical significance in the overall suspension rates for schools based on their level of recognition of PBIS. This study only looked at a small number of schools recognized by a state-sanctioned organization, PaPBS, for implementing PBIS compared with all of the other racially, economically, and geographically diverse schools in Pennsylvania. Schools wishing to be involved with PaPBS must make a three-to-five-year commitment and agree to several required training opportunities and assessments. Prior to applying for recognition, each school is required to go through a training process. In addition to training, the school needs to establish a dedicated PBIS team, adopt schoolwide discipline as a school goal, and create a system for data collection. The principal needs to commit to the three-to-five-year process while also being an active member of the PBIS team. As a team member, the principal would need to attend all levels of Pennsylvania PBS training across the continuum of behavior support. These requirements may be prohibitive for a principal looking to implement a new program or see recognition from an existing program. With many principals and administrators already feeling the strain of expanded responsibilities, taking the required steps for PBIS recognition may not be worth the commitment and effort.

The sheer number of schools and variations in enrollment and suspension data made for a difficult comparison between the groups with and without PBIS. It could be interpreted that merely being recognized for implementing PBIS does not affect the suspension rate. Those schools may have had lower suspension rates or their PBIS programs could be focused on lower-level behavioral offenses. Further research, as described later in this chapter, may be needed to draw a clear conclusion from this research question.

Implications

Several studies have shown that PBIS can improve student behavior and reduce the number of suspensions (Freeman et al., 2015; Sugai & Horner, 2020). This, combined with research showing a decrease in exclusionary discipline from a peak in the 2010s to 2017-2018, would lead one to believe suspensions are becoming less of an issue (Leung-Gagne et al., 2022). However, the results of this study have shown that the suspension rate in Pennsylvania schools has increased during the three years from 2019-2020 through the 2021-2022 school year. The move to virtual education due to the COVID-19 pandemic and the return to in-person education for the 2021-2022 school year has led to an increase in student discipline issues and student suspensions as teachers and students have grappled with adjusting to a return to school (Welsh, 2022). Dealing with these discipline issues requires a more complex response to student behavior that includes both focused interventions for students and training and support for teachers (Welsh, 2022). Schools that shift toward a whole-child approach to discipline that includes creating a positive school environment, building strong community relationships, focusing on social and emotional learning, and providing individualized support to address student needs and learning barriers will be better equipped to deal with and understand student behavioral concerns in a post-COVID world.

Although implementing PBIS on its own may still improve behavior and reduce suspensions, school administrators need to take a more holistic approach to discipline prevention (Tucker & Whittaker, 2020). Along with providing student support, it is also necessary for schools to review and make changes to their discipline policies, provide professional learning to create inclusive and culturally responsive learning environments, and invest in support services to meet the needs of both students and educators (Leung-Gagne, 2022). Improving student

behavior and reducing student suspensions is a complex issue that requires complex solutions. The COVID-19 pandemic has had lingering effects on student behavior that will need to be studied further in the coming years. Although the results of this study did not show a relationship between recognition for PBIS implementation and student suspensions, schools should continue to implement PBIS while also addressing mental health and social and emotional learning to create a school environment conducive to positive behavior and fewer suspensions.

School Suspension and Students of Color

This study found no significant relationship between schools that were or were not recognized for PBIS and the suspension levels for students of color during the three school years from 2019-2020 through 2021-2022. However, the study did highlight the continued disparity in suspensions for students of color compared to their White peers.

Implications

Despite the proven success of PBIS implementation in addressing student behaviors and reducing suspensions, many schools fail to address the cultural differences related to diverse enrollments, as well as the disproportionate use of exclusionary discipline for students of color (Fergus, 2021). A critical step to understanding discipline is using school-level discipline data, particularly regarding race, which can allow schools to gain a deeper understanding of the complexity of discipline issues while allowing for a systems-based approach to determining possible solutions (Payno-Simmons, 2021). Schools must also address the effects that implicit bias among staff has on their approach to student discipline. Teachers and other adults contributing to the disproportionality in school discipline are unaware that implicit biases may have affected their actions (Scott, 2021). Addressing these biases should be a focus for any school that looks toward closing the discipline gap between students of color and their White

peers. For this approach to be successful in reducing the disparity in disciplinary actions, it requires adults in schools to be both willing and able to address and change their implicit bias (Scott, 2021). Simply focusing on implicit biases is only one piece of a complex puzzle. In addition to implicit bias training, staff can benefit from additional professional development that provides them with skills and strategies to address student discipline. Providing teacher professional development that focuses on classroom and behavior management has shown potential to improve behavior and reduce student suspensions among high-risk groups (Flynn et al., 2016). This study, along with relevant literature, illustrates how PBIS implementation as a standalone strategy is insufficient in reducing the racial disparity in student discipline (Allday et al., 2021). A systems-based approach to the problem is necessary to ensure success.

Discussion

This study focused on three research questions, presenting the results in two distinct but related parts. The first research question focused on the relationship between principal perceptions of suspensions and zero tolerance policies and their implementation of PBIS. The second question focused on the relationship between a school's recognition of PBIS and its suspension rate. The third question expanded on the second question but included suspension rates broken down by student ethnicity. The picture that emerged from the analysis is one in which the significant findings and unexpected results add to the conversations regarding school discipline and PBIS.

Research Question 1

The first research question was to what degree does the school principal's perception of exclusionary discipline vary among schools with and without a PBIS system in place? The results of the discipline practices survey (DPS) showed a significant difference in principal

attitudes toward zero tolerance policies and exclusionary discipline. The range of scores represented a diverse view of how principals viewed disciplinary practices. When comparing the DPS scores of principals working in schools with or without PBIS in place, a significant result was found. Principals working in schools with PBIS had significantly higher scores on the DPS, relating to favorability toward alternatives to exclusionary discipline. This supported the research hypothesis that principal perceptions of discipline varied based on whether there was a PBIS program in place in their school.

Systems such as PBIS utilize a tiered system of interventions based on the severity of the behavior and the ensuing response. At the Tier 1 and Tier 2 levels, teachers and other staff are typically involved in developing the discipline response with interventions and supports; at the personalized Tier 3 level, typically more input is required from the school principal (Nese, Nese et al., 2021). The reliance on the principal in addressing the most severe behavioral problems implies that principals should have knowledge of discipline data and trends as well as the professional development necessary for them to make an informed decision (Nese et al., 2021). However, the nuances involved in many decisions regarding student behavior rely on the discretion and judgment of the principal (Findlay, 2015). Providing prospective principals with training and coursework on school discipline can help shape their views on discipline and provide them with the tools they need to make discipline decisions that are in the best interest of the students.

Suspension Data and PBIS Recognition

The second research question was how does the suspension rate of high schools with sustained implementation of PBIS programs compare to schools without a recognized PBIS system? After analyzing and comparing suspension data with recognition for PBIS

implementation, this study did not find any significant difference in suspension rates between schools that were recognized for PBIS implementation and those that were not. This result confirmed the null hypothesis that there would be no difference between the groups. The results of this study contradicted much of the current research, illustrating that PBIS, implemented with fidelity, leads to lower suspension rates (James et al., 2019; McIntosh, Girvan, McDaniel et al., 2021; Scott et al., 2021). The current study focused on all high schools in Pennsylvania and did not include any typographic data in the school comparison. Comparing suspension rates of large urban schools, small rural schools, and everything in between may have limited the analysis for this study. Had the researcher chosen to compare the schools recognized with PBIS with schools with similar populations and typologies, the analysis may have produced different results. Although the results of this study did not support other research, it is essential to look at the larger body of research on PBIS, showing that it has the potential to reduce suspensions. Implementing evidence-based practices, such as PBIS, should be based on repeated results from multiple studies, and not a single inconsistent result.

Understanding the factors that led to the lack of a significant finding in this result could add to the discussion of suspensions and PBIS—the three years for this study comprised the year when many schools were closed due to COVID-19, the year prior, and the year after. Baseline data from 2019-2020, the year prior to COVID shutdowns, the lack of discipline data during the 2020-2021 school year, and suspension data from 2021-2022, when schools returned to in-person learning, could provide education researchers with a unique snapshot into how schools and students responded to discipline before, during, and after a global pandemic. The results of this study may not have shown a significant result, but viewed through a larger context, the results prove to be valuable.

Research Question 3

Research question 3 sought to answer the question, to what extent does the implementation of a PBIS program affect the suspension rates of students of color? No significant relationship was found between the suspension rates, based on ethnicity, of schools that were recognized for PBIS implementation and those that were not. This result confirmed the null hypothesis that there is no difference between the groups. However, the analysis confirmed a troubling pattern in the suspension rates of students of color. This study added to existing research showing the disproportionate rates of suspensions for students of color compared to their White counterparts, often referred to as the "discipline gap."

Addressing the discipline gap will require schools to scale up interventions, such as PBIS, that have shown promise in providing equity in school discipline (Bastable et al., 2022). Implementing and providing professional development on equity-focused intervention within the PBIS framework has been shown to reduce the use of exclusionary discipline and improve school climate (McIntosh, Girvan, McDaniel et al., 2021; Taylor et al., 2023). Administrators who can provide support for their staff to address issues of equity in discipline can help close the discipline gap. However, it will take more than just professional development on how to implement an equity-based PBIS approach. Understanding how to increase teachers' commitment to racial equity, they must also become aware of their own biases. They must be concerned with the consequences of their biases to be motivated to act differently (Bastable et al., 2022). Providing programs for preservice teachers, current educators, staff, and school leaders in implicit bias and the cultural differences related to student behavior is needed to help close this discipline gap.

Changing current policies and practices will not be easy. Harmful exclusionary discipline practices are embedded in our education systems and are often used when administrators feel they have exhausted other options. Shifting away from harmful exclusionary discipline practices for students of color will take time and a larger philosophical shift in those responsible for school discipline (Nese, Nese et al., 2021). Educating and preparing educators and principals to address equity in school discipline should be included in preparatory coursework. Providing principals with training that prioritizes addressing the inequitable outcomes of our current discipline systems could allow principals to use their leadership influence to create a culture of equity in their schools.

COVID-19 and Discipline

The findings from the study provide new insight into PBIS implementation and school discipline for a three-year period that includes the year many schools were shut down due to COVID-19 and the following year. The lack of suspension data for the 2020-2021 school year that was interrupted by COVID-19 created some issues in investigating statistical patterns. However, it did provide some insight into the possible effects of the COVID-19 pandemic on school discipline. The suspension data from the years before and after school shutdowns pointed to a rise in suspensions, bucking a generally decreasing trend in suspension rates since the 1990s (Leung-Gagne et al., 2022). The data for this study only included the year after COVID-19, so it is difficult to determine if the uptick in suspension speaks to a long-term trend or a temporary increase in suspensions as schools adjusted to a return to in-person schooling post-pandemic. Some signs, such as an Education Week Research Center survey of teachers, 66% reported an increase in students misbehaving (Prothero, 2023). Similarly, data from the School Pulse Panel show that 80% of schools reported stunted behavioral and socioemotional development in

students due to the pandemic, with approximately half of all schools reporting increases in physical attacks between students during the return to in-person learning (USDOE, 2022). In response to these rising discipline issues, several states, including Nevada and Arizona, are considering legislation that allows for more severe consequences for student behavioral problems (Zalaznick, 2023). Whether or not future data show a return to the decreasing trend in suspension use, the effects of COVID-19 on student behavior are undeniable.

