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## A Review of the Impact of School Disciplinary Practices on Student Outcomes

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A REVIEW OF THE IMPACT OF SCHOOL DISCIPLINARY PRACTICES ON STUDENT OUTCOMES

A MASTER'S THESIS  
SUBMITTED TO THE FACULTY  
OF BETHEL UNIVERSITY

BY  
STEPHANIE M. THUN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
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## Abstract

The literature review sought to determine the impact of traditional discipline and alternative behavioral interventions on student outcomes. The research showed that certain student populations including Blacks, males, students qualifying for free or reduced lunch, and students with special education status were suspended most often. Exclusionary discipline was connected to lower academic outcomes, higher drop-out rates, and increased likelihood of suspension. Successful use of alternative interventions suggested that students need to be taught new behavior skills in order to learn them. Findings show that traditional discipline is not able to improve student outcomes. They also show that alternative interventions need to be in place in all educational settings to support students so they may learn the behavior skills needed to successfully engage in their education.

## Table of Contents

Signature Page

Abstract

Table of Contents

Chapter I: Introduction

History of School Discipline Practices in the United States

Research Questions

Chapter II: Literature Review

Traditional Discipline: Suspension and Expulsion

Positive Behavior Interventions and Supports

Collaborative and Proactive Solutions

Other Interventions

Chapter III: Discussion and Conclusion

Summary

Limitations of Research

Professional Applications

Conclusion

References

## CHAPTER I: INTRODUCTION

Have you ever heard of a student being suspended from school because they could not read or solve a math equation? The answer is likely no. Students who struggle with the academic areas often receive interventions and extra supports to learn the skills they lack. Why do we treat social-emotional and behavioral skills differently? Instead of providing interventions and instruction in these areas, students who struggle with social-emotional and behavioral skills are often sent home. In addition to being sent home, the student is also expected to learn the skills they need to avoid repeating the offense on their own. School systems do not expect students to teach themselves academic skills, so why do these same systems expect students to teach themselves emotional-regulation and coping strategies? The expectations are inequitable. The following review will address the impacts of current traditional disciplinary practices, as well as those of alternative response practices, on school-age student outcomes.

### **History of School Discipline Practice in the United States**

Traditional discipline, also referred to as exclusionary discipline, is a common practice across the United States. Traditional discipline is the practice of excluding students through in-school suspension, out-of-school suspension, and expulsion as a consequence to rule infractions. In-school suspension is when a student is removed from more than half of their scheduled school day, but remains on school grounds. Out-of-school suspension is when students are removed from school for fewer than ten school days and are not allowed on school grounds, and expulsion is when a student is removed from school for ten or more days and is unenrolled from the school.

According to the National Center for Education Statistics, 2,635,742 students were suspended or expelled from a public school during the 2013-2014 school year. This represents about 5.3% of all students in the public education system that year. Traditional discipline practice has been criticized for being inequitable with specific populations, such as Black students, students who qualify for free or reduced lunch, and students who are eligible for special education services, being over-represented (Arcia, 2006; Gorgan & Gage, 2011; Jacobsen et al., 2019; Raffaele Mendez, 2003). The effectiveness of exclusionary discipline has also been questioned due to the lack of an apparent instructional component to help students learn the skills they need to avoid future suspensions (Costenbader & Markson, 1998; Theriot et al., 2010). Evidence suggests that students do require instruction in the areas of behavior and social-emotional in order to learn new skills in those areas (Choi & HeckenLaible-Gotto, 1998; Crosby et al., 2018; Greene & Ollendick, 1993; Henderson & Guy, 2017; Johnson et al., 1997). Student involvement in decision making around their behavior, consequences, and interventions has also proven to be a more effective practice than unilateral adult decisions made through traditional discipline (Brasof & Peterson, 2017; Greene et al., 2004; Martin et al., 2008; Ollendick et al., 2016).

The United States Department of Education has compiled the *Compendium of School Discipline Laws and Regulations for the 50 States, Washington, D.C., and Puerto Rico*, which was last updated in May 2013. The compendium is a collection of the states' discipline profiles. Each state has different laws and regulations, so there is variance amongst what is permissible for school discipline across the nation. One component of each state's plan is how they will implement evidence-based multi-tiered supports to all students and those at-risk for exclusion.

This means all schools should have at minimum one form of evidence-based behavior or social-emotional intervention in place in order to legally move forward with disciplinary practices within the school building. One common tiered intervention is School-wide Positive Behavior Interventions and Supports (PBIS). PBIS is a tiered system that, when implemented with fidelity, can have positive impacts on student outcomes and reducing behavior incidents (Bradshaw et al., 2017; Eraldi et al., 2019; Freeman et al., 2015; Gage et al. 2018; Gage et al., 2020; Norcera et al. 2014; Ward & Gersten, 2013).

### **Research Questions**

The following literature review will focus on the impacts of suspension and alternative interventions that may be used in-place-of or in-addition to traditional discipline. The author aimed to answer the following research questions: What are the impacts of traditional discipline on student outcomes? What alternatives options to traditional discipline exist? What are the impacts of the alternative options on student outcomes?

## CHAPTER II: LITERATURE REVIEW

The literature for this thesis was located through searches of Academic Search Premiere and PsychINFO. The list was limited by only reviewing peer reviewed articles that had an available full text. The key words used to search were, “positive school behavior intervention,” “school discipline impact,” “collaborative problem solving,” and “school behavior interventions.”

### **Traditional Discipline: Suspension and Expulsion**

Costenbader and Markson (1998) researched variables associated with students who have been suspended and student perceptions of those events. The study compared suspended to non-suspended students, and the students evaluated the effectiveness of suspension on addressing their behavior problems.

The study participants were in grades seven through ten from four schools: urban middle school, urban high school, small-town middle school, small-town high school. Seven-hundred fifty participants completed surveys, and one-hundred thirty were eliminated because they were missing more than fifty percent of the question responses. Of the 620 included participants, 41 percent reported ISS or OSS in their school history; 112 reported ISS, 35 reported OSS, and 105 reported both ISS and OSS. The participants were 48 percent male, 55 percent high school students, 67 percent attended small-town schools, 50 percent White, 23 percent Black, 8 percent Hispanic, and 13 percent other. The urban middle and high schools were 56% Black, and the small-town middle and high schools were 28% Black.

The survey included 15 items and the student rating scale had 48 items. Participants completed sections on demographics, extracurricular activities, involvement with the legal



system, and history of suspension during the current school year. Participants who reported OSS or ISS completed an additional six-question survey to share the perception of the event. The questions addressed the class the behavior occurred in, the behavior that occurred, their feelings at the time of suspension, the degree suspension helped them solve their problem and ideas of other interventions that might help them solve their problems more effectively in the future.

The data showed that 56 percent of ISS and 64 percent of OSS were assigned to male participants, which is higher than the overall percentage of males for the group, which was 48 percent. Also, the non-suspended group was 60% female. Within the OSS group, 45 percent were Black, 18 percent were Hispanic, and 12 percent were White, which also does not align with the whole group demographics. Another pattern was that participants who were suspended were more likely to be involved with the legal system. Six percent of the non-suspended group had been involved with the legal system, in comparison to 14 percent of the ISS group and 32 percent of the OSS group. Also, participants from urban schools were more likely to have been suspended outside of school than small-town participants.

The most common suspendable offense was physical aggression, followed by talking back to staff and using profanity. The OSS group had higher reports of physical violence and weapon possession than the ISS group. Although OSS was more common in urban schools, small-town schools had more participants who received OSS for non-violent offenses.

Participants who were suspended reported two common feelings: angry or happy. Of all suspended participants, 19 percent felt their suspension helped them learn a lesson so they will no longer be suspended again. Twelve percent felt they learned a lot from the suspension, 36

percent felt they learned a little, and 67 percent felt they did not learn anything from their suspension that will help them solve their problem and avoid future suspensions. When asked to provide reasons for the suspension, participants reported: lack of self-control, failure to understand school rules, frustration with schoolwork, lack of interest in schoolwork, problems with substance abuse. Over 50 percent of participants reported taking more interesting or relevant courses would help them solve their problem and avoid future suspensions. Over 25 percent of participants shared that learning ways to respond to situations that led to suspension would help them solve their problem. The study draws attention to the need to include students in the problem-solving process so that students can feel like they are able to address their problems to avoid future school exclusion.

Raffaele Mendez (2003) conducted a study to discover predictors of student suspension rates and the effect of suspension on students' educational achievement and graduation. The researcher wanted to determine if different groups of students get suspended more often, what variables predict the rate of suspension in white and black 6<sup>th</sup>-grade students, how does the number of suspensions experienced by a 6<sup>th</sup> grader relate to school achievement, and does the effect of suspensions on achievement vary by race.

The study included students who entered Kindergarten in 1989 in Pinellas County, FL with projected graduation in 2002. The study followed 8,268 students from Kindergarten through 12<sup>th</sup> grade. The population was 79% white, 19% black, and 1.5% Hispanic.

The longitudinal study collected student surveys, teacher surveys, demographic information, standardized test scores, and suspension records from 2<sup>nd</sup> to 12<sup>th</sup> grade. The data

was compiled and analyzed to identify if any patterns were present in student exclusion and academic achievement.