As more research comes to light regarding the return to in-person education after the COVID-19 pandemic, administrators and schools can gain a better understanding of the effect it had on students. Initial research into PBIS during and after the COVID-19 pandemic has pointed to teachers showing greater satisfaction with adjustments made to their PBIS programs in situations where administrators provided more professional development and administrative support for continued PBIS implementation (Terrell & Cho, 2023). Conversely, schools without a PBIS team in place and lack of available professional development may suffer from a lack of staff buy-in, a crucial factor in the successful implementation of PBIS (Terrell & Cho, 2023; Yeung et al., 2016). Administrators willing to provide the needed support for their staff to implement PBIS can ensure that their faculty buys into the program, which may lead to improved discipline outcomes.

Limitations of the Study

Discipline Practices Survey

The first portion of this study used a survey sent to high school principals in Pennsylvania based on names and addresses found in the Pennsylvania Department of Education Educational Names and Addresses (EdNA) database and on school websites. The Discipline Practices Survey was sent to principals in 570 high schools in the state of Pennsylvania. This

convenience sample was based on the geographic proximity of the researcher and the availability of principal e-mail addresses found by accessing school websites. Although this sample is representative of high schools within the state, it does not represent the entire population of high school principals within the United States. Additionally, the study only focused on school principals and not on assistant principals or other administrators responsible for discipline decisions within their schools.

The target response rate to ensure a 95% confidence level with a 5% error rate was calculated using a sample size calculator (Qualtrics, 2023). For this study, a 40% response rate of 230 responses out of 570 surveys was needed to maintain this confidence level. The actual response rate of 43 completed surveys out of 570 sent equaled a much lower 7.5% response rate. The researcher attempted to mitigate this low response rate by keeping the survey short and sending two e-mail reminders once the survey was available online. However, several concerns arise with this low response rate including the increased chance of Type-II error, or "the failure to reject a null hypothesis when it is actually false" (Trochim et al., 2016). Considering the small sample due to the low response rate, the results of this study did show a statistically significant correlation with a medium effect size between PBIS implementation and principal perceptions. However, increasing the statistical power of this test with a larger sample size may have provided stronger evidence for the reported results.

The online nature of the survey, as well as the time constraints that many principals face, may have led to this low response rate. In addition to the numerous tasks and responsibilities they must complete daily, completing a survey, no matter how short, may have prevented principals from responding. One principal e-mailed and said that they appreciated the topic but made a conscious decision not to participate in any studies because they felt they could not

respond to all surveys and research projects and did not think it was fair to pick and choose which studies to participate in. In this case, they chose not to participate in any. It would not be surprising to discover that other principals had a similar approach to research studies and surveys. For future research, utilizing professional organizations such as the Pennsylvania Principals Association would provide an opportunity for the researcher to describe the study in a more formal environment. Principals may be more likely to participate if the survey were presented at an organizational event or through official communication.

Along with the low response rate, there is some concern with the generalizability of the survey results. With the small sample size and lack of any demographic data, it is difficult to determine if the sample was representative of the larger group.

In addition to the low response rate, the data collected related solely to the DPS and the implementation of PBIS. No demographic data were collected about the principals' race, gender, school type, or experience. To keep the survey short and increase participation, questions related to demographics were not included. Including these data could have provided a more complete picture of other potential factors that could affect the DPS survey results and the implementation and recognition of PBIS. Adding basic introductory questions regarding demographics and school typology would not have significantly added to the time to complete the survey but would have collected data that would add more context to the responses. Additional data points would have allowed for a more in-depth analysis.

The surveys relied on principals to honestly convey their perceptions and accurately report their PBIS recognition level. However, there is still a chance for response bias. In surveys where there is a perception of socially undesirable actions, individuals may underestimate the likelihood that they would perform an undesirable action (Chung & Monroe, 2003). In this study,

principals who are aware of the negative effects of exclusionary discipline may have overestimated their favorability toward the more socially desirable use of alternative discipline strategies. Similarly, there is a chance that some nonrespondents saw the issue of exclusionary discipline as a sensitive issue and chose not to respond (McNeeley, 2012). Although the survey was conducted without collecting any identifying information, nonrespondents may have been influenced by a perceived lack of true anonymity (Whelan, 2008). The respondents may have chosen to partake in the survey due to their strong views, either in favor or against the topic, leading to a possible response bias. Many of these potential bias concerns could have been mitigated with a larger sample size.

The validity of the survey should be considered as well. The original DPS used by Skiba and Edl (2004) was edited to only include items related to zero tolerance and exclusionary discipline. The internal consistency of the survey was measured with a Cronbach's alpha of $\alpha = 0.66$, which is at or just below the acceptable level (Taber, 2018: Tavakol & Dennick, 2011). A survey with more targeted questions toward a single concept, as well as a higher response rate, may have improved any validity issues. For instance, including additional questions solely related to the use of suspensions would potentially provide a more valid and robust survey.

School Data

For the second part of the study, suspension data were collected for three years, starting with the 2019-2020 school year. Suspension and enrollment data by reported ethnicity were collected from the 585 traditional public high schools in Pennsylvania. Private schools, charter schools, and technical schools were excluded due to their ability to remove students with behavioral problems. No typology data were collected related to the schools' locations or socio-economic levels. By including all schools within the state, a representative sample for the state

was ensured. By not including additional factors related to schools beyond enrollment, ethnicity, and suspensions, a complete picture of the use of suspension in student discipline could not be obtained. The scope of this study was focused only on the relationship between PBIS implementation recognition and student suspension rates.

PBIS Recognition

The number of schools selected for PBIS recognition represents a slight limitation to the study. Data related to PBIS implementation recognition were taken from publicly available reports from the Pennsylvania Positive Behavior Supports Network (PaPBS). The sample size for schools recognized for implementing PBIS was relatively small. For 2019-2020, 29 schools were recognized for implementation at various levels. The same schools continued to be recognized for the 2020-2021 school year. The PaPBS network did not change its recognition for 2020-2021 due to shutdowns due to the COVID-19 pandemic. For the 2021-2022 school year, 31 schools were recognized for their PBIS implementation. These samples represent 5.1% of schools recognized in 2019-2020 and 2020-2021 and 5.6% recognized in 2021-2022. The requirements and commitments for schools wishing to be recognized may lead to this sample not being a representative sample of all schools implementing PBIS with fidelity. There may be several schools that are successfully implementing PBIS with fidelity but did not apply for recognition from PBIS. Including all schools that applied for PBIS recognition could provide an additional layer of data to consider. Those schools may not have been recognized as having PBIS in place. Additional research into schools outside of the PaPBS Network would provide for a more detailed analysis.

Suggestions for Future Research

The results from this study provided several areas for future research. The basis for this study was to gain a better picture of how principal perceptions of discipline relate to their implementation of PBIS and how recognition for PBIS implementation related to overall suspension rates and suspension rates by race. The significant findings and the lack of significance lead to further questions that future research can examine.

Principal Perceptions

Future research into principal perceptions should consider additional demographic and typological data. Looking at the types of students and the types of schools where principals work could provide insight into the relationship between their perceptions and their discipline practices. Investigating factors relating to the principals themselves may also reveal influences that shape their perspectives. Questions relating to principal age, ethnicity, gender, years in their position, and educational level may lead to several new insights into principal perspectives on discipline. Principals are not the only administrators responsible for the school's discipline policies and practices. Expanding the current study to include additional administrators, such as assistant principals, would allow researchers to determine how the perspectives of multiple stakeholders affect a school's overall discipline policies and practices.

The Discipline Practices Survey was chosen because it has been used in other studies. Only a portion of the original survey was used for this study. Improving on or adding to the questions related explicitly to suspensions could provide more specific data regarding this practice. Additionally, the original survey could provide a broader picture of how a principal's perceptions or attitudes on a broader scale relate to their implementation or recognition of PBIS.

School Suspension

Based on the low number of schools recognized for PBIS for this period and the lack of new data for the 2020-2021 school year, additional research into PBIS implementation with fidelity and suspensions is needed. The results of this study point to an increase in school suspensions in the first year after the COVID-19 pandemic. An increase in school discipline issues after a return to in-person education (Pendharkar, 2022) may have skewed data for the 2021-2022 school year. Future research investigating suspension trends in more recent years is needed to determine if a rise in suspensions was merely a factor of a return to in-person education or symbolic of more significant issues relating to increased suspension rates. Additional research into how schools can address trauma and mental health issues related to returning to school post-COVID could provide valuable insight into strategies that schools can use to address student behaviors.

The current study did not find a significant difference in suspension rates for schools that were recognized for PBIS compared to those that were not recognized. However, several factors may have affected these results. Further research comparing these schools to schools with similar populations and locations would allow for a better comparison. Continuing the current research over a longer time period to investigate how individual school suspension rates have changed based on the school's sustained implementation of PBIS would also help determine the effects of PBIS implementation fidelity on student suspensions.

The findings from this study support other research showing that students of color continue to be suspended at higher rates than their White peers. Further research into how alternative methods of discipline, such as PBIS, can be used to address this inequality is needed. This study did not look at the types of behaviors that caused student suspensions but including that data in a further study could be valuable. This would help identify what behaviors students

of color are more likely to be suspended for and would also allow researchers to investigate the differences in disciplinary response based on specific behaviors. Another area of interest related to this study would be studying the lengths of suspensions and the amount of time spent out of school. The data in this study were based on individual numbers of suspensions and not individual students. A research design that accounts for individual students who are suspended multiple times would be beneficial. Whether the focus is on the inequitable discipline systems that are in place or on the root causes of discipline problems, there remains a need for further study into the continuing use of suspensions. Limiting the use of suspensions is needed to protect students from the many adverse effects of exclusionary discipline.

PBIS Implementation

A significant portion of the theoretical framework of this study is on the use of implementation science in education to understand variations in outcomes of evidence-based practices. Implementation science is not new, but its application to education is an emerging field (Albers & Pattuwage, 2017). Much of the research on interventions such as PBIS focuses on effectiveness, and research in implementation science focuses on understanding how programs are adopted, implemented, and spread (McKay, 2017). The effectiveness of PBIS has been studied, but further research into the numerous factors that can affect the fidelity of implementation is needed.

Conclusion

This study involved investigating three research questions related to School discipline and PBIS. The first question explored the relationship between principals' perspectives on exclusionary discipline and their implementation of PBIS. Results indicated a positive relationship between principals supporting alternatives to exclusionary discipline and

implementing PBIS. The results from this portion of the study added to the body of research showing the effects of a principal's personal views and perceptions on the climate at their school. Continuing to prepare principals and other school leaders to embrace PBIS over alternatives to traditional discipline systems is needed to reduce or eliminate the use of exclusionary school discipline practices.