The data showed Black males who received special education services and free and reduced lunch represented less than 5% of participants, but they were 24% of all students suspended 3-5 times in the 1995-96 school year, 48% of students suspended 6-8 times, and 56% suspended 12-14 times. In total, 66.37% of Black males who received free or reduced lunch and special education services were suspended at least once in 6<sup>th</sup> grade, while only 13.6% of Black males in sped who paid for lunch were suspended. Another finding was 44.12% of White males receiving free or reduced lunch, and special education services were suspended at least once, and 54.29% of White males who paid for lunch and were in sped were suspended. Black girls with free or reduced lunch, regardless of special education status, were suspended more disproportionately than any other demographic. The most suspensions for this student group occurred in 10<sup>th</sup> grade. The increase in suspension in the high school years may be due to the adoption of zero-tolerance policies that occurred when the participant pool was entering the 9<sup>th</sup> grade.

Raffaele Mendez stated her data showed the best predictor for future suspensions was past suspensions. Also, suspensions for this population correlated with poor academic performance and failure to graduate on time. It should be noted that the cohort decreased from 8,673 to 5,830 from 9<sup>th</sup> to 12<sup>th</sup> grade, which may be why a decrease in suspensions was seen following 10<sup>th</sup> grade because students dropped-out. The study does provide patterns in the data set that should be looked for in other populations in order to generalize the results.

Arcia (2006) conducted a longitudinal retrospective analysis on suspensions, achievement, and long-term enrollment status of students in a large, urban school district. The study aimed to answer the question, how does suspension impact student achievement? The analyses included a large urban school district with the following student demographics: 58% Hispanic, 29% Black, 10% White, 3% Other, and almost 3/4<sup>th</sup>s free-reduced lunch. Within the district, the study focused on 49,327 suspended students and a matched group of 42,809 non-suspended students, counter-balanced to reflect similar make-up of races and free/reduced lunch status.

The study occurred over three school years from 2001 to 2004. The suspension percentage was determined by comparing the number of suspended students to the number of students enrolled in October. Developmental scores for academic achievement were determined by looking at that increase in standardized test scores; academic gains were analyzed across years within each participant.

The initial analysis reviewed student suspension rates, suspensions per student per year, suspension length, and the maximum days of suspension for one student. Over the three school years, 15%, 15.3%, and 16.2% of students were suspended at least one time. The average number of suspensions per student per year was 2.2, 2.2, and 2.3 suspensions per school year. The average length of suspensions per year was 7.2, 7.2, and 7.3 days per suspension. The maximum number of days missed in one school year due to suspension by one student was 92, 92, and 102. Twenty-six percent of suspended students were suspended for more than ten days, and one percent were suspended more than 40 days in one school year. The analyses also revealed that student suspensions increased with age. Four times as many 6<sup>th</sup>

graders were suspended than 5<sup>th</sup> graders and the suspensions were more than four days longer than a 5<sup>th</sup>-grade suspension on average. The most common grade level suspended was 9<sup>th</sup> grade, representing 37% to 38% of the suspended population each year.

Academic analyses showed students without suspensions gained on average 198 points over three years, students with suspension in 1 school year gained 176 points, suspensions in 2 school years gained 168 points, and suspension in 3 school years gained 159 points. In addition to lesser gains, there was also a trend that students who received suspensions had lower achievement scores than students who did not receive suspensions prior to the suspension occurring, so the students who were suspended typically started with a lower score and then subsequently made fewer gains.

The final analyses looked at drop-out rates for students who were suspended in 9<sup>th</sup> grade. Of the students who were suspended 1-10 days during their 9<sup>th</sup>-grade year, 21% had dropped off three years later. Ninth grades suspended 11-20 days had a 32% drop out rate three years later, and those suspended 21 or more days had an a 43% drop-out rate three years later. Although the study only represents one school district, the correlation of suspension to lesser academic gains and increased school drop-out rate suggests that other school districts should review their data and consider alternative options to exclusionary discipline.

Achilles et al. (2007) studied predictors for exclusion for elementary students receiving special education services using the Special Education Elementary Longitudinal Study (SEELS) database. The SEELS database followed children from 2000 to 2006. The current study included 1,824 participants, age seven to 14-years, from the database. All participants had a special education label of EBD, LD, or OHD with a diagnosis of ADHD. The researchers

hypothesized that African American, male, and older participants with a disability label of EBD or OHD would have higher exclusion rates than participants with similar characteristics and a LD label. Participants who receive free or reduced lunch or lived in non-two-parent-homes were predicted to have higher rates of exclusion, as were participants with multiple school changes, low parent involvement, lack of extracurriculars, and those who attend urban schools. Finally, Achilles et al. (2007) predicted that participants who had later onset of disability services and interventions would have higher exclusion rates.

The data used from the SEELS database was collected from three parent interviews from 2000 to 2006 and participating school districts. The parents reported disability, history of exclusion, demographics, family structure, SES information, school setting (urban, suburban, or rural), number of school changes since Kindergarten, parent involvement, their child's school experience, parent satisfaction with their child's schooling, extracurricular involvement, age of disability onset, and if their child received early interventions. The schools provided additional demographic information. Of the 1,824 SEELS participants, only 723 participants were used for this study. Participants were excluded because they were missing data from their files.

The data showed that students with EBD and ADHD labels were suspended more than students with the LD label. It also showed African American students were excluded more than Caucasian students and males were excluded more than females. Other predictors for exclusion were receiving free or reduced lunch, multiple school changes, urban setting schools, participating in extracurriculars, and low parent satisfaction with schools. Facets of this data that were not predictors were non-two-parent homes, disability onset at a later age, no early

intervention, and lack of parent involvement. The data also showed that religious involvement was a predictor for a lower likelihood of exclusion.

The researchers also looked at how participants with specific labels differed. The results showed that older students were excluded more than younger for ADHD and LD labels, but this difference was not seen for participants with the EBD label. Also, in addition to African American, which was higher for all three labels, Hispanic participants with the LD label were more likely to be excluded. The best predictor for exclusion was low SES status.

This study revealed that there are many predicting factors within the category of special education. Students with certain special education labels in this sample were excluded more from school than other special education labels, as were students who were of low SES status and non-White.

Jacobsen et al. (2019) examined the rate of suspension and expulsion of children in urban elementary students. The data was pulled from the Fragile Families and Child Wellbeing Study. The study collected data on 5,000 participants born in urban hospitals between 1998 to 2000. The hospitals were randomly sampled within 16 cities, which were selected randomly from a list of 200,000 urban cities.

Parents and teachers reported on physical aggression (i.e., destroying things belonging to others and fighting) and exclusionary discipline. This data was then analyzed to assess the risk of exclusionary discipline by age nine, as well as variability by race. The analysis found that participants who were suspended and expelled were more likely to exhibit physically aggressive behavior. The suspended participants were also more likely to have a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD).

The schools attended by the participants were in urban communities. The schools had fewer economic resources, a higher percentage of Black students, and relied heavily on suspensions and expulsions as a disciplinary strategy. Eleven percent of the participants had been removed from school by age 9. When looking at the whole student population, one out of 25 non-black girls were suspended or expelled compared to four of 25 Black girls who were suspended. For boys, less than three of 25 non-Black boys were suspended compared to 10 out of 25 Black boys who were suspended. Based on this data, Black boys were three times more likely to be excluded from school than Hispanic boys and five times more than white and other race boys. Black girls were four times more likely to be suspended or expelled than Hispanic girls and six times more likely than white or other race girls.

The primary limitation of the study is that the data came from interviews. Parents and teachers may have been biased in their responses to student behavior. There may also be a misrepresentation of suspension data, as some parents may have only included out-of-school suspension days, omitting in-school suspension. Although the conclusions of this study are not conclusive, it does identify the pattern of race being a predictive factor for exclusionary discipline.

Theriot et al. (2010) conducted a study that looked at the likelihood of school exclusion in middle and high school students based on their last infraction of the previous school year. The study was done in a medium-sized school district in the southeastern US. The participants were all middle and high school students with one or more discipline incidents during the 2004-2005 school year. The district had 14 middle and 14 high schools in urban, suburban, and a few rural settings. About 13,000 middle school students and 16,000 high school students were



enrolled in the schools. The student breakdown by race was 81% Caucasian, 15% African American, and 2% Hispanic. Forty-one percent of the student population received free or reduced lunch and 13% qualified for special education services.

The study used data from school discipline records of the 2004-2005 school year. The student's last infraction of the year coded a 1 for exclusion or 0 for not excluded and other discipline. Exclusion included OSS and expulsion. OSS was defined as removal from school for ten days or less and remaining enrolled. Expulsion was defined as removal for more than ten days, and the student was unenrolled from the school. Other variables reviewed were: gender, ethnicity, special education, ELL, and previous OSS and ISS. The last offense severity was coded as zero-tolerance or violent offenses. Zero-tolerance offenses include alcohol and drug, weapons, assaulting a teacher or principal. Violent offenses were either fighting or violence. Data from the state's Dept of Education was used to determine: school type, total enrollment, percent of the population that was non-white, percent free or reduced lunch, ethnicity, and gender of principal.

The data showed 9,706 students had a recorded discipline incident during 2004-2005, which is 15% of all middle and high school students in the district. Students with at least one infraction were 62% male, 43% free or reduced lunch, and 73% White. Of the remaining 27% ethnicity, 86.6% were African American. The analysis showed the school community type, and principal ethnicity and gender were non-significant predictors for exclusion. The predictors that were statistically significant were African-American race, free or reduced lunch status, ELL status, and special education status. Theriot et al. suggested that student intervention and school-level intervention is required to meet student and school needs, specifically aligned with

these groups. These predictors cannot be generalized to greater populations outside of this sample without replication of these results.

Goran and Gage (2011) studied the relationship between language, behavior, cognitive ability, and academic performance for school-age students with disabilities. The study compared and contrasted students with Emotional Behavior Disorders (EBD) and Learning Disabilities (LD). The researchers hypothesized the following: students with greater language deficits will have more suspensions, student cognitive ability will directly correlate with academic performance, and students with the EBD label will contrast in the areas of language, academics, and past suspensions to students with the LD label.

The study reviewed data from a medium-sized Midwestern school district on students ages 5 to 14 during the 2008-2009 school year. The district served 17,419 students, with 2,316 receiving special education services. The study only included 142 students with EBD and LD labels. The students with the LD label represented 82.4% of the study population. Notable demographic variability was present in the EBD group; forty percent were female, 60% were Black, and 80% qualified for free and reduced lunch.

The students included in the study were administered the Clinical Evaluation of Language Fundamentals, Fourth Edition (CELF-4) and Cognitive Ability Test (CogAT) as part of their special education testing for the district. The expressive and receptive composite score from the CELF-4 was used to determine language skills, and the CogAT determined cognitive ability for the study. The district also administered the Missouri Assessment Program (MAP) to all students. The participants' MAP scores were pulled to determine academic performance. Additionally, discipline history was pulled from the school database. The data were coded as 0,

no suspension, 1, in-school suspension (ISS), and 2 for out-of-school suspension (OSS). Each score was then multiplied by the number of days that the participant was suspended. For example, a student with 3 ISS and 2 OSS days would receive a score of 7.

The analysis of the data showed no significant differences between LD and EBD cognitive ability, academic performance, or language ability. There were significant differences in the history of suspension. Language skills were not a predictor for suspension, but they did directly correlate with cognitive and academic abilities for both EBD and LD groups. Cognitive ability also positively correlated with the academic performance for both groups. The difference in the history of suspension showed EBD students were suspended at a higher rate than LD students. This was expected because students with the label of EBD have identified needs in the area of behavior and emotional processing. What was unexpected was that EBD students had similar deficits in the area of language skills, cognitive ability, and academic performance to the LD group. These patterns cannot be generalized to other school districts. It does draw attention to the need to consider language, cognitive, and academic deficits as possible functions of behavior. Future research should also review how suspension impacts EBD students who may be at risk for failure in these areas long-term since this study suggests that students with the EBD label may have higher suspension rates than other groups.

Hemphill et al. (2013) conducted a study that compared students in Australia and students in Washington state in the United States. The question the study aimed to answer was, is school suspension a predictor of youth non-violent antisocial behavior. For this study, antisocial behavior was defined as "Behavior that violates personal rights and societal rules and conventions for maintaining public order... physical violence, property offences, and illicit drug

use, to socially unacceptable behaviors such as truancy (Hemphill et al., 2013)." The researchers hypothesized that suspension is a risk factor for delinquency and future imprisonment.

The study included grades seven and nine students in Victoria, Australia, and Washington State, USA. There were 3,677 participants who participated with a 99% retention over 12-months. One thousand eight-hundred thirty-nine participants were from Victoria. The study, conducted in 2002, included 60 public and private schools. The included classroom within each school was randomly selected. The demographics of the participants from Victoria were: 90% Caucasian, 5% Asian, 5% of other origins. The participants from Washington State were 65% White, most common other ethnicities were Hispanic, Asian, and Native American. Participants living in low-income housing represented 22% of the sample.

The study administered surveys from February to June in Washington and May to November in Victoria 2002 and 2003. Surveys were completed by participants in class—absent students completed under the supervision of trained school personnel or via telephone with study staff. The survey measured attitudes towards antisocial behavior, poor family management, current alcohol, tobacco, and cannabis use, association with antisocial friends, and school suspension.

The analysis showed Victoria scored higher on attitudes towards antisocial behavior, poor family management, current alcohol use, and current tobacco use. Washington State scored higher on opportunities for pro-social school involvement, current cannabis use, association with antisocial friends, and school suspension. The most common reported antisocial behavior was stealing small items and being drunk or high at school. The hypothesis

of school suspension being a predictor of non-violent antisocial behavior was not supported by the data. Instead, it suggested that peer groups, family relationships, and school relationships were more influential. Although suspension is not directly associated with non-violent antisocial behavior, it does suggest that positive student outcomes are influenced by a positive peer, family, and school relationships.

School exclusion typically increases in grades six through 10. Students who are older are typically suspended at higher rates than younger students, but is there more going on in the middle school years? Greene and Ollendick (1993) studied if students with poor academic transition to middle school are impacted by other social-emotional difficulties. Poor academic transition was defined as dropping one grade point or more in social studies, science, math, English, and reading. The study conducted provided interventions to two different groups.

The first intervention was provided through the teacher and only addressed academics and classroom support.

The second intervention included the academic-teacher component and also supported the student's social-emotional needs through the school counselor. Green and Ollendick wanted to know what intervention was most effective for academics, and if the interventions impacted other social-emotional areas.

The study included 66 participants, 37 boys 29 girls, in 6th grade at four different middle schools in a southwestern Virginia county. Over 95% of the student population was White, mid-to lower-class.

Forty-two participants had a decrease in GPA from the end of 5th to the second grading period in 6th grade; the remaining 24 participants did not. The students with the decrease in

GPA were randomly assigned to one of two treatment intervention groups. The 24 students whose GPA remained stable were the control group.

Pre-treatment, student participants completed the Children's Depression Inventory (CDI), Revised Children's Manifest Anxiety Scale (RCMAS), Survey of Middle School Stressors, and Piers-Harris Self-Concept Scale. Teachers completed the Revised Behavior Problem Checklist (RBPC).

Archival data provided by the school included grades and standardized test scores. Throughout the intervention, student participants completed biweekly surveys to assess their perception of treatment, teachers completed weekly activity checklists to track student support and relationship, and guidance counselors completed a weekly report of student contact.

All treatment students were placed in two block courses where they had the same class with the same teacher for two hours. Block provided students informal counseling, monitoring, and encouragement about academics and personal struggles, including work completion, building relationships, behavior, and school expectations. Teachers met twice before treatment started with the project manager to learn how to conduct supportive activities that were done with treatment students at least twice a week during the fifth grading period (6 weeks). Teachers did not know if their students were in the full or partial treatment group.

Full treatment students were split into six groups of three to five students who met weekly during the 3rd and 4th grading period and biweekly during the fifth grading period. All six groups had the same leader, an advanced-level clinician with a graduate degree in clinical psychology. The groups discussed differences from elementary to middle, accepting great personal responsibility for academics, the importance of work completion, and how to interact

positively with peers and teachers. Additional topics discussed were: problem-solving training, strategies for asking for help, and organizational skills. Students set weekly goals with aligned incentives for meeting their goals. Parents of full-treatment students were contacted weekly and were also encouraged to conduct supportive activities at home. At the end of the treatment, student and teacher participants completed all the reports they completed pre-treatment.

Prior to the start of treatment, the control group had a higher GPA and self-esteem. They also had lower depression scale scores and academic pressure and stress scores. Teachers also reported fewer behavior problems for control group students when compared to students in the treatment groups. Participants in the full-treatment group improved .44 GPA points from pretreatment to posttreatment, and .32 points from pre-treatment to the 4-month follow-up. Participants in the partial treatment group showed .31 points growth from pretreatment to posttreatment, and a .23 GPA point increase from pretreatment to the 4-month follow-up. The full-treatment and partial-treatment had similar GPAs pretreatment and at the 4-month follow-up. The only significant difference between the full and partial treatment groups was the full-treatment group scores significantly lower scores on the depression scale from pretreatment to posttreatment and pretreatment to 4-month follow-up, while the partial treatment group showed no significant change in depression score scales. The study's results showed participants who received the academic intervention improved academically, and improvements in social-emotional areas required a separate intervention that specifically addressed that area in order to show improvement. The academic intervention did not improve the social-emotional areas. It cannot be concluded in the academic intervention or

social-emotional intervention for full-treatment participants impacted the academic improvement or if the combination of support was needed to achieve that result. It should be noted that in this study, students who were not previously identified as at-risk academically were labeled as at-risk after completing two of six grading periods in their first year of middle school. Future longitudinal research should focus on how targeting social-emotional and academic areas during the middle school transition year impacts school exclusion and office discipline referrals.

### **Positive Behavior Interventions and Supports**

Bradshaw et al. (2007) researched the effects of PBIS on school climate and how the fidelity of implementation impacted the outcomes of PBIS in schools. The study was a randomized trial conducted from 2002 to 2007. Thirty-seven public elementary schools from five districts in Maryland were included. The majority of staff in each school displayed a willingness and commitment to the PBIS program adoption. Twenty-one of the schools were in the PBIS intervention condition, and sixteen were in the comparison condition and committed to not implementing PBIS for the duration of the study. Half of the participating schools received Title I support. The community location of the schools was 48% suburban, 41% urban, and 11% rural—no significant demographic differences between treatment and non-treatment groups.