The second and third research questions investigated relationships between the suspension rates of schools that were recognized for their implementation of PBIS. No significant differences were found when comparing overall suspension rates and rates broken down by ethnicity. The time period in which this study was completed must be taken into consideration when determining further implications related to PBIS. The three years of data from this study provided a unique look at suspension data before, during, and after the COVID-19 pandemic that draws into question the generalizability of the study to the implementation of PBIS. As schools adjust to in-person education post-COVID-19, it would seem that behavioral problems and suspension rates will return to their pre-COVID-19 levels. The return to in-person learning may have also undone much of the progress schools had made in their implementation of PBIS. When implementing a PBIS program, the most significant changes can take four to five years to take effect. If we are to assume at least some reversion in PBIS fidelity based on school closures due to COVID-19, we can also assume that a return to pre-COVID-19 implementation with fidelity will take several years. Thus, the lack of significant relationships and the rise in suspensions found in this study should not deter from the wealth of research illustrating the positive effects of PBIS on student behavior. The increase in suspensions as students returned to in-person learning post-COVID pointed to a need to further understand the impact of the pandemic on student behavior and the resulting responses from schools

Although the results were not significant about the research questions, the results uncovered other concerning patterns in school discipline. The first and perhaps most revealing pattern related to the continued inequity in suspension rates between students of color and their White counterparts. Students of color continue to be suspended at higher rates despite many efforts to address this discipline gap.

Results from this study are intended to inform researchers and decision-makers on using PBIS to reduce student suspensions. Simply implementing PBIS may not be enough to close the discipline gap between students of color and their White peers. A more significant cultural shift in how administrators and educators view discipline practices is needed.

REFERENCES

Albers, B., & Pattuwage, L. (2017). Implementation in education: Findings from a scoping review. Melbourne: Evidence for Learning. http://www.evidenceforlearning.org.au/evidence-informed-educators/implementation-in-education/

Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., Putnam, B., Swain-Bradway, J., McIntosh, K., & Sugai, G. (2014). *School-wide PBIS tiered fidelity inventory*. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports. www.pbis.org/

Allday, R. A., Burt, J. L., & Haggard, K. N. (2021). Considering a function-based approach for reducing disproportional disciplinary practices. *Preventing School Failure*, *65*(4), 332-342. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1937023/

American Psychological Association Zero Tolerance Task, F. (2008). Are zero tolerance policies effective in the schools?: An evidentiary review and recommendations. *Am Psychol*, *63*(9), 852-862. https://doi.org/10.1037/0003-066X.63.9.852/

Anderson, K. P., & Ritter, G. W. (2017). Disparate use of exclusionary discipline: Evidence on inequities in school discipline from a U.S. state. *education policy analysis archives*, *25*. https://doi.org/10.14507/epaa.25.2787/

Anti Drug Abuse Act of 1986, 21 U.S. Code § 801. 1986 (1986). https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3207.pdf/

Arcia, E. (2006). Achievement and enrollment status of suspended students. *Education and Urban Society*, *38*(3), 359-369. https://doi.org/10.1177/0013124506286947/

Bacher-Hicks, A., Billings, S. B., & Deming, D. J. (2021). Proving the school-to-prison pipeline: Stricter middle schools raise the risk of adult arrests [Article]. *Education Next*, *21*(4), 52-57. https://eps.cc.ysu.edu:8443/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=ehh&AN=152917790&site=ehost-live&scope=site/

Baker, T. L. (2019). Reframing the connections between deficit thinking, microaggressions, and teacher perceptions of defiance. *Journal of Negro Education*, *88*(2), 103-113. https://doi-org.eps.cc.ysu.edu/10.7709/jnegroeducation.88.2.010/

Baron, J. H. (2005). Corporal punishment of children in England and the United States:*Mount Sinai Journal of Medicine*, *72*(1), 45-46.

Basford, L., Lewis, J., & Trout, M. (2020). It can be done: How one charter school combats the school-to-prison pipeline [Article]. *Urban Review*, *53*(3), 540-562. https://doi.org/10.1007/s11256-020-00583-x/

Bastable, E., Falcon, S. F., McDaniel, S. C., McIntosh, K., & Santiago-Rosario, M. R. (2021). Understanding educators' implementation of an equity-focused PBIS intervention: A qualitative study of critical incidents. *Journal of Positive Behavior Interventions*, *23*(4), 220-231. https://doi.org/10.1177/10983007211008847/

Bastable, E., McIntosh, K., Falcon, S. F., & Meng, P. (2022). Exploring educators' commitment to racial equity in school discipline practice: A qualitative study of critical incidents. *Journal of Educational & Psychological Consultation*, *32*(2), 125-155. https://doi-org.eps.cc.ysu.edu/10.1080/10474412.2021.1889194/

Baule, S. M. (2020). The impact of positive behavior intervention support (PBIS) on suspensions by race and ethnicity in an urban school district. *AASA Journal of Scholarship & Practice*, *16*(4), 45-56.

Berman, P., & McLaughlin, M. W. (1974). Federal programs supporting educational change: A model of educational change. Vol. I. RAND Corporation. https://www.rand.org/pubs/reports/R1589z1.html/

Birken, S. A., Bunger, A. C., Powell, B. J., Turner, K., Clary, A. S., Klaman, S. L., Yan Yu, Whitaker, D. J., Self, S. R., Rostad, W. L., Chatham, J. R. S., Kirk, M. A., Shea, C. M., Haines, E., Weiner, B. J., & Yu, Y. (2017). Organizational theory for dissemination and implementation research. *Implementation Science*, *12,* 1–15. https://doi-org.eps.cc.ysu.edu/10.1186/s13012-017-0592-x/

Blevins, K. (2018, October 31). What does "spare the rod, spoil the child mean in the Bible. *Crosswalk*. https://www.crosswalk.com/faith/bible-study/what-does-spare-the-rod-spoil-the-child-mean.html/

Bohanon, H., & Wu, M.-J. (2014). Developing buy-in for positive behavior support in secondary settings. *Preventing School Failure*, *58*(4), 223-229. https://doi.org/10.1080/1045988X.2013.798774/

Bradshaw, C. P., Debnam, K., Koth, C. W., & Leaf, P. (2009). Preliminary validation of the implementation phases inventory for assessing fidelity of schoolwide positive behavior supports. *Journal of Positive Behavior Interventions*, *11*(3), 145-160. https://doi.org/10.1177/1098300708319126/

Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering school climate through school-wide positive behavioral interventions and supports: Findings from a group-randomized effectiveness Trial. *Prevention Science*, *10*(2), 100–115. https://doi-org.eps.cc.ysu.edu/10.1007/s11121-008-0114-9

Bradshaw, C. P., Waasdorp, T. E., & Leaf, P. J. (2012). Effects of school-wide positive behavioral interventions and supports on child behavior problems. *Pediatrics*, *130*(5), e1136-e1145. https://doi.org/10.1542/peds.2012-0243/

Bradshaw, C. P., Waasdorp, T. E., & Leaf, P. J. (2015). Examining variation in the impact of school-wide positive behavioral interventions and supports: Findings from a randomized controlled effectiveness trial. *Journal of Educational Psychology*, *107*(2), 546-557. https://doi-org.eps.cc.ysu.edu/10.1037/a0037630/

Brent, J. J. (2019). Enduring dispositions: Examining punitive logics in the context of disciplinary reform. *Theoretical Criminology*, *23*(1), 96–116. https://doi-org.eps.cc.ysu.edu/10.1177/1362480617719451/

Butler, S. (1704). *Hudibras: The second part*. R. Chiswel, G. Sawbridge, R. Wellington, &G. Wells. https://books.google.com/books?id=sLsNAAAAQAAJ/

Camacho, K. A., & Krezmien, M. P. (2020). A statewide analysis of school discipline policies and suspension practices. *Preventing School Failure: Alternative Education for Children and Youth, 64*(1), 55-66.

Capatosto, K. (2015). School discipline policy: Updates, insights, and future directions [Policy Brief]. *Kirwan institute for the study of Race and Ethnicity.* https://www.researchgate.net/profile/Kelly-Capatosto/publication/283722547_School_Discipline_Policy_Updates_Insights_and_Future_Directions/links/5644fd8f08ae9f9c13e5ad19/School-Discipline-Policy-Updates-Insights-and-Future-Directions.pdf/

Carter Andrews, D. J., & Gutwein, M. (2020). Middle school students' experiences with inequitable discipline practices in school: The elusive quest for cultural responsiveness. *Middle School Journal*, *51*(1), 29-38. https://doi.org/10.1080/00940771.2019.1689778/

Center on PBIS. (2015). Positive behavioral interventions and supports implementation blueprint. Technical Assistance Center on Positive Behavioral Interventions and Supports, U.S. Department of Education, Office of Special Education Programs.

Center on Positive Behavioral Interventions and Supports. (n.d.-a). https://www.pbis.org/

Center on Positive Behavioral Interventions and Supports (n.d.-b). School wide. https://www.pbis.org/

Center on Positive Behavioral Interventions and Supports (n.d.-c) National Technical Assistance Center on Positive Behavioral Interventions and Supports schools using PBIS. https://www.pbis.org/about/about/

Cho Blair, K., Park, E., & Kim, W. (2021). A meta-analysis of tier 2 interventions implemented within School-Wide Positive Behavioral Interventions and Supports. *Psychology in the Schools*, *58*(1), 141-161. https://doi-org.eps.cc.ysu.edu/10.1002/pits.22443/

Chu, E. M., & Ready, D. D. (2018). Exclusion and urban public high schools: Short- and long-term consequences of school suspensions. *American Journal of Education*, *124*(4), 479-509. https://doi.org/10.1086/698454/

Chung, J., & Monroe, G. S. (2003). Exploring social desirability bias. *Journal of Business Ethics*, *44*, 291-302.

Coggshall, J. G., Osher, D., & Colombi, G. (2013), Enhancing educators' capacity to stop the school-to-prison pipeline. *Family Court Review, 51,* 435-444. https://doi.org/10.1111/fcre.12040/

Consortium for Citizens with Disabilities (CCD). (2021, July 23). Consortium for Citizens to Alejandro Reyes, Director, Program Legal Group, Office for Civil Rights, U.S. Department of Education. https://votervoice.s3.amazonaws.com/groups/apaadvocacy/attachments/CCD%20Comments%20on%20Discipline%20RFI.pdf/

Crossman, A. (2020). *An overview of labeling theory*. ThoughtCo. https://www.thoughtco.com/labeling-theory-3026627/

Curran, F. C. (2019). The law, policy, and portrayal of zero tolerance school discipline: Examining prevalence and characteristics across levels of governance and school districts. *Educational Policy*, *33*(2), 319-349. http://dx.doi.org/10.1177/0895904817691840/

Curran, F. C., & Finch, M. A. (2021). Reforming school discipline: Responses by school district leadership to revised state guidelines for student codes of conduct. *Educational Administration Quarterly*, *57*(2), 179-220. https://doi.org/10.1177/0013161x20925893/

de Brey, C., Musu-Gillette, L., & McFarland, J. (2019). *Status and trends in the education of racial and ethnic groups, 2018*. U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences.

DeMatthews, D. (2016) Effective leadership is not enough: Critical approaches to closing the racial discipline gap. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *89*(1), 7-13. DOI: 10.1080/00098655.2015.1121120

Denessen, E., Hornstra, L., van den Bergh, L., & Bijlstra, G. (2022). Implicit measures of teachers' attitudes and stereotypes, and their effects on teacher practice and student outcomes: A review. *Learning & Instruction*, *78*. https://doi-org.eps.cc.ysu.edu/10.1016/j.learninstruc.2020.101437/

Detrich, R. (2014). Treatment integrity: Fundamental to education reform. *Journal of Cognitive Education & Psychology*, *13*(2), 258-271. https://doi-org.eps.cc.ysu.edu/10.1891/1945-8959.13.2.258/

DeVoe, J. F., Ruddy, S. A., Miller, A. K., Planty, M. G., Snyder, T. D., Peter, K., Duhart, D. T., & Rand, M. R. (2002). *Indicators of school crime and safety*. U.S. Departments of Education and Justice. NCES 2003–009/NCJ 196753.

DiLulio, J. (1995, November 7). The coming of the super predators. *The Washington Examiner*. https://www.washingtonexaminer.com/weekly-standard/the-coming-of-the-super-predators

Eccles, M. P., Hrisos, S., Francis, J., Kaner, E. F., Dickinson, H. O., Beyer, F., & Johnston, M. (2006). Do self- reported intentions predict clinicians' behaviour: A systematic review. *Implementation Science*, *1*(1), 28. https://doi.org/10.1186/1748-5908-1-28/

Eiraldi, R., McCurdy, B., Schwartz, B., Wolk, C. B., Abraham, M., Jawad, A. F., Nastasi, B. K., & Mautone, J. A. (2019). Pilot study for the fidelity, acceptability, and effectiveness of a PBIS program plus mental health supports in under-resourced urban schools. *Psychology in the Schools*, *56*(8), 1230-1245. https://doi-org.eps.cc.ysu.edu/10.1002/pits.22272/

Elrod, B. G., Rice, K. G., & Meyers, J. (2022). PBIS fidelity, school climate, and student discipline: A longitudinal study of secondary schools [Article]. *Psychology in the Schools*, *59*(2), 376-397. https://doi.org/10.1002/pits.22614/

English Standard Version Bible. (2001). ESV Online. https://esv.literalword.com/

Estrapala, S., Rila, A., & Bruhn, A. L. (2021). A systematic review of tier 1 PBIS implementation in high schools. *Journal of Positive Behavior Interventions*, *23*(4), 288-302. https://doi-org.eps.cc.ysu.edu/10.1177/1098300720929684/

Eyllon, M., Salhi, C., Griffith, J. L., & Lincoln, A. K. (2022). Exclusionary school discipline policies and mental health in a national sample of adolescents without histories of suspension or expulsion. *Youth & Society*, *54*(1), 84-103. https://doi.org/10.1177/0044118X20959591/

Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). *Breaking schools' rules: A statewide study of how school discipline relates to student's success and juvenile justice involvement*. Council of State Governments Justice Center, Texas A&M University, Public Policy Research Institute. https://knowledgecenter.csg.org/kc/system/files/Breaking_School_Rules.pdf

Fenning, P., & Rose, J. (2007). Overrepresentation of African American students in exclusionary discipline: The role of school policy. *Urban Education*, *42*(6), 53 6-559. http://dx.doi.org/10.1177/0042085907305039/

Fergus, E. (2021). The beliefs about race and culture operating in our discipline strategies: A commentary. *Preventing School Failure*, *65*(3), 216-222. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1888686/

Ferguson, M. (2022). Is education reform dead? *Phi Delta Kappan*, *103*(7), 60–61.

FindLaw. (June, 2016). *School discipline history*. https://www.findlaw.com/education/student-conduct-and-discipline/school-discipline-history.html/

Findlay, N. M. (2015). Discretion in student discipline: Insight into elementary principals' decision making. *Educational Administration Quarterly*, *51*(3), 472–507. https://doi-org.eps.cc.ysu.edu/10.1177/0013161X14523617/

Fixsen, D., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network

Flynn, R. M., Lissy, R., Alicea, S., Tazartes, L., & McKay, M. M. (2016). Professional development for teachers plus coaching related to school-wide suspensions for a large urban school system. *Children & Youth Services Review*, *62*, 29-39. https://doi-org.eps.cc.ysu.edu/10.1016/j.childyouth.2016.01.015/

Freeman, J., Simonsen, B., McCoach, D. B., Sugai, G., Lombardi, A., & Horner, R. (2015). An analysis of the relationship between implementation of school-wide positive behavior interventions and supports and high school dropout rates. *The High School Journal*, 290-315.

Fronius, T., Darling-Hammond, S., Persson, H., Guckenburg, S., Hurley, N., & Petrosino, A. (2019). Restorative justice in U.S. schools: An updated research review. *WestEd*.

Gage, N. A., Grasley-Boy, N., Peshak George, H., Childs, K., & Kincaid, D. (2019). A quasi-experimental design analysis of the effects of school-wide positive behavior interventions and supports on discipline in Florida. *Journal of Positive Behavior Interventions*, *21*(1), 50-61. https://doi-org.eps.cc.ysu.edu/10.1177/1098300718768208/

Gerlinger, J., Viano, S., Gardella, J. H., Fisher, B. W., Chris Curran, F., & Higgins, E. M. (2021). Exclusionary school discipline and delinquent outcomes: A meta-analysis. *Journal of Youth and Adolescence*, *50*(8), 1493-1509. https://doi.org/10.1007/s10964-021-01459-3/

Goff, P. A., Jackson, M. C., Di Leone, B. A. L., Culotta, C. M., & DiTomasso, N. A. (2014). The essence of innocence: Consequences of dehumanizing Black children. *Journal of Personality and Social Psychology*, *106*(4), 526–545. https://doi-org.eps.cc.ysu.edu/10.1037/a0035663/

González, T., Sattler, H., & Buth, A. J. (2019). New directions in whole-school restorative justice implementation. *Conflict Resolution Quarterly*, *36*(3), 207–220. https://doi-org.eps.cc.ysu.edu/10.1002/crq.21236/

Graham, S., & Lowery, B. S. (2004). Priming unconscious racial stereotypes about adolescent offenders. *Law and Human Behavior*, *28*(5), 483–504. https://doi-org.eps.cc.ysu.edu/10.1023/B:LAHU.0000046430.65485.1f/

Grasley-Boy, N. M., Gage, N. A., Lombardo, M., & Anderson, L. (2021). The additive effects of implementing advanced tiers of SWPBIS with fidelity on disciplinary exclusions. *Journal of Positive Behavior Interventions*, *1*. https://doi-org.eps.cc.ysu.edu/10.1177/10983007211011767/

Grasley-Boy, N. M., Reichow, B., van Dijk, W., & Gage, N. (2021). A systematic review of tier 1 PBIS implementation in alternative education settings. *Behavioral Disorders*, *46*(4), 199–213. https://doi-org.eps.cc.ysu.edu/10.1177/0198742920915648/

Green, A. L., Hatton, H., Stegenga, S. M., Eliason, B., & Nese, R. N. T. (2021). Examining commitment to prevention, equity, and meaningful engagement: A review of school district discipline policies. *Journal of Positive Behavior Interventions*, *23*(3), 137-148. https://doi.org/10.1177/1098300720951940/

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*(1), 4. https://doi-org.eps.cc.ysu.edu/10.1037/0033-295X.102.1.4/

Gregory, A., & Clawson, K. (2016). The promise of restorative practices to transform teacher-student relationships and achieve equity in school discipline. *Journal of Educational & Psychological Consultation*, *26*(4), 325–353. https://doi-org.eps.cc.ysu.edu/10.1080/10474412.2014.929950/

Gregory, A., & Cornell, D. (2009). "Tolerating" adolescent needs: Moving beyond zero tolerance policies in high school. *Theory Into Practice*, *48*(2), 106–113. http://www.jstor.org/stable/40344600/

Gregory, A., Hafen, C. A., Ruzek, E., Mikami, A. Y., Allen, J. P., & Pianta, R. C. (2016). Closing the racial discipline gap in classrooms by changing teacher practice. *School Psychology Review*, *45*(2), 171-191.

Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher*, *39*(1), 59-68. http://dx.doi.org/10.3102/0013189X09357621/

Gresham, F. M. (2009). Evolution of the treatment integrity concept: Current status and future directions. *School Psychology Review*, *38*(4), 533–540.

Gun-Free Schools Act of 1994 20 U.S.C. §§ 8921-23 (1994). https://www.govinfo.gov/content/pkg/USCODE-2000-title20/pdf/USCODE-2000-title20-chap70-subchapXIV-partF-sec8921.pdf

Harn, B., Parisi, D., & Stoolmiller, M. (2013). Balancing fidelity with flexibility and fit: What do we really know about fidelity of implementation in schools? *Exceptional Children*, *79*(2), 181-193. https://doi-org.eps.cc.ysu.edu/10.1177/001440291307900204/

Harper, K. (2020). School discipline reform is still needed, but is discipline policy still the solution? *State Education Standard*, *20*(2), 43-47.

Hawken, L. S., Bundock, K., Kladis, K., O'Keeffe, B., & Barrett, C. A. (2014). Systematic review of the check-in, check-out intervention for students at risk for emotional and behavioral disorders. *Education & Treatment of Children (West Virginia University Press)*, *37*(4), 635–658. https://doi-org.eps.cc.ysu.edu/10.1353/etc.2014.0030/

Heilbrun, A., Cornell, D., & Lovegrove, P. (2015). Principal attitudes regarding zero tolerance and racial disparities in school suspensions. *Psychology in the Schools*, *52*(5), 489–499. https://doi-org.eps.cc.ysu.edu/10.1002/pits.21838/

Heyder, A., van Hek, M., & Van Houtte, M. (2021). When gender stereotypes get male adolescents into trouble: A longitudinal study on gender conformity pressure as a predictor of school misconduct. *Sex Roles, 84,* 61-75. https://doi.org/10.1007/s11199-020-01147-9/

Hopson Shelton, P., Cantu, N., Adams, J. C., Adegbile, D. P., Gilchrist, S., Heriot, G. Kirsanow, P. N., Kladney, D., & Yaki, M. (2021, April). Disparate and punitive impact of exclusionary discipline practices on students of color, students with disabilities and LGBTQ students in Pennsylvania public schools. Pennsylvania Advisory Committee to the U.S. Commission on Civil Rights.