Data was collected from 2,596 staff members; 1,437 were general education teachers, and 1,159 were support staff (school psychologists, counselors, teaching assistants, office staff, and resource teachers). The staff were 91.29% female, 86.56% Caucasian, and 13.44% African



American. The staff age breakdown was 32.05% in their twenties, 23.92% in their thirties, 23.15% in their forties, 18.10% in their fifties, and 2.77% were 60 or older. The average number of staff per school was 68.49. Staff characteristics were collected from a staff questionnaire, and school characteristics were provided by the Maryland Department of Education.

The study was a randomized control effectiveness trial of school-wide PBIS in elementary schools. Each school in the PBIS group received training on how to implement the intervention program. PBIS teams of five to six teachers and administration attended a 2-day summer training. PBIS behavior support coaches also provided ongoing support and assistance to schools throughout the study. Participants in the study completed the Organization Health Inventory for Elementary Schools (OHI) to collect data on institutional integrity, staff affiliation, academic emphasis, collegial leadership, and resource influence. Participants responded on a 4-point scale, and the OHI score was the average of the individual responses. The School-Wide Evaluation Tool (SET) was used to assess PBIS implementation quality. The SET was completed by an external observer. The OHI and SET were completed in July before the initial training and annually at the beginning of May. Over the five year study, 80 to 86 percent of eligible staff participated annually.

The OHI data showed significant positive intervention effects on resource influence, staff affiliation, and academic emphasis. There was no significant effect on collegial leadership or institutional integrity for the intervention group. The SET data showed that no schools met the implementation fidelity of PBIS at the start of the study. The comparison group did have 6.3 percent of schools implement PBIS with fidelity years one, three, and four, and 18.8 percent

in year two. The intervention group had 66.7 percent fidelity after year one, 85.7% fidelity after year 2, 95.2% fidelity after year 3, and 100% fidelity after year four.

The data suggests that formal training and coaching for PBIS does allow schools to adopt and implement the PBIS intervention with fidelity, but the amount of time it takes a school to develop the tools and skills vary. Also, schools that had no formal PBIS training were able to implement PBIS with fidelity, but at a significantly lower rate than the schools with training. The OHI data also showed that for these schools, school climate did improve, according to school staff. Staff reported that they felt the necessary resources were available for them to implement PBIS and reach academic goals. Staff also felt that the academic emphasis set realistic goals that were high and attainable. Staff also reported that PBIS improved the sense of trust and confidence within their school teams. This study did rely on teacher report, which is subject to bias. The data also only represents the participant schools and cannot be generalized without replication of results in the various school contexts.

Ward and Gersten (2013) studied the Safe and Civil Schools (SCS) approach to SWPBIS. The SCS program focused on establishing settings, structures, and systems to facilitate positive behavior change. The researchers specifically wanted to determine if SCS training improved the development and enforcement of school discipline policy and improved student behavior and academic achievement.

The study included 32 elementary schools in a large urban school district. The schools were randomly assigned to treatment and control groups. The district's student population was 90% free or reduced lunch and 87% minority students. There were negligible differences between treatment and control schools.

The study used a randomized experimental design. First, school leadership teams were formed, including one administration staff, three general education teachers, one special education teacher, and two other (i.e., specialists, paras, bus drivers). The leadership team attended seven days of training by the SCS consultant. The team learned how to collect data through observation of common areas (i.e., playground, hallways, etc.), ODRs, and results from safety and climate surveys. The team was also taught how to train the rest of the building staff in PBIS. The training sessions occurred in May, June, October, and February. Treatment schools received training from May 2008 to 2010, and control schools started to receive training in May 2009. The student behavior and achievement data were pulled for both schools from 2007 to 2010. Other data was collected on PBIS implementation fidelity via the BoQ, and student behavior was measured through staff reports via the California Healthy Kids Survey (CHKS).

The results showed that PBIS systems were consistently being used in both treatment and control schools by the end of the year with two with 68% fidelity based on BoQ scores. Also, twice as many staff reported that they felt a consistent school-wide plan with clear expectations was in place from before implementing SCS to after implementing SCS for two years. Additional teacher report through the CHKS showed the following reductions in problem behavior: 32% decrease in bullying, 67% decrease in classroom disorder, and 21% decline in disrespectfulness and defiance. The only significant difference was in classroom disorder, such as disruptive behavior and on-task behavior. Additionally, students were 22% less likely to report being hit or pushed at school. Suspension data showed a 17% decrease in suspensions at the end of year one and a 22% decrease at the end of year two when compared to the year

prior to implementing SCS. The data also showed student academic performance on statewide tests improved 14 points in math and 9 points in ELA; these changes occurred district wide so likely not due to SCS. The implementation of PBIS in the schools in the study did positively impact staff perception of expectations and behavior management systems. It also decreased the number of suspensions and classroom behaviors. These results cannot be generalized without further replication.

Gage et al. (2018) researched the effect of PBIS implementation in schools on the number of discipline incidents, ISS, and OSS and variation in effectiveness compared to implementation fidelity. The study included all elementary and middle-level public schools in the state of Georgia during the 2015-2016 school year. The school demographics, discipline, and PBIS implementation data were provided by the Georgia Department of Education.

The study included 1,755 schools with an average student enrollment of 548.5 students. The student population was 40.3% White, 39% Black, and 13.8% Hispanic. Sixty-eight and a half percent of students qualified for free or reduced lunch and twelve percent received special education services. The Georgia Department of Education provides district-level planning, school team training, tech assistance, and ongoing coaching on PBIS. Benchmarks of Quality (BoQ) are used to assess the PBIS implementation fidelity. Schools are given one of the following statuses based on their implementation fidelity percentage: installing below 70%, emerging 70-85%, operational above 85%. The study only included emerging and operational to ensure PBIS was being implemented with fidelity. The comparison group was data for all public elementary and middle school data from the Georgia department of education.

The BoQ was a 53-item scale completed to determine the percent of implementation fidelity. This was completed by the PBIS school team and external coach. Academics were measured in the areas of ELA, math, science, and social studies using the Georgia Milestone Assessment System. Behavior incidents, student demographics, ISS for at least half of a school day, and OSS were recorded by the Georgia Department of Education.

The data analysis showed that PBIS schools had statistically fewer ISS and OSS exclusions from schools than schools that were implementing PBIS with 70% or less fidelity. The PBIS schools had 55.1% fewer OSS, 79.8% fewer ISS, 58.9% fewer disciplinary incidents than the comparison schools. There were no statistical differences between installing and operational PBIS schools. In this data-set implementation fidelity had a large effect on student behavior incidents and exclusion in elementary and middle schools. Replication of these findings in different contexts should be done before these findings can be generalized.

Gage et al. (2020) completed a replication study of their Georgia study from 2018. The study looked at the effects of PBIS on OSS, expulsions, and effects of implementation fidelity. The study included all California public schools from the 2016-2017 school year. The data was provided by the California Department of Education. PBIS implementation fidelity was rated by the CA PBIS Coalition, which used the following category labels: bronze, silver, gold, platinum. Bronze schools completed the Tiered Fidelity Inventory (TFI) and the online application. Silver schools implemented PBIS with 70% or greater fidelity on one or more tiers of the TFI, which was completed with an external coach, and they submitted the online application. Gold schools implemented Tier 1 PBIS with 70% or greater fidelity and 70% or greater on Tier 2 or 3 according to their completed TFI. They also submitted the online application and 100 words or

less about their school's PBIS effort. Platinum schools implemented all three tiers with 70% or better fidelity, submitted rates of OSS and office discipline referrals (ODRs), sustained or improved positive academic trends, completed the online application, and submitted a 100 or less word statement about their school's PBIS effort.

The schools initially reviewed for inclusion in the study were 60% elementary schools with an average enrollment of 622.6 students. The student demographic averages were 25.7% white, 5.9% African American, and 53.4% Hispanic. Twenty-three and two-tenths percent of the student population qualified as ELL, 12.2% received special education services, and 62.6% qualified for free or reduced lunch. The schools had the following PBIS implementation fidelity classification: 17 platinum schools, 91 gold schools, 559 silver schools, and 222 bronze schools. The final analysis included 98 gold and platinum schools with available OSS and office discipline referral data. These schools were selected to ensure PBIS was implemented with fidelity.

The TFI measured fidelity based on three tiers. Tier 1 was universal interventions for all students, Tier 2 was targeted interventions for 10 to 15 percent of the student population, and Tier 3 was an intensive intervention for five to 10 percent of the population. The TFI was completed with an external PBIS coach. Other categories that were considered during the analysis in addition to PBIS implementation fidelity were school type (regular or alternative), school-age level, urbanicity, and Title I status. It should be noted that the California Assessment of Student Performance scores, which were used to review student academics, were pulled from the 2015-2016 school year since the 2016-2017 scores were not yet available.

In California, students can be excluded for: cause, attempt, or threaten physical harm, violence, firearm or weapon possession or use, unlawful possession or sale of controlled

substances, robbery or extortion, damage to school property, theft, tobacco possession, committing an obscene act, disrupting school activities (excludes K-3), sexual assault, threatening a witness in a disciplinary proceeding, hazing, and bullying. The suspension data collected gave a total of suspensions per school and did not specify if multiple suspensions were given to one student. The data did identify if students had been suspended or expelled, but it did not separate ISS and OSS.