Horner, R., Sugai, G., Fixsen, D., Horner, R. H., & Fixsen, D. L. (2017). Implementing effective educational practices at scales of social importance. *Clinical Child & Family Psychology Review*, *20*(1), 25-35. https://doi-org.eps.cc.ysu.edu/10.1007/s10567-017-0224-7/

Horner, R., Sugai, G., & Lewis, T. (2020). Is school wide behavior support and evidence-based practice? Center on PBIS. https://assets-global.website-files.com/5d3725188825e071f1670246/60bf970915720b202ceafcd8_Evidence%20Base%20PBIS%20043020.pdf/

Huang, F. L., Olsen, A. A., Cohen, D., & Coombs, N. (2021). Authoritative school climate and out-of-school suspensions: Results from a nationally-representative survey of 10th grade students. *Preventing School Failure*, *65*(2), 114–123. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2020.1843129/

Hyman, J. M. B. (2017). Reining in implicit bias. *ILL. BJ*, *105*, 26-27.

İnan-Kaya, G., & Rubie-Davies, C. M. (2022). Teacher classroom interactions and behaviours: Indications of bias. *Learning & Instruction*, *78*. https://doi-org.eps.cc.ysu.edu/10.1016/j.learninstruc.2021.101516/

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Jackson, R. (2021). After a year of trauma for all, how can we discipline more fairly? *Educational Leadership*, *79*(2), 45–49.

Jacobsen, W. C. (2020). School punishment and interpersonal exclusion: Rejection, withdrawal, and separation from friends. *Criminology*, *58*(1), 35-69. https://doi.org/10.1111/1745-9125.12227/

Jacobsen, W. C., Pace, G. T., & Ramirez, N. G. (2019). Punishment and inequality at an early age: Exclusionary discipline in elementary school. *Social Forces*, *97*(3), 973-998. https://doi.org/10.1093/sf/soy072

James, A. G., Noltemeyer, A., Ritchie, R., Palmer, K., & University, M. (2019). Longitudinal disciplinary and achievement outcomes associated with school-wide PBIS implementation level. *Psychology in the Schools*, *56*(9), 1512-1521. https://doi-org.eps.cc.ysu.edu/10.1002/pits.22282/

Kaestle, C. F. (1978). Social change, discipline, and the common school in early nineteenth-century America. *The Journal of Interdisciplinary History*, *9*(1), 1-17. https://doi.org/10.2307/203666/

Kajs, L. T. (2006). Reforming the discipline management process in schools: An alternative approach to zero tolerance. *Education Research Quarterly, 29*(4), 16-28.

Kaminski, J. (2011). Diffusion of innovation theory. *Canadian Journal of Nursing Informatics*, *6*(2), 1-6.

Kang-Brown, J., Trone, J., Fratello, J., Daftary-Kapur, T. (2013). *A generation later: What we've learned about zero tolerance in schools.* Vera Institute of Justice, Center on Youth Justice. https://www.vera.org/downloads/publications/zero-tolerance-in-schools-policy-brief.pdf/

Katic, B., Alba, L. A., & Johnson, A. H. (2020). A systematic evaluation of restorative justice practices: School violence prevention and response. *Journal of School Violence*, *19*(4), 579-593. https://doi.org/10.1080/15388220.2020.1783670/

Katz-Amey, J. (2019). Interrupting inequitable discipline practices. *Multicultural Education*, *27*(1), 37-42.

Kenneth, M. L., & Dreiband, E. S. (2018, December 21) Dear colleague letter. Department of Education, Office for Civil Rights.

Kim, T., & Weiner, J. (2022). Negotiating incomplete autonomy: Portraits from three school principals. *Educational Administration Quarterly*, *58*(3), 487–521. https://doi-org.eps.cc.ysu.edu/10.1177/0013161X221080374/

Kittelman, A., McIntosh, K., & Hoselton, R. (2019). Adoption of PBIS within school districts. *Journal of School Psychology*, *76*, 159-167. https://doi-org.eps.cc.ysu.edu/10.1016/j.jsp.2019.03.007/

Kline, D. M. S. (2016). Can restorative practices help to reduce disparities in school discipline data? A review of the literature. *Multicultural Perspectives*, *18*(2), 97-102. https://doi.org/10.1080/15210960.2016.1159099/

Krezmien, M., & Camacho, K. (2018). Suspension and students with high incidence disabilities: Implications of trends over time. *Empirische Sonderpädagogik*, *10*(2), 121-133.

Kumar, R., Gray, D. L., & Kaplan Toren, N. (2022). Pre-service teachers' desire to control bias: Implications for the endorsement of culturally affirming classroom practices. *Learning & Instruction*, *78*. https://doi-org.eps.cc.ysu.edu/10.1016/j.learninstruc.2021.101512/

Lacoe, J., & Steinberg, M. P. (2018). Do suspensions affect student outcomes? *Educational Evaluation and Policy Analysis*, *41*(1), 34-62. https://doi.org/10.3102/0162373718794897/

Lane, K. L., Carter, E. W., Jenkins, A., Dwiggins, L., & Germer, K. (2015). Supporting comprehensive, integrated, three-tiered models of prevention in schools. *Journal of Positive Behavior Interventions*, *17*(4), 209-222. doi:10.1177/1098300715578916/

Lane, K. L., Oakes, W. P., & Menzies, H. M. (2014). Comprehensive, integrated, three-tiered models of prevention: Why does my school—and district—need an integrated approach to meet students' academic, behavioral, and social needs? *Preventing School Failure*, *58*(3), 121–128. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2014.893977/

Lane, K. L., Peia Oakes, W., Powers, L., Diebold, T., Germer, K., Common, E. A., & Brunsting, N. (2015). Improving teachers' knowledge of functional assessment-based interventions: Outcomes of a professional development series. *Education & Treatment of Children (West Virginia University Press)*, *38*(1), 93–120. https://doi-org.eps.cc.ysu.edu/10.1353/etc.2015.0001/

Leban, L., & Masterson, M. (2022). The impact of childhood school suspension on dropout and arrest in adolescence: Disparate relationships by race and adverse childhood experiences. *Criminal Justice & Behavior*, *49*(4), 550-569. https://doi.org/10.1177/00938548211041387/

Lee, J. O., Kosterman, R., Jones, T. M., Herrenkohl, T. I., Rhew, I. C., Catalano, R. F., & Hawkins, J. D. (2016). Mechanisms linking high school graduation to health disparities in young adulthood: a longitudinal analysis of the role of health behaviours, psychosocial stressors, and health insurance. *Public Health (Elsevier)*, *139*, 61-69. https://doi-org.eps.cc.ysu.edu/10.1016/j.puhe.2016.06.010/

Lee, T., Cornell, D., Gregory, A., & Fan, X. (2011). High suspension schools and dropout rates for Black and White students. *Education & Treatment of Children, 34*(2), 167-192. https://doi.org/10.1353/etc.2011.0014/

Leung-Gagné, M., McCombs, J., Scott, C., & Losen, D. J. (2022). *Pushed out: Trends and disparities in out-of-school suspension*. Learning Policy Institute. https://doi.org/10.54300/235.277

Lhamon, C. E., & Samuels, J. (2014, January 8). *Dear colleague letter*. Department of Education, Office for Civil Rights.

Losen, D. J., & Martinez, T. E. (2013). Out of school and off track: The overuse of suspensions in American middle and high schools. *Civil Rights Project/Proyecto Derechos Civiles*.

Losen, D. J., & Martinez, P. (2020). Is California doing enough to close the school discipline gap? Executive summary. In *Civil Rights Project - Proyecto Derechos Civiles*. Civil Rights Project - Proyecto Derechos Civiles.

Lunneblad, J., & Johansson, T. (2021). Violence and gender thresholds: A study of the gender coding of violent behaviour in schools. *Gender and Education, 33*(1), 1-16. https://doi.org/10.1080/09540253.2019.1583318/

Lustick, H. (2021). "Restorative justice" or restoring order? Restorative school discipline practices in urban public schools. *Urban Education*, *56*(8), 1269-1296. https://doi.org/10.1177/0042085917741725/

MacDonald, A., & McGill, P. (2013). Outcomes of staff training in positive behaviour support: A systematic review. *Journal of Developmental & Physical Disabilities*, *25*(1), 17-33. https://doi.org/10.1007/s10882-012-9327-8/

Mallett, C. (2016). The school-to-prison pipeline: A critical review of the punitive paradigm shift. *Child & Adolescent Social Work Journal*, *33*(1), 15-24. https://doi-org/10.1007/s10560-015-0397-1/

Malloy, J. M., Bohanon, H., & Francoeur, K. (2018). Positive behavioral interventions and supports in high schools: A case study from New Hampshire. *Journal of Educational and Psychological Consultation*, *28*(2), 219-247.

Martinez, J. A. (2020). A call for help?: How public school principals' subjective report of institutional weakness relates to disciplinary incidents. *Journal of School Violence*, *19*(4), 446-455. http://dx.doi.org/10.1080/15388220.2020.1729780/

Massar, M. M., McIntosh, K., & Eliason, B. M. (2015, May). Do out-of-school suspensions prevent future exclusionary discipline? *Positive Behavioral Interventions & Supports* (PBIS). https://assets-global.website-files.com/5d3725188825e071f1670246/5d79778ee21ac97f0bfeb9a6_evalbrief_may2015.pdf

Mathews, S., McIntosh, K., Frank, J. L., & May, S. L. (2014). Critical features predicting sustained implementation of school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions*, *16*(3), 168-178. https://doi-org./10.1177/1098300713484065/

Mayworm, A. M., & Sharkey, J. D. (2014), Ethical considerations in a three-tiered approach to school discipline policy and practice. *Psychology in the Schools*, *51*, 693-704. https://doi.org/10.1002/pits.21782/

McDaniel, S. C., Cohen, D., & Bruhn, A. L. (2022). Evaluating school-level student outcomes of a systematic tier 2 framework. *Behavioral Disorders*, *47*(3), 176–186. https://doi-org.eps.cc.ysu.edu/10.1177/0198742921100915/

McIntosh, K., Girvan, E. J., Fairbanks Falcon, S., McDaniel, S. C., Smolkowski, K., Bastable, E., Santiago-Rosario, M. R., Izzard, S., Austin, S. C., Nese, R. N. T., & Baldy, T. S. (2021). Equity-focused PBIS approach reduces racial inequities in school discipline: A randomized controlled trial. *School Psychology*, *36*(6), 433-444. https://doi.org/10.1037/SPQ0000466/

McIntosh, K., Girvan, E. J., McDaniel, S. C., Santiago-Rosario, M. R., St. Joseph, S., Fairbanks Falcon, S., Izzard, S., & Bastable, E. (2021). Effects of an equity-focused PBIS approach to school improvement on exclusionary discipline and school climate. *Preventing School Failure*, *65*(4), 354–361. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1937027/

McKay, S. (2017, March 15). Quality improvement approaches: Implementation science. Carnegie Foundation. https://www.carnegiefoundation.org/blog/quality-improvement-approaches-implementation-science/

Mcleod, S. (2017). *Maslow's hierarchy of Needs*. https://www.simplypsychology.org/maslow.html/

McNeeley, S. (2012). Sensitive Issues in Surveys: Reducing Refusals While Increasing Reliability and Quality of Responses to Sensitive Survey Items. In: Gideon, L. (eds) Handbook of Survey Methodology for the Social Sciences. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-3876-2_22

McTernan, E. (2018). Microaggressions, equality, and social practices. *Journal of Political Philosophy*, *26*(3), 261-281. https://doi-org.eps.cc.ysu.edu/10.1111/jopp.12150/

Minkos, M. L., Sassu, K. A., Gregory, J. L., Patwa, S. S., Theodore, L. A., & Femc, B. M. (2017). Culturally responsive practice and the role of school administrators. *Psychology in the Schools*, *54*(10), 1260–1266. https://doi-org.eps.cc.ysu.edu/10.1002/pits.22072/

Morgan, E., Salomen, N., Plotkin, M., & Cohen, R. (2014). The school discipline consensus report: Strategies from the field to keep students engaged in school and out of the juvenile justice system. The Council of State Governments Justice Center. http://csgjusticecenter.org/wp-content/uploads/2014/06/The_School_Discipline_Consensus_Report.pdf

Morris, E. W., & Perry, B. L. (2016). The punishment gap: School suspension and racial disparities in achievement. *Social Problems*, *63*(1), 68-86. https://doi-org.eps.cc.ysu.edu/10.1093/socpro/spv026/

Morrison, B., Blood, P., & Thorsborne, M. (2005). Practicing restorative justice in school communities: Addressing the challenge of culture change. *Public Organization Review*, *5*(4), 335–357. https://doi-org.eps.cc.ysu.edu/10.1007/s11115-005-5095-6/

Mullet, J. H. (2014). Restorative discipline: From getting even to getting well. *Children & Schools*, *36*(3), 157-162. https://doi.org/10.1093/cs/cdu011/

Muñiz, J. O. (2021). Exclusionary discipline policies, school-police partnerships, surveillance technologies and disproportionality: A review of the school to prison pipeline literature. *Urban Review*, *53*(5), 735-760. https://doi.org/10.1007/s11256-021-00595-1/

Murray, J. (2014). Critical issues facing school leaders concerning data-informed decision-making. *Professional Educator*, *38*(1), 14–2.

National Institute of Education (US), & CM Leinwand Associates. (1978). *Violent schools, safe schools: The safe school study report to the congress* (Vol. 1). U.S. Department of Health, Education, and Welfare, National Institute of Education.

Nese, R. N. T., Kittelman, A., Strickland-Cohen, M. K., & McIntosh, K. (2021). Examining teaming and tier 2 and 3 practices within a PBIS framework. *Journal of Positive Behavior Interventions*. https://doi.org/10.1177/10983007211051090/

Nese, R. N. T., Nese, J. F. T., McCroskey, C., Meng, P., Triplett, D., & Bastable, E. (2021). Moving away from disproportionate exclusionary discipline: developing and utilizing a continuum of preventative and instructional supports. *Preventing School Failure*, *65*(4), 301–311. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1937019/

Neumerski, C. M., Grissom, J. A., Goldring, E., Rubin, M., Cannata, M., Schuermann, P., & Drake, T. A. (2018). Restructuring instructional leadership: How multiple-measure teacher evaluation systems are redefining the role of the school principal. *Elementary School Journal*, *119*(2), 270-297. https://doi-org.eps.cc.ysu.edu/10.1086/700597/

Nilsen, P. (2015). Making sense of implementation theories, models, and frameworks. *Implementation Science, 10*(1), 1-13. https://doi-org.eps.cc.ysu.edu/10.1186/s13012-015-0242-0/

Nishioka, V., Merrill, B., & Hanson, H. (2020). Changes in exclusionary and nonexclusionary discipline in grades k–5 following state policy reform in Oregon. *Regional Educational Laboratory Northwest*.

Noltemeyer, A., Palmer, K., James, A. G., Petrasek, M., & Bowman-Perrott, L. (2019). Disciplinary and achievement outcomes associated with school-wide positive behavioral interventions and supports implementation level. *School Psychology Review*, *48*(1), 81-87. https://doi-org.eps.cc.ysu.edu/10.17105/SPR-2017-0131.V48-1/

Noltemeyer, A. L., & Mcloughlin, C. S. (2010). Changes in exclusionary discipline rates and disciplinary disproportionality over time. *International Journal of Special Education*, *25*(1), 59-70.

Noltemeyer, A. L., Ward, R. M., & McLoughlin, C. (2015). Relationship between school suspension and student outcomes: A meta-analysis. *School Psychology Review*, *44*(2), 224-240. https://doi.org/10.17105/spr-14-0008.1/

Novak, A., & Fagan, A. (2022). Expanding research on the school-to-prison pipeline: Examining the relationships between suspension, expulsion, and recidivism among justice-involved youth. *Crime & Delinquency*, *68*(1), 3-27. https://doi.org/10.1177/0011128721999334/

Novak, A., & Krohn, M. (2021). Collateral consequences of school suspension: Examining the 'knifing off' hypothesis. *American Journal of Criminal Justice*, *46*(5), 728-747. https://doi.org/10.1007/s12103-020-09579-5/

Nowicki, J. M. (2018). K-12 education: Discipline disparities for black students, boys, and students with disabilities. Report to Congressional Requesters. GAO-18-258. *US Government Accountability Office*.

Oakes, W. P., Lane, K. L., & Germer, K. A. (2014). Developing the capacity to implement tier 2 and tier 3 supports: How do we support our faculty and staff in preparing for sustainability? *Preventing School Failure: Alternative Education for Children and Youth*, *58*(3), 183-190.

Oakes, W. P., Schellman, L. E., Lane, K. L., Common, E. A., Powers, L., Diebold, T., & Gaskill, T. (2018). Improving educators' knowledge, confidence, and usefulness of functional assessment-based interventions: Outcomes of professional learning. *Education & Treatment of Children (West Virginia University Press)*, *41*(4), 533–565. https://doi-org.eps.cc.ysu.edu/10.1353/etc.2018.0028/

Öğülmüş, K., & Vuran, S. (2016). Schoolwide positive behavioral interventions and support practices: Review of studies in the journal of positive behavior interventions. *Educational Sciences: Theory & Practice*, *16*(5), 1693-1710. https://doi.org/10.12738/estp.2016.5.0264/

Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes. *Psychological Science, 26*(5), 617-624. doi:10.1177/0956797615570365/

Owens, J., & McLanahan, S. S. (2020). Unpacking the drivers of racial disparities in school suspension and expulsion. *Social Forces*, *98*(4), 1548-1577. https://doi.org/10.1093/sf/soz095/

PaPBS. (2020). Recognition 2019-2020 school year. Pennsylvania Positive Behavior Interventions and Supports System. https://papbs.org/Portals/0/UploadedFiles/Recognition%20process/2019-2020%20booklet.pdf?ver=MEuXpLdVuSNneHodH8Y1TA%3D%3D/

Pas, E. T., Ryoo, J. H., Musci, R., & Bradshaw, C. P. (2019). A state-wide quasi-experimental effectiveness study of the scale-up of school-wide positive behavioral interventions and supports. *Journal of School Psychology, 73*, 41-55.

Payne, A. A., & Welch, K. (2015). Restorative justice in schools: The influence of race on restorative discipline. *Youth & Society*, *47*(4), 539-564.

Payno-Simmons, R. L. (2021). Centering equity in school discipline: The Michigan PBIS equity pilot. *Preventing School Failure*, *65*(4), 343-353. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1937024/

Pearman, F. A., Curran, F. C., Fisher, B., & Gardella, J. (2019). Are achievement gaps related to discipline gaps? Evidence from national data. *AERA Open*. https://doi.org/10.1177/2332858419875440/

Pendharkar, E. (2022). Here's how the pandemic changed school discipline. *Education Week*, *42*(16), 8-10.

Pennsylvania Education Law Center. (2022). Fact sheet: Suspensions in Pennsylvania. Pennsylvania Education Law Center. https://www.elc-pa.org/wp-content/uploads/2021/08/suspensions-in-pa.pdf/

Pennsylvania Legislative Code Ch. 22, § 12.6. Exclusions from school.

Pennsylvania Positive Behavior Support Network. (n.d.). School-wide applying for recognition. https://papbs.org/FAQ/School-Wide-Applying-For-Recognition/

Pennsylvania Positive Behavior Support Network. (2022). Pennsylvania's positive behavior interventions and supports system recognition 2021-222 school year. Pennsylvania Training and Technical Assistance Network. https://www.pattan.net/CMSPages/GetAmazonFile.aspx?path=~%5Cpattan%5Cmedia%5Cmaterials%5Cpublications%5Cfiles%5Cpapbs-2021-22-recognition-bklt-12-22-ff-wbl.pdf&hash=4b39fc2ae0e0b9845e656b9188a9a2ec84995e317f60f84127e4641458e0137d&ext=.pdf/

Pennsylvania Positive Behavior Support. (2022). Frequently Asked Questions. https://papbs.org/FAQ/

Peterson, E. R., Rubie-Davies, C., Osborne, D., & Sibley, C. (2016). Teachers' explicit expectations and implicit prejudiced attitudes to educational achievement: Relations with student achievement and the ethnic achievement gap. *Learning & Instruction*, *42*, 123–140. https://doi-org.eps.cc.ysu.edu/10.1016/j.learninstruc.2016.01.010/

Petrasek, M., James, A., Noltemeyer, A., Green, J., & Palmer, K. (2022). Enhancing motivation and engagement within a PBIS framework. *Improving Schools*, *25*(1), 37-51. https://doi.org/10.1177/13654802211002299/

Petrosino, A., Turpin-Petrosino, C., & Guckenburg, S. (2010). *Formal system processing of juveniles: Effects on delinquency*. The Campbell Collaboration. http://www.njjn.org/uploads/digital-library/resource_1478.pdf/

Pinkelman, S. E., Mcintosh, K., Rasplica, C. K., Berg, T., & Strickland-Cohen, M. K. (2015). Perceived enablers and barriers related to sustainability of school-wide positive behavioral interventions and supports. *Behavioral Disorders*, *40*(3), 171-183. https://doi.org/10.17988/0198-7429-40.3.171/

Pollock, K., Murakami, E., & Swapp, D. H. (2015). The work of school leaders: north American similarities, local differences. *International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, *43*(2), 5-20.

Prothero, A. (2023, April 20). Student behavior isn't getting and better, survey shows. Education Week. https://www.edweek.org/leadership/student-behavior-isnt-getting-any-better-survey-shows/2023/04

Puzzanchera, C. (2021, May). *Juvenile arrests 2019*. U.S. Department of Justice, Office of Justice Programs. 2019 NCJ 256032. https://ojjdp.ojp.gov/publications/juvenile-arrests-2019.pdf

Qualtrics. (2023, March 21). Sample size calculator. Qualtrics. https://www.qualtrics.com/blog/calculating-sample-size/

Rafa, A. (2019). Policy analysis: The status of school discipline in state policy. *Education Commission of the States*.