The data showed schools in the treatment group had fewer suspensions than the comparison schools, and no difference in expulsion. The difference in suspensions was found to be statistically significant. When the Gold and Platinum schools were separated, there were no statistically significant differences between Gold schools and comparison schools; there was a significant difference between Platinum and comparison school suspensions.

The results of this study in California were consistent with the findings in Georgia. Schools that were implementing PBIS with high fidelity had fewer suspensions than schools that were not implementing PBIS with fidelity.

Nocera et al. (2014) studied the effect of positive behavior supports as part of a school improvement process on student behavior and academic achievement in comparison to the traditional exclusionary reactive approach. The study included one middle school with 750 students in 7<sup>th</sup> and 8<sup>th</sup> grade. More than 50% of the student population qualified for free-reduced lunch, and 40% of the student population represented minority groups.

The study occurred during the 2007-2008 and 2008-2009 school years. Seventy-five 7<sup>th</sup> grade and 75 8<sup>th</sup> grade students participated in the student during each school year, totaling 300 students. The study used a mixed methods approach, compiling quantitative and

qualitative data. The qualitative data was collected from transcripts of administrative and teacher interviews. Quantitative data was collected from the school climate survey completed by students. The survey in 2007 included 47 questions. The data from this survey informed the school improvement plan and was used to develop the goals for academic achievement and school climate. The created positive behavior plan looked to increase parent involvement at school. The plan utilized a tiered support system. Tier I supports and interventions were provided to all students. Tier II was received by 10-15% of the students who were identified as at-risk for problem behavior, so they received specialized supports. Tier III included 5-10% of the students who received support and intervention to address chronic behavior problems.

The implementation of the positive behavior improvement plan was implemented by all teachers in the school. The principal ran in-service with teachers on logical and natural behavior consequences. School staff operated under the belief that behavior continues because it serves a function and replacement behavior needs to be taught. Teachers also attended a two-day seminar on improving school climate and support student behavior and achievement. The Tier I supports utilized in the plan included: all students were taught specific behaviors that met each student's expectation, students were shown how expected behaviors looked in each school environment (i.e., lunch, classroom, etc.), and positive rewards were given to students who performed positive behaviors. The school also had a streamlined approach to respond to problem behaviors. First, teachers offered an opportunity for the student to correct the unwanted behavior before it became a problem and conferenced with the student to review behavior expectations before issuing detention. If not resolved, the parent was contacted about detention, and a parent meeting followed detention to avoid



future problems. If the behavior continued, then the student received a behavior referral to the office. This plan ensured that the teacher, student, and parent were collaborating to resolve the problem behavior before involving administration.

For Tier II and III interventions, teachers were provided additional PD on conflict cycle, Functional Behavior Analysis (FBA), and Positive Behavior Intervention and Supports (PBIS). Tier II conflict cycle training focused on stressful incidents, student feelings, student behavior, and adult reactions that create power struggles between students and teachers. Staff was given strategies to avoid negative reactions to end the conflict cycle to avoid power struggles. Tier III FBA and PBIS training taught teachers how to define the behavior, collaborate with others, collect baseline data, develop a hypothesis, determine reinforcement, and plan interventions. Behavior Intervention Plans (BIP) for students with Tier III interventions were developed from the FBAs, and included strategies for reducing behaviors and meeting needs in pro-social ways. A specific area of focus for all student interventions was on increasing student academic success to avoid behavior caused by academic failure.

Norcera et al. (2014) analyzed the number of office discipline referrals, number of school suspensions, number of behavioral infractions, pre-post results of a school climate survey, and faculty interview data. The results showed referrals declined by 36% from 2007 to 2010, suspensions declined by 39%, and suspension of special education and minority students also reduced. It was noted that suspension of special education and minority students still runs at a disproportionate rate to typical Caucasian students. In addition to decreased referrals and suspensions, documented classroom problem behaviors decreased by 40% from 2007 to 2009. The behaviors with the greatest improvements were cutting class and low-level infractions that

are responsive to Tier 1 interventions. Tier I students were the only students who responded positively to the reward system that worked for the majority of students. The reward system was ineffective for Tier II and Tier III students.

Teachers and administration reported that peer and administrative leadership was imperative to the success of the plan. Consistency of discipline empowered students and teachers because the 5 step plan was predictable and didn't lead with a call home or office referral. Teacher-student conference was perceived by the teacher as a key piece to success.

The study only represented one middle school's outcomes after implementing a positive behavior plan building-wide over two school years. The sample size and convenience of the sample limit its generalizability, but it suggests that schools may benefit from shifting away from traditional exclusionary discipline practices towards positive systems that require teachers, students, and parents to collaborate and problem-solve through problem behaviors before involving administration.

Freeman et al. (2015) studied the direct and indirect effects of PBIS on high school dropout rates. The researchers specifically aimed to determine if PBIS implemented with fidelity could address dropout risk factors, thus reducing high school dropout rates.

The study used data from 600 to 800 typical high schools from PBIS Center's dataset from 37 states across seven years, 2005 to 2012. Public data from the state department's website was also included. The high schools had an average enrollment of 1,080 students. The demographic and community breakdown averages were: 40% free or reduced lunch, 33% minority, 22% urban, 21% suburban, 13% large small-towns, and 13% rural area.

The study was a quasi-experiment interrupted time series design. Implementation fidelity of PBIS was determined based on BoQ and SET scores. A BoQ score of 70% and an 80% SET score was considered implementing with fidelity. The schools were coded based on their BoQ and SET scores. Schools that met implementation criteria were labeled the implementation fidelity group, partially meeting on the SET or BoQ resulted in a partially implementing label, and schools with a SET score below 40 or BoQ score below 35 were considered not yet implementing schools. Data was pulled from the state department of education on dropout rate, student attendance, and academic performance on state standardized tests.

The results showed that higher attendance correlated with fewer dropouts and higher standardized test scores. Schools that were implementing PBIS with fidelity had a statistically significant positive effect on student attendance, especially schools with large minority populations. Freeman et al. also noted that schools that implemented PBIS with fidelity over many years continued to see small decreases in high school dropout rates. There were no significant effects found for schools that were partially implementing or not implementing PBIS with fidelity. These are not causal findings, but it does draw attention to the impact of student attendance on dropout rates and academic performance. In this study, implementation of PBIS with fidelity aligned with improving student attendance.

Eraldi et al. (2019) conducted a pilot study to assess tier one and two implementation outcomes for PBIS in urban elementary schools. The researchers assessed if tier 1 PBIS interventions reduced ODRs and if tier 2 interventions decreased diagnostic severity for children with, or at-risk for, internalizing and externalizing emotional and behavioral problems.

The study included two Kindergarten through eighth-grade public schools in large cities in Northeastern USA. The study was conducted over three years. School A had 648 students: 75% Latino, 18% AA, 1% White, 1% Asian, 5% Other. School B had 1,134 students: 65% Latino, 16% AA, 11% Asian, 4% White, 4% other. One-hundred percent of both schools were eligible for free or reduced lunch. From the two schools, 29 parents, 26 school staff, and 23 students completed acceptability surveys. All students received tier one interventions, and 114 students participated in one of the three tier 2 interventions over the three years. There were 14 groups for students in grades four through six, and 15 groups were made for students in grades seven and eight. Four masters-level school counselors and four graduate students in psychology conducted the tier two intervention groups.

The tier 2 evidence-based interventions included: Coping Power Program (CPP) for externalizing behaviors, Friends for Life (FRIENDS) for anxiety symptoms, and Primary and Secondary Control Enhancement Training (PASCET) for depression symptoms. The interventions each used demonstration, role plays, exposure, and relaxation.

Doctoral-level psychologist and masters-level school psychologist ran two-day training with school leadership teams (professionals, paraprofessionals, and a parent) on tier one PBIS intervention. Consultants attended monthly school leadership meetings to assist the team in using data to evaluate tier 1 plan. Similarly, Tier 2 counselors attended an initial training workshop and had follow-up consultations. Also, a one-and-a-half-day workshop was completed on each program conducted by the research team. The primary investigator and two postdoctoral fellows in clinical child or community psychology did weekly consultation with the school counselors for 45 minutes to review data and plan the next group intervention

session. The tier 2 groups were run by a counselor and a research team member. The schools began implementing tier 1 interventions in September of year one, and the tier 2 interventions began in January of year one. Tier two interventions included twelve 45 minute sessions conducted during lunch time.

Consultants used the School-wide Evaluation Tool (SET) to the implementation fidelity of tier one interventions each year. Total ODRs were recorded for each year to determine the change in discipline referrals. Implementation fidelity for tier 2 sessions was done by independent coders who rated recorded intervention sessions using the Fidelity Checklist developed for the study. Data was also collected from tier 2 parents at baseline and posttreatment. Parents of tier two participants completed the NIMH Diagnostic Interview Schedule for Children, Computer Version, 4<sup>th</sup> Edition (NIMH C-DISC-IV), which was used to determine disorder diagnoses. Parents also completed the Interference Thermometer to determine the degree each disorder impaired the child's functioning. Students who scored positive or intermediate for externalizing behaviors on the NIMHC-C-DISC-IV and IT scale were assigned to CPP, positive and intermediate anxiety disorder were assigned to FRIENDS, and positive and intermediate depressive disorder were assigned to PASCET.

The results of the study showed children, parents, and teachers rated CPP, FRIENDS, and PASCET as acceptable for all components on the acceptability survey. The SET score for tier one implementation fidelity showed both schools met fidelity criteria for years two and three. Tier 2 intervention group fidelity was 88% for CPP, 9 87% for FRIENDS, and 94% for PASCET. The ODRs decreased from year 1 to year 3 for both schools. Diagnostic severity also showed significant changes for intermediate diagnosis students who are at-risk. There were no

significant improvements for positive diagnosis students. This makes sense because tier two interventions are designed for at-risk students and are not expected to be effective interventions for high-need students. The research data showed that PBIS intervention implementation coincided with a decrease in ODRs, and students who were identified as at-risk for externalizing behavior, anxiety, and depression reduced their level of risk from pre-intervention to post-intervention based on parent feedback.

### **Collaborative Proactive Solutions**

Greene et al. (2004) conducted a study to determine the effectiveness of Collaborative Problem Solving, now referred to as Collaborative Proactive Solutions (CPS), on the behavior of children with Oppositional-Defiant Disorder (ODD) in comparison to Parent Training (PT) programs. ODD is defined as a "recurrent childhood pattern of developmentally inappropriate levels of negativistic, defiant, disobedient, and hostile behavior toward authority figures (Green et. al, 2004)." The two programs work with parents and children. Their primary contrast between PT and CPS is CPS focuses on adult-child problem solving, while PT teaches parents how to deliver directives and respond to behavior in ways that motivate their child to comply. To further explain, CPS has the parent and child work together to identify problems that have occurred and work to identify solutions that are agreeable to both parties. This planning lays out a previously agreed-upon framework for the parent and child to follow if a problem situation arises. PT focuses on how parents respond to non-compliance and are more reactive than CPS.

The study included 50 children with ODD, ages 4 to 12 years, who were randomly assigned to the CPS and PT groups. For every three participants assigned to CPS, two were assigned to PT. By the end of the study, 3 participants dropped, so 28 CPS and 19 PT participants completed the treatment. Participants included in the study were clinically referred and met the following criteria: ODD diagnosis, no Conduct Disorder diagnosis, partially met criteria for juvenile bipolar disorder or major depressive disorder, had an IQ of at least 80, and were not actively suicidal or homicidal. The sample was primarily White with four Black and one Asian American. Eighty percent of the participants who completed the treatment also completed the 4-month post assessment, 25 CPS, and 16 PT participants.

To determine participant eligibility, a phone diagnostic screening, followed by a full diagnostic interview, was completed. The Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Epidemiologic version was used to assess child participant eligibility. Cognitive ability was determined by Block Design and Vocabulary subtests of the Wechsler Intelligence Scale for Children-Revised. The screening was conducted by raters with an undergraduate degree in psychology, and they were trained to high levels of inter-rater reliability. One hundred seventy-two children were screened and 50 met all criteria.

The PT group received Barkley's (1997) 10-week behavior management program. The treatment discussed and educated parents about causes of their child's defiant behavior, instructed parents on giving their child positive attention through a special time, trained parents to use attending skills to increase their child's compliance, increased effective parent commands, implemented a contingency management program, used time-out procedures, taught how to manage child's behavior in public, and used daily school-home report card. The

treatment primarily provided instruction to parents on how to manage their child's behavior with the intent of avoiding possible behavior triggers and responding to the behavior effectively.

CPS treatment aimed to help adults understand cognitive factors that contribute to aggressive outbursts, including emotion regulation, frustration tolerance, problem-solving, and adaptability skills, and three basic strategies for handling unmet expectations: the imposition of adult will, collaborative problem solving, and removing the expectation. CPS recognized the impact of the three strategies on adult-child interactions and aimed to coach parents and children to become proficient with collaborative problem solving to resolve disagreements and defuse conflicts to reduce aggressive outbursts. CPS treatment was 7-16 weeks, with a mean length of 11 weeks. The treatment was attended primarily by parents. CPS treatment included: identified what contributes to noncompliant behavior, created a user-friendly environment, described implementation of the collaborative problem-solving framework, provided medication education, improved family communication, and provided cognitive-skills training. All clinicians for both treatments were doctoral-level clinical psychologists. Two clinicians delivered PT, and four delivered CPS. Blind rater listened to 20% of tapes to determine consistencies of two treatments across sessions.

The two treatments varied in their primary focus. PT focused on behavior, and CPS focused on cognitive-behavioral therapy. The clinicians had weekly supervision from the primary investigator to ensure implementation fidelity of the treatments. No medications were prescribed or administered to the child participants during treatment. Child participants were permitted to continue medications they were on prior to joining the study. Parents reported



medication used weekly to track the change in dosage or termination of medication that occurred during treatment.

Other measures that were completed by the parent included: parent-child relationship inventory (PRCI) pre-and post-treatment, Parenting Stress Index (PSI) completed pre-and post-treatment, parent domain, child domain, and the ODD rating scale (ODDRS) completed pre-, post-, and four months post-treatment. Therapists complete the Clinical Global Impression (CGI) post-treatment and by parents at four months post-treatment.

Pretreatment measures indicated no significant differences between PT and CPS groups in demographics, cognitive ability, rates of diagnostic comorbidity, and medication. The CPS group reported significantly more medication adjustments during treatment. The majority of children in both conditions had two or fewer changes in medication. More medication changes in the CPS group may be due to medication-education component. Medication changes were included as covariant in the final data analysis.

CPS treatment group showed significant improvement on the ODDRS from pre to post and pre to 4t month. Both PT and CPS showed large effect sizes based on ODDRS pre to post-treatment. The pre to post-treatment results showed CPS made 46% clinically significant improvement, and PT made 37% improvement. The pre to 4-month post-treatment results showed 60% improvement for CPS and 37% improvement for PT clinically significant improvement. The PSI for the CPS group showed significant improvement in one parent domain, competence, and three child domains, distractibility-hyperactivity, adaptability, and reinforces parent. Borderline significant improvement for the CPS group occurred in the mood domain. The PCRI showed significant improvement in limit-setting and communication and

borderline significant improvement in autonomy for the CPS group. The variance in results from pre to post-treatment and pre to 4-months-post-treatment suggested deterioration in effectiveness for the PT group and improvement for the CPS group. The CPS group also showed greater improvement than PT on CGI pre to post-treatment.

The results suggest that PT and CPS are both effective treatment methods for improving child behavior in children with ODD. The data suggest that CPS is the more effective method long-term, as it showed to increase in effectiveness over time, while PT remained stagnant from post-treatment to 4-months post-treatment.

Ollendick et al. (2016) conducted a similar study that compared the effectiveness of Parent Management Training (PMT), Collaborative and Proactive Solutions (CPS), and waitlist control condition (WLC) for children with ODD. The researcher's predicted that PMT and CPS will be more effective than WLC, PMT and CPS will be comparable, comorbid ADHD would produce fewer positive treatment outcomes, but anxiety disorder (AD) would not have an effect, and older children, males, and low SES participants will have fewer positive treatment outcomes.

The study was conducted in rural southwest Virginia. It included parents who had kids with ODD who were referred by a mental health professional, physician, school personal, or recruited through ads in local papers and on local tv. Two-hundred fifty-seven kids were screened via phone for ODD. One-hundred sixty-four met the criteria via phone and were then confirmed through a comprehensive in-person assessment, which also measured comorbid disorders. The children who met the criteria were seven- to 14-year-old with ODD. Ninety-nine percent of the participants had a comorbid disorder, and 83% had a second comorbid disorder.

A majority of the comorbid disorders were ADHD or AD: generalized anxiety, social anxiety, or separation anxiety. The final study included 134 total participants. Of those participants, 25% were on stimulant medication for ADHD, 8% were on a non-stimulant ADHD medication, 4% were on an antipsychotic/bipolar medication, 3% were on an antidepressant medication, 3% were on an anti-anxiety medication, and 1% was on an antiseizure medication. Participants were excluded if their child had a cognitive disorder, autism spectrum disorder, psychotic disorder, intellectual impairment, or current suicidal or homicidal ideation.

Ollendick et al. (2016) randomly assigned the participants to groups: PMT, CPS, and WLC 6-weeks. Families of kids in the WLC group who continued to qualify ODD after six weeks were randomly assigned to the PMT or CPS group. The children were assessed at the end of the treatment and six months post-treatment. Two clinicians were assigned to one family per assessment. The clinicians were supervised by research assistants and graduate students in a clinical psychology APA approved clinical scientist doctoral program, or they were a postdoctoral fellow. All clinicians and supervisors were trained to ensure the reliability and validity of data collection. No assessment clinicians served as therapists for participating families.

To start the study, there were 60 CPS, 63 PMT, and 11 WLC participants. At the one-week follow-up, all WLC's were randomly assigned, with four going to PMT and seven to CPS. Of the original groups, 43 CPS participants and 46 PMT participants remained in the treatment. At the 6-month follow, 27 CPS and 28 PMT participants remained.