Rainbolt, S., Fowler, E. S., & Mansfield, K. C. (2019). High school teachers' perceptions of restorative discipline practices. *NASSP Bulletin*, *103*(2), 158-182.

Reed, K. N., Fenning, P., Johnson, M., & Mayworm, A. (2020). Promoting statewide discipline reform through professional development with administrators. Preventing School Failure, 64(2), 172-182. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2020.1716674/

Restorative Practices Working Group. (2014, March). *Restorative practices: Fostering health relationships & promoting positive discipline*. http://schottfoundation.org/sites/default/files/restorative-practices-guide.pdf/

Rodriguez, B. J., Loman, S. L., & Borgmeier, C. (2016). Tier 2 interventions in positive behavior support: A survey of school implementation. *Preventing School Failure: Alternative Education for Children and Youth*, *60*(2), 94-105.

Rodríguez, R. R. (2017) School-to-prison pipeline: An evaluation of zero tolerance policies and their alternatives. *Houston Law Review*, *54*(3):803-837.

Rogers, E. M. (2003). *Diffusion of innovations*, 5th Ed.. United Kingdom: Free Press.

Rosenbaum, J. (2020). Educational and criminal justice outcomes 12 years after school suspension. *Youth & Society*, *52*(4), 515-547. https://doi.org/10.1177/0044118X17752208/

Rossi, C. (2017) *Building administrator support across implementation stages: Using implementation science to support administrators at PBIS schools*. May Institute. https://www.mayinstitute.org/pdfs/PBIS2017%20-%20Role%20of%20the%20Administrator%20in%20PBIS%20NEBPIS%202017%20Catherine%20Rossi%20Intro%20to%20Admin.pdf

Rothman, N. B., Vitriol, J. A., & Moskowitz, G. B. (2022). Internal conflict and prejudice-regulation: Emotional ambivalence buffers against defensive responding to implicit bias feedback. *PLoS ONE*, *17*(3), 1-15. https://doi-org.eps.cc.ysu.edu/10.1371/journal.pone.0264535/

Runge, T. J., Staszkiewicz, M. J., Myers, T., & Breo, S. (2021, December). *Executive summary of the 13th annual program evaluation of Pennsylvania's school-wide positive behavioral interventions and supports initiative*. Indiana University of Pennsylvania. https://papbs.org/LinkClick.aspx?fileticket=CWLOzQaAHYo%3d&portalid=0/

Sanders, J., Liebenberg, L., & Munford, R. (2020). The impact of school exclusion on later justice system involvement: Investigating the experiences of male and female students. *Educational Review*, *72*(3), 386-403. https://doi-org.eps.cc.ysu.edu/10.1080/00131911.2018.1513909/

Schiff, M. (2018). Can restorative justice disrupt the 'school-to-prison pipeline'? *Contemporary Justice Review*, *21*(2), 121-139. https://doi.org/10.1080/10282580.2018.1455509/

Schneider, S. (2021, June 9). City district suspends fewer young students after suspension ban, but racial disparities remain. *WESA*. https://www.wesa.fm/education/2021-06-09/discipline-data/

School Discipline Support Initiative. (n.d.). Pipeline to prison https://supportiveschooldiscipline.org/school-to-prison-pipeline/

Scott, T. M. (2021). Implicit bias, disproportionate discipline, and teacher responsibility for instruction as prevention. *Preventing School Failure*, *65*(4), 291-300. https://doi-org.eps.cc.ysu.edu/10.1080/1045988X.2021.1937021/

Shah, N., & McNeil, M. (2013). Discipline policies squeezed as views on what works. *Education Week*, *32*(16), 4-11.

Shah, N., Ortiz, N., Christensen, J., Stroupe, D., & Reinholz, D. (2021). Who participates? Analyzing data with context can help educators detect inequities in classroom participation and reduce implicit bias. *Educational Leadership*, *78*(6), 41–46.

Shapiro, E. S. (2005). Commentary: Center for promoting research to practice: Moving from findings to implementation. *Psychology in the Schools*, *42*(5), 585-591.

Shen, J., Cooley, V., Ma, X., Reeves, P., Burt, W., Rainey, J. M., & Yuan, W. (2012). Data-informed decision making on high-impact strategies: Developing and validating an instrument for principals. *Journal of Experimental Education*, *80*(1), 1–25. https://doi-org.eps.cc.ysu.edu/10.1080/00220973.2010.550338/

Sievers, C. (2023, February 22). Proposed bill would make suspending Arizona Kindergarteners easier. Tucson Sentinel. https://www.tucsonsentinel.com/local/report/021424_school_suspension_ban/arizona-could-become-latest-state-ban-attendance-related-suspensions/

Skiba, R., & Ellrod, H. (2004). The Disciplinary Practices Survey: How do Indiana's principals feel about discipline. *Children Left Behind Policy Briefs. Supplementary Analysis 2-C*. Center for Evaluation and Education Policy, Indiana University.

Skiba, R., & Peterson, R. (1999). The dark side of zero tolerance. *Phi Delta Kappan*, *80*(5), 372-382.

Skiba, R., & Sprague, J. (2008). Safety without suspensions. *Educational Leadership*, *66*(1), 38-43.

Skiba, R. J. (2002). Special education and school discipline: A precarious balance. *Behavioral Disorders, 27*(2), 81-97. https://doi-org.eps.cc.ysu.edu/10.1177/019874290202700209/

Skiba, R. J. (2013). Reaching a critical juncture for our kids: The need to reassess school-justice practices. *Family Court Review*, *51*(3), 380-387. https://doi.org/https://doi.org/10.1111/fcre.12034

Skiba, R. J. (2014). The failure of zero tolerance. *Reclaiming Children & Youth*, *22*(4), 27–33.

Skiba, R. J., & Knesting, K. (2001). Zero tolerance, zero evidence: An analysis of school disciplinary practice. *New Directions for Youth Development*, 2001(92), 17-43. https://.doi.org/10.1002/yd.23320019204/

Skiba, R. J., Trachok, M., Chung, C. G., Baker, T., & Hughes, R. (2012, April). Parsing disciplinary disproportionality: Contributions of behavior, student, and school characteristics to suspension and expulsion. *Annual Meeting of the American Educational Research Association, Vancouver, British Columbia, Canada*, *16*.

Skrzypek, C. Ball, A. Kim, W. & Bascug, E. W. (2020). In their own words: Student perceptions of restorative practices. *Children & Schools, 42*(1), 1-9. http://doi.org/10.1093/cs/cdaa011/

Slavin, R. E. (2017). Evidence-based reform in education, *Journal of Education for Students Placed at Risk (JESPAR), 22*(3), 178-184. DOI:10.1080/10824669.2017.1334560/

Song, S., Milner, T., Thompson, T. R. H., & Sliva, A. (2020). Restorative justice practices: Making schools safe through relationship. *Social Pathology & Prevention*, *6*(2), 19-27.

Staats, C. (2016). Understanding implicit bias: What educators should know. *American Educator*, *39*(4), 29.

Steinberg, M. P., & Lacoe, J. (2018). Reforming school discipline: School-level policy implementation and the consequences for suspended students and their peers. *American Journal of Education*, *125*(1), 29-77. https://doi.org/10.1086/699811/

Stephens, J. M., Rubie-Davies, C., & Peterson, E. R. (2022). Do preservice teacher education candidates' implicit biases of ethnic differences and mindset toward academic ability change over time? *Learning & Instruction*, *78*. https://doi-org.eps.cc.ysu.edu/10.1016/j.learninstruc.2021.101480/

Sugai, G., & Horner, R. H. (2009). Defining and describing schoolwide positive behavior support. In W. Sailor, G. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of Positive Behavior Support* (pp. 307-326). Springer US. https://doi.org/10.1007/978-0-387-09632-2_13/

Sugai, G., & Horner, R. H. (2020). Sustaining and scaling positive behavioral interventions and supports: Implementation drivers, outcomes, and considerations. *Exceptional Children*, *86*(2), 120-136.

Sullivan, A. L., Van Norman, E. R., & Klingbeil, D. A. (2014). Exclusionary discipline of students with disabilities: Student and school characteristics predicting suspension. *Remedial & Special Education, 35*(4), 199-210. https://doi-org.eps.cc.ysu.edu/10.1177/0741932513519825/

Sun, J., Johnson, B., & Przybylski, R. (2016). Leading with data: An increasingly important feature of school leadership. *International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, *44*(3), 93–128.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2/

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53-55. https://doi.org/10.5116/ijme.4dfb.8dfd/

Taylor, J. C., Hanley, W., Deger, G., & C. Hunter, W. (2023). Promoting anti-racism practices and the cycle of critical consciousness within positive behavior interventions and supports frameworks. *Teaching Exceptional Children*, *55*(5), 314-322. https://doi-org.eps.cc.ysu.edu/10.1177/00400599221120242/

Teasley, M. L. (2014). Shifting from zero tolerance to restorative justice in schools. *Children & Schools*, *36*(3), 131–133. https://doi-org.eps.cc.ysu.edu/10.1093/cs/cdu01/

Terrell, H. M., & Cho, S. J. (2023). Translating school faculty experiences using PBIS into recommendations for practice. *Behavioral Sciences*, *13*(5), 372.

Teske, S. C., Huff, B., & Graves, C. (2013). Collaborative role of courts in promoting outcomes for students: The relationship between arrests, graduation rates, and school safety. *Family Court Review*, *51*(3), 418-426. https://doi.org/10.1111/fcre.12038/

The Editorial Board. (2021, June 11). Stop suspending little kids. [Editorial]. *Pittsburgh Post Gazette*. https://www.post-gazette.com/opinion/editorials/2021/06/12/PPS-should-extend-suspension-ban-to-students-in-grades-3-4-and-5/stories/202106110013/

Travers, P. (1980). An historic view of school discipline. *Educational Horizons*, *58*(4), 184-187. http://www.jstor.org/stable/42924396/

Tucker, W., & Whittaker, M. (2020). Disproportionate discipline and COVID-19: A call for change. *National Center for Special Education in Charter Schools*. https://files.eric.ed.gov/fulltext/ED608542.pdf

Underwood, J. (2020). Disciplinary policies for students with special needs. *Phi Delta Kappan, 101*(8), 64–66. https://doi-org.eps.cc.ysu.edu/10.1177/0031721720923798/

U.S. Department of Education, Office for Civil Rights. (2010). *Free Appropriate Public Education for Students With Disabilities: Requirements Under Section 504 of the Rehabilitation Act of 1973*, Washington, D.C.