The study used the Peabody Picture Vocab Test, fourth edition, and Expressive Vocab test, second edition to gather expressive language ability at pretreatment. The Anxiety

Disorder Interview Schedule (ADIS) for DSM-IV child and parent versions were videotaped when administered at the pretreatment and six-month follow-up. The Clinical Global Impression-Severity was completed by the same clinician as the ADIS to rate overall behavior impairment. The Disruptive Behavior Disorders Rating Scale was completed by parents at each assessment, and the Behavior Assessment System for Children – Second edition: Aggression scale was also administered at each assessment.

The PMT treatment group was provided by six therapists for nine consecutive weekly sessions with parents and one additional session four weeks after the last session. The program was modified to include the children in sessions so the parents could practice skills they were learning prior to implementing them at home. Each session started by stating the goals of the session, and printed handouts were provided to the parent. PMT aims to educate parents about the causes of defiant and noncompliant behavior. PMT instructs parents on positive attending through the use of special time and trains parents to use attending skills to increase compliant behavior. The goals of PMT are to increase the effectiveness of parental commands, teach parents to implement a contingency management program, use time-out procedures, manage child behavior in public places, and use daily school and home report cards to consistently manage child behavior. The PMT therapists received 4 hours of training prior to the start of treatment and were supervised in each session.

The CPS treatment group included eight therapists who helped parents and children use problem-solving methods independently. The number of sessions was the same as PMT. CPS focuses on training parents to view their child's behaviors as manifestations of lagging skills.

The parent and child then work together to identify the problem and come up with mutually agreeable solutions.

The study results showed PMT and CPS were more effective than the WLC treatment. The effectiveness of PMT and CPS was equivalent, with nearly 50% of the participants being diagnosis free at post-treatment. Both PMT and CPS were more effective for younger than older children. The participants of this study were primarily middle-class Caucasian families, so the generalizability is limited. The effectiveness of PMT and CPS may only be seen in educated Caucasian families and limited to families with children who have an ODD diagnosis.

Martin et al. (2008) examined patterns of restraint and seclusion before and after implementing CPS with aggressive children and adolescents. The participants were 755 patients at an inpatient psychiatric facility from 2003 to 2007. The participants' median age was 11. Sixty-three percent were male, 52% White, 25% Black, 23% Hispanic, and 52% were Medicaid covered.

The research team conducted a prospective study on data collected at a psychiatric inpatient unit for school-age children at Yale-New Haven Children's Hospital. The 15-bed facility averaged 198 admissions per year that lasted an average of 29 days over the course of the study.

Staff wide training occurred in 2005 on CPS implementation. The staff team first went through a three-hour overview, followed by 90 minutes sessions twice per week to discuss specific patients and their challenging behaviors. The staff team included: 25 nurses, 35 counselors, two psychiatrists, one psychologist, three school personnel, and six trainees.

From 2003 to 2007, the average stay decreased two days per year, from 35 to 22. The data indicated 2,230 restrictive interventions occurred during the study, 559 restraints (25%) and 1,671 seclusions (75%). Approximately five percent of patients accounted for 50% of restrictive events. The data showed boys were more likely to be restrained and secluded than girls, older age participants were more likely to be restrained and secluded than younger, and patients who were covered by Medicaid were more likely to be secluded. The largest difference when comparing data was Black participants were more than four times as likely to be restrained or secluded as White participants. From pre-CPS implementation to post-CPS implementation, the number of yearly restraints decreased from 263 to seven, and seclusions decreased from 432 to 133. The duration of restraints decreased from 16 plus or minus 10 hours per month to .3 plus or minus .5 hours per month. The length of seclusions dropped from 15 plus or minus 6 hours to 7 plus or minus 6 hours per month. Staff injuries also decreased from 55 in 2003 to 29 in 2007. The data suggests that CPS treatment decreased the need for staff to use restriction and seclusion with patients in an inpatient psychiatric unit.

Epstein and Saltzman-Benaiah (2010) studied how to adapt Collaborative and Proactive Solutions (CPS) to work in a group setting for parents and children with Oppositional Defiant Disorder (ODD) and Tourette's Syndrome (TS). The study subjects were parents of children under the age of 12-years who meet the criteria for TS, another tic disorder, or ODD. All of the children were patients in Tourette Syndrome Neurodevelopmental Clinic at University Health Network and were assessed by a clinical psychiatrist. The study excluded children with conduct disorder (CD), current suicide/homicide, history of brain injury/neurological conditions, or a

full-scale IQ below 80. Families with previous CPS treatment or psychosocial interventions were also excluded. Eighteen families were screened, and fifteen met the study's criteria.

To start, participants completed diagnostic interviews using ODD and CD subsections of Schedule for Affective Disorders and Schizophrenia for School-Aged Children – Present and Lifetime Version. The three questionnaires were completed at the intake procedure (baseline), pre-intervention, post-intervention, and 2-month follow-up. Participants also had a telephone interview at pre-intervention, post-intervention, and 2-month follow-up. Raters, who were doctoral-level clinical psychologists, additionally administered Oppositional Defiant Disorder Rating Scale and the Clinical Global Impression to the participants.

The participants were separated into two separate treatment groups who participated in the treatment at different times. The first group had 11 parents and seven children. The second group had eight parents and five children. Parents were given manual binders, divided into seven sections. The binders included session outlines, written material of new concepts, practice exercises, and homework sheets. The curriculum was designed to help parents understand children's behavioral difficulties and emotional dysregulation are not intentional, identify contributors to the development of noncompliant behavior, environmental changes to prevent difficulty, understand three basic parenting strategies – Plan B, become comfortable with Plan B (empathy, define the problem, invite the child to problem-solving), and recognize challenges that interfere with effective parenting. Clinical psychiatrists worked with participants through the treatment with the goal of helping the parent participants develop the skills necessary to use CPS independently with their children. Participants completed treatment sessions, work through materials in the binder, and completed homework. At the conclusion of

the treatment, participants completed a post-treatment satisfaction questionnaire, Eyberg Child Behavior Inventory (ECBI) parent rating scale, which assessed frequency and intensity of behavior at home, social competence scale, and parenting stress index.

Twelve families completed the treatment. All 12 children had ODD, 11 had TS, and one had chronic motor tic disorder and an average age of 9.33. Ninety-one percent of mothers and eighty-eight percent of fathers missed no more than one treatment session and no more than one homework assignment. Mothers and fathers reported significant improvement on the ECBI intensity scale and problem scale. Significant improvement was also reported on the social competence scale, ODD rating scale, and parenting stress outcomes. At the end of treatment, 95 percent of parents felt confident in their ability to use CPS with their child at home. Although the study does not take place in schools, it does suggest that with training, people who are not clinical psychologists are able to utilize this tool with children independently.

Miller-Slough et al. (2016) studied the impact of parent-child synchrony on emotional lability, aggression, and overall functioning. For this study, synchrony was defined as active engagement, shared understanding, and willingness to listen to others. The study included 75 children age seven to 12 years; 46 participants were male. The parents included 55 mothers and 20 fathers. All participants received treatment for ODD, met ODD criteria, and did not meet criteria for CD, ASD, or psychosis. The participants' full-scale IQ was 80 or higher, and they had no current suicidal/homicidal ideation. The majority of the participants were White and from two-parent households. In addition to ODD, 65.4% of participants met the criteria for ADHD, and 58.7% met the anxiety criteria.



The multi-methods assessment recruited participants from a university-based clinic. The participants received weekly treatment sessions up to 14 sessions from clinical therapists. The clinical therapists and assessment interviewers were post-masters graduate students in clinical psychology supervised by a licensed clinical psychologist. Assessment interviewers were blind to treatment conditions.

The Anxiety Disorder Interview Schedule, Fourth Edition (ADIS-IV) was used to measure ODD symptoms and other behavior problems pre- and post-treatment. Additionally, the CGAS measured the overall functioning of the participant. Parent-child synchrony was observed during parent-child conversation tasks on positive and negative emotions that occurred during treatment sessions. The conversations were coded for agreement on details of an event, perceived connectedness, and shared affect. Participants were scored on a 0-4 scale, four being most synchronous. The final measure used was the BASC-2. Parents reported their child's internalizing and externalizing symptoms and adaptive functioning via the BASC-2, pre- and post-treatment. Only the aggression scale scores were used for the study.

The results showed participants with higher parent-child synchrony pretreatment were associated with lower emotional lability posttreatment. This may be because synchrony makes it easier for parents and children to work on behavior goals and discuss and resolve problems together. Pretreatment parent-child synchrony was also associated with less aggression in children at posttreatment. This study suggests that parent-child synchrony enhances the impact of behavior intervention. This study cannot be generalized to school settings. It does prompt thought about the impact of parent involvement in education on behavior and parent-child synchrony.

### **Other Interventions**

Johnson et al. (1997) studied middle school students' ability to learn conflict resolution procedures and if they were able to generalize them outside of the classroom setting when presented with conflict situations. The study took place during the 1993-1994 school year in a Midwest suburban middle school. The school had 176 students, grades six through nine. There were 84 boys and 92 girls. The grade breakdown was 55 sixth grade students, 43 seventh grade, 42 eighth grade, and 36 ninth grade students. All students were White and from middle-class families.

The study used a pretest-posttest control-group experimental design. The treatment group received conflict resolution and peer mediation training, and the control group received no training. The training took place three-days per week during the students' 25-minute homeroom class. The students were randomly assigned to one of 12 homeroom teachers, three at each grade level. Two homerooms at each level were randomly assigned to receive the training, and one was designated as the control group. The training ran from February to May, totaling 14 hours of training.