United States Department of Education. (2016). *2013-2014 Civil rights data collection: A first look.* U.S. Department of Education Office of Civil Rights. https://www2.ed.gov/about/offices/list/ocr/docs/2013-14-first-look.pdf/

United States Department of Education. (2018, April). 2015-2016 Civil rights data collection school climate and safety. Office for Civil Rights, U.S. Department of Education. https://www2.ed.gov/about/offices/list/ocr/docs/school-climate-and-safety.pdf

United States Department of Education. (2021, June). *An overview of exclusionary discipline practices in public schools for the 2017-2018 school year*. United States Department of Education Office for Civil Rights. https://ocrdata.ed.gov/assets/downloads/crdc-exclusionary-school-discipline.pdf

U.S. Department of Education. (2022). School pulse panel, Institute of Education Sciences, National Center for Education Statistics. https://ies.ed.gov/schoolsurvey/spp/

Van Camp, A. M., Wehby, J. H., Copeland, B. A., & Bruhn, A. L. (2021). Building from the bottom up: The importance of tier 1 Supports in the context of tier 2 interventions. *Journal of Positive Behavior Interventions*, *23*(1), 53-64. doi:10.1177/1098300720916716/

Waasdorp T. E., Bradshaw C. P., & Leaf, P. J. (2012, February) The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: A randomized controlled effectiveness trial. *Archives of Pediatrics & Adolescent Medicine*, *166*(2),149-156. https://doi.org/10.1001/archpediatrics.2011.755/

Weber, M. A., Rich, S. E., Gann, C. J., Duhon, G. J., & Kellen, S. S. (2019). Can less be more for students at-risk for emotional and behavioral disorders: Evaluating components of check-in/ check-out. *Education & Treatment of Children (West Virginia University Press)*, *42*(4), 469–488. https://doi-org.eps.cc.ysu.edu/10.1353/etc.2019.002/

Welsh, R. O. (2022) School discipline in the age of COVID-19: Exploring patterns, policy, and practice considerations. *Peabody Journal of Education,* 97(3), 291-308. DOI: 10.1080/0161956X.2022.2079885/

Widdowson, A. O., Garduno, L. S., & Fisher, B. W. (2021). The school-to-gang pipeline: Examining the Impact of school suspension on joining a gang for the first time. *Crime & Delinquency*, *67*(6/7), 997-1021. https://doi-org.eps.cc.ysu.edu/10.1177/0011128720981835/

Williams, J. A., Johnson, J. N., Dangerfield-Persky, F., & Mayakis, C. G. (2020). Does employing more novice teachers predict higher suspensions for black students? A hierarchical multiple regression analysis. *Journal of Negro Education*, *89*(4), 448-458.

Williams, M. T. (2017). Microaggressions: Clarification, evidence, and impact. *Perspectives on Psychological Science*, *15*(1), 3-26. https://doi-org.eps.cc.ysu.edu/10.1177/1745691619827499/

Wolf, K. C., & Kupchik, A. (2017). School suspensions and adverse experiences in adulthood. *JQ: Justice Quarterly*, *34*(3), 407-430. https://doi.org/10.1080/07418825.2016.1168475/

Wright, J. P., Morgan, M. A., Coyne, M. A., Beaver, K. M., & Barnes, J. C. (2014). Prior problem behavior accounts for the racial gap in school suspensions. *Journal of Criminal Justice*, *42*(3), 257-266. https://doi-org.eps.cc.ysu.edu/10.1016/j.jcrimjus.2014.01.001/

Wright, P. W., & Wright, E. P. D. (2006). *Wrightslaw: Special education law* (2nd ed.).

Xia, J., Shen, J., & Sun, J. (2020). Tight, loose, or decoupling? A national study of the decision-making power relationship between district central offices and school principals. *Educational Administration Quarterly*, *56*(3), 396-434. https://doi-org.eps.cc.ysu.edu/10.1177/0013161X19851174/

Yeung, A., Craven, R., Chen, Z., Mooney, M., Tracey, D., Barker, K., Power, A., Dobia, B., Schofield, J., Whitefield, P., & Lewis, T. (2016). Positive behavior interventions: The issue of sustainability of positive effects. *Educational Psychology Review*, *28*(1), 145–170. https://doi-org.eps.cc.ysu.edu/10.1007/s10648-015-9305-7/

Yong, M., & Cheney, D. A. (2013). Essential features of tier 2 social-behavioral interventions. *Psychology in the Schools, 50*(8), 844-861. doi:10.1002/pits.21710/

Zaff, J., Donlan, A., Gunning, A., Anderson, S., McDermott, E., & Sedaca, M. (2017). Factors that promote high school graduation: A review of the literature. *Educational Psychology Review*, *29*(3), 447-476. https://doi-org.eps.cc.ysu.edu/10.1007/s10648-016-9363-5/

Zalaznick, M. (2023, May 11). Stricter discipline may be returning to schools after abandonment of zero tolerance. *District Administration.* https://districtadministration.com/stricter-discipline-may-be-returning-to-schools-after-abandonment-of-zero-tolerance/

Zimmerman, G., & Rees, C. (2014). Do school disciplinary policies have positive social impacts? Examining the attenuating effects of school policies on the relationship between personal and peer delinquency. *Journal of Criminal Justice. 42*, 54–65. https://doi.org/10.1016/j.jcrimjus.2013.12.003/

APPENDICES

APPENDIX A

IRB LETTER

Mar 27, 2023 2:53:41 PM EDT

Jane Beese
Teacher Ed and Leadership St

Re: Exempt - Initial - 2023-166 Exclusionary Discipline: Principal Perceptions and PBIS

Dear Dr. Jane Beese:

Youngstown State University Human Subjects Review Board has rendered the decision below for Exclusionary Discipline: Principal Perceptions and PBIS

Decision: Exempt

Selected Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly
reported to the IRB.

Findings: Confidential SurveyMonkey survey for PA Principals of K-12 schools, without identifier questions, and no signatures required. Meets Category 2.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,
Youngstown State University Human Subjects Review Board

APPENDIX B

DISCIPLINARY PRACTICES SURVEY

Welcome to My Survey

Greetings! I am a doctoral student at Youngstown State University, and I am currently completing my dissertation research in the field of School discipline. I would like to invite you to participate in a short online survey regarding your thoughts on school discipline. You are receiving this e-mail because you are a principal of a high school in the state of Pennsylvania. The survey should take approximately fifteen minutes to complete.

The purpose of this study is to investigate relationships between the implementation of PBIS and the use of exclusionary discipline. This goal of this survey is to compare principal perceptions of discipline and the implementation level of PBIS at their school. If you agree to take part, you will be asked two questions about the implementation level of PBIS at your school, two demographic questions and 31 questions using a five-point Likert scale to assess your opinions on discipline related issues.

Although you may not directly benefit from this research, we hope that your participation will provide meaningful data regarding principal perceptions on discipline practices. This information will provide a foundation for further research on how school leaders can address discipline concerns.

We believe that this study presents no risks to the participants. To the best of our ability, your answers to this survey will remain confidential. Results will be collected on a secure, password protected website (Survey Monkey?) The survey will not collect any identifiable information such as emails or computer IP addresses. No one, including the researcher, will know if you participated in this study.

Your participation is completely voluntary, and you can withdraw at any time.

The survey link will remain active for two weeks.

If you have questions about the project or have problems with the survey, you may contact the researcher, Jason Clarkson at 609-385-3109 or the Doctoral Chair, Dr. Jane Beese, at 330-941-2236. If you have questions about your rights as a research participant, please contact the Office of Research Services at YSUIRB@ysu.edu at 330-941-2377.

Thank You for your participation.

1. Do you wish to participate
Yes, continue to survey
No, I am not interested

Disciplinary Practices Survey

Please complete the survey questions to the best of your ability

2. Does your school currently implement a PBIS program?
Yes
No

* 3. Has your school been recognized by the PaPBS network for successful implementation of PBIS with fidelity?
Yes
No
Unsure

4. At what level was your school recognized?
Initial tier 1 implementation with fidelity
Sustained tier 1 implementation with fidelity
Tier 1 & 2 implementation with fidelity
Implementation with fidelity at tier 1, 2, & 3
Stongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

* 5. Out of school suspension makes students less likely to misbehave in the future
Strongly Disagree Disagree Neither Disagree nor Agree Agree Strongly Agree

* 6. Zero tolerance makes a significant contribution to maintaining order at my school.
Strongly Disagree Disagree Neither disagree nor agree Agree Strongly agree

* 7. I believe suspension and expulsion allow students time away from school that encourages them to think about their behavior.
Strongly disagree Disagree Neither disagree nor agree agree Strongly agree

* 8. Suspension and expulsion do not really solve discipline problems.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

* 9. Out-of-school suspension is a necessary tool for maintaining school order.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

* 10. Zero tolerance sends a clear message to disruptive students about appropriate behaviors in school.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

* 11. Students who are suspended or expelled are only getting more time on the streets that will enable them to get in more trouble.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

* 12. I believe suspension is unnecessary if we provide a positive school climate and challenging instruction.
Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree

* 13. Regardless of whether it is effective, suspension is virtually our only option in disciplining disruptive students.
Strongly disagree Disagre Neither disagree nor agree Agree Strongly agree

* 14. Certain students are not gaining anything from school and disrupt the learning environment for others. In such a case, the use of suspension and expulsion is justified to preserve the learning environment for students who wish to learn.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

15. I feel it is critical to work with parents before suspending a student from school.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

16. Regardless of the severity of a student's behavior, my objective as a principal is to keep all students in school.
Strongly Disagree Disagree Neither disagree nor agree Agree Strongly agree

17. The primary purpose of discipline is to teach appropriate skills to the disciplined student.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

18. It is sad but true that, in order to meet increasingly high standards of academic accountability, some students will probably have to be removed from school.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

19. The majority of this school's discipline problems could be solved if we could only remove the most persistent troublemakers.
Strongly Disagree Disagree Neither agree nor Disagree Agree Strongly agree

20. Schools cannot afford to tolerate students who disrupt the learning environment
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

21. I believe that putting in place prevention programs (e.g., bullying programs, conflict resolution, improved classroom management) can reduce the need for suspension and expulsion.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

22. Time spent on prevention programs or individualized behavior programming is wasted if students are not willing to take responsibility for their behavior.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

23. Prevention programs would be a useful addition at our school, but there is simply not enough time in the day.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

24. I have noticed that time spent in developing and implementing prevention programs pays off in terms of decreased disruption and disciplinary incidents.
Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree

25. Students with disabilities who engage in disruptive behavior need a different approach to discipline than students in general education.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

26. Repeat offenders should receive more severe disciplinary consequences than first time offenders.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

27. A student's academic record should be taken into account in assigning disciplinary consequences.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

28. Disadvantaged students require a different approach to discipline than other students.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

29. Suspension and expulsion are unfair to minority students.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

30. Disciplinary consequences should be scaled in proportion to the severity of the problem behavior.
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree

31. Conversations with students referred to the office are important, and should be factored into most decisions about disciplinary consequences
Strongly disagree Disagree Neither disagree nor agree Agree Strongly agree