Prior to starting the training program, all of the participants completed the How I Manage Conflicts measure and Conflict Scenario written measure and the Strategy Constructiveness Scale. These measures were also complete by all participants at the conclusion of the study. Participants in the treatment group were taught integrative negotiations and perspective-reversal. Integrative negotiations teach students to find mutually satisfying solutions to problems, and perspective-reversal teaches students to view the conflict

from both points of view. Participants in the treatment group completed lessons from *My Mediation Notebook* from *Teaching Students to be Peacemakers* program. The program taught participants the nature of conflict, how to engage in integrative negotiations, and how to mediate peers' conflicts. Participants were also taught the six steps of negotiation: describe what you want, describe how you feel, explain the reasons for your wants and feelings, reverse perspectives, invent three optional mutual agreements, and reach an integrative agreement. Participants then applied their knowledge of negotiation to the four-step mediation process: end hostilities, ensure commitment to mediation, facilitate negotiations, and formalize the agreement. The training was done by four graduate students and the professor who wrote the program.

The results of the study were 75% of the sample reported using mediation to solve conflict post-treatment compared to 0% pretreatment. This was determined by student responses to the How I Manage Conflicts measure. Also, students reported on the Strategy Constructiveness Scale the strategies they would use when presented with a conflict situation. The strategies pretreatment included: telling the teacher, commanding the other to give in, and physical force. Posttreatment, 34% of the experimental group reported using negotiation, and 22% proposed alternative agreements. Only one student in the control group reported using negotiations and proposing alternative agreements. There were no significant differences found among grade levels or between girls and boys. The results of this study suggest that students need to be taught conflict resolution skills and that they are capable of learning them at the middle school level. Replication of these results is needed before generalizing these findings.

Choi and HeckenLaible-Gotto (1998) researched the effectiveness of using regular education teachers and certified school psychologists as co-facilitators when implementing a social skills training program within a regular education classroom. The study included students and teachers from 2 first-grade classrooms from two different school districts in the Midwest. The small-rural elementary students were in the treatment group, and the small community elementary school was the control group. The two groups were closely matched demographically and had an almost equal number of girls and boys. The classes had 12 to 13 Caucasian students who were an average of 7-years-old.

The study used a peer rating sociometric procedure to measure the effectiveness of the social skills training program. The students, with support from Choi and HeckenLaible-Gotto, reported how much they liked to work with each peer in their class from not at all to a lot. Then they used the same scale to rate how much they like to play with each peer in their class. Students only rated peers of the same gender to eliminate gender bias. Each student was given a score made from the average of all the reports.

The treatment group teacher participated in 2 1-hour sessions with a certified school psychologist prior to implementing the psychoeducational behavioral approach social skills training program. The program had four basic components: modeling, role-playing, performance feedback, and transfer of training. Students participated in the treatment in two 30 minutes sessions per week for four weeks. In each session, the teacher or psychologist modeled a skill for students. The students were encouraged to practice what they saw, using role-play scenes. Each student participated in at least one role play scene. The teacher and psychologist provided feedback to students to assist their learning until they could show the

skill. Students also gave feedback to peers during the practice and role-play phase. To help students generalize what they learned into other classroom contexts, the teacher rewarded students' effort to show behaviors outside of the training session. The same peer rating process was completed again at the end of the training program.

The data showed that the control group students had significantly higher scores than the treatment group students on the work with and play with peer rating scales. From pre-to-post, the treatment group increased significantly in their peer rating scale scores. There were no significant increases or decreases found for the control group. This may be because the control group's peer rating scale scores were significantly higher at the pretest phase, so there was less room for improvement. The study is limited by its size and how data was collected. Although subject to rater bias, the data for the treatment group showed that explicitly teaching social skills to the students did improve students' want to work and play with their peers.

Wyman et al. (2010) studied the Rochester Resilience Project (RRP), which is used to address child emerging behavioral and social-emotional problems through school-based interventions. They aimed to determine the impact of the RRP on classroom behavior, social-emotional functioning, and discipline incidents. They also wanted to know if the effectiveness varied by age and type of behavior problem.

The study included children who attend urban elementary schools in grade Kindergarten through third grade. The students had two or more of the following difficulties: external behavior, social-emotional, and staying on-task. Two-hundred twenty-six students from two elementary schools from 59 different classrooms were included. The identified students were 54.4% male, 60% African American, and 90% were eligible for free or reduced lunch.

The randomized trial assigned school to the intervention or control group. Pretreatment, teachers completed behavior ratings on behavior control, task orientation, assertiveness vs withdrawn, anxious behavior, peer social skills for all students 4-6 weeks after school start. Special education classrooms were excluded. The intervention group had Resilience Mentors who taught students emotional self-monitoring skills and cognitive-behavioral strategies during weekly sessions over 14 weeks. Students were taught how to monitor emotions of self and others, self-control, reducing escalation of emotions, and skills for maintaining control and regaining equilibrium. All the skills were modeled and practiced in a neutral setting before being applied in the classroom setting. Additional data pulled were office disciplinary referrals and out-of-school suspension from 3-months before the intervention to 4-months after the conclusion of the intervention.

The data showed pretreatment in the intervention and control group were comparable for office discipline referrals and suspensions. After the intervention, the intervention students improved in all areas of behavior, according to the teacher behavior reports. The intervention group also reduced their ODRs by 46% and suspensions by 43%. The only statistically significant change was in ODRs, which dropped from 30.6% to 25% for the intervention group. The control group showed no significant changes. The study showed that RRP intervention aligned with student decrease in behavior and ODRs, while the control group saw no changes. No definitive conclusions can be made. The findings suggest that students benefit from direct instruction in the social-emotional areas if positive change is desired.

Crosby et al. (2018) examined the effectiveness of trauma-informed intervention for court-involved African American female students. The focus was on how student mood and

focus in school was impacted after participating in the trauma-informed intervention discipline practice, referred to as Monarch Room.

The study included students who participated in the Monarch Room for the full year. The sample included 71 participants. A total of 141 participants, 35% of the school population, utilized Monarch Room. Seventy of the participants were excluded because they did not attend the school for the full year. For the qualitative portion of the study, 23 participants were randomly selected from the entire school population. Of the 23 participants, 70% accessed Monarch Room during the year.

The study took place during the 2014-2015 school year, running from September to June, at a public charter high school. The school was on a large Midwestern child welfare placement agency and residential unit campus. The charter school only served female students with a history of abuse, neglect, and home removal. Monarch Room recognizes the impact of trauma and triggers on student behavior. The trauma-informed intervention responded to student behavior with an attachment driven discipline in place of exclusionary discipline practice. Monarch Room participants were either self-referred or referred by school staff. The intervention lasted less than 10 minutes, focusing on problem-solving skills and sensory-motor input. The qualitative portion of the study review time spent in the Monarch Room. The qualitative portion collected student perceptions of the Monarch Room.

The results of the study show that the average participant spent 10 to 20 minutes per visit in the Monarch Room. Monarch Room was used most in January to March, followed by September to December. April to June had the lowest number of visits to the Monarch Room. This suggests that there is a need for behavior intervention throughout the year, but the need

for intervention may vary by time of year. Students reported that Monarch Room improved their moods, helped them calm, and helped them to de-escalate and self-soothe so they could return to class. Nine out of 400 students were suspended during the 2014-2015 school year. Of these students, two of them accessed the Monarch Room.

The study only included one school during one school year, so the generalizability is limited. It also lacked a comparison component to previous school years, so it is unclear if nine students is a typical suspension rate for the school. The authors did note that the primary problem of Monarch Room was it lacked a component to teach participants how to generalize the skills they learned in the Monarch Room to other settings. This is likely why participants were repeatedly accessing the Monarch Room throughout the school year.

Brasof and Peterson (2017) compared the perceived fairness of Youth Court in comparison to traditional discipline. The researchers were interested in teacher and student perspectives, as well as if Youth Court could improve legitimate authority. Legitimate authority is defined as when students believe an authority figure has the right to make demands, so they need to obey.

The study included three urban schools in Northeastern USA. The schools included: a public school grades six through 12, Kindergarten through 8 charter school, and a magnet high school. All three schools were primarily African American and Latino and qualified for Title I. The study was conducted during the 2014-2015 school year.

Youth court was run by 25 9<sup>th</sup> graders in Advanced Programming for Underserved Students for grades six through 12 at the public high school. The magnet high school had 17 10<sup>th</sup> graders in psychology class run Youth Court, and the charter school had 20 5<sup>th</sup> graders who



ran Youth Court for K-5 students only. All Youth Court groups received in class training from the same trainer.

Youth Court students to prepared for their cases by reading referral/history, interviewing the defendant and witnesses, and preparing questions. During court, students would question the defendant, students witnesses, and staff witnesses so all sides of the story were heard. Students were in control of decision making and could request guidance from the staff advisor. The students who ran Youth Court would determine the sentence, which could be accepted or rejected by the defendant. Rejected statements could be amended with a proposed alternative from the defendant or it could default back to the traditional discipline system if an agreement could not be reached.

The study relied on qualitative data collected by the primary researcher. The primary researcher completed 26 observations that included: 12 hearings and post-hearing conferences, seven in class trainings, and seven informal conversations between Youth Court and primary researcher. Additional data included: 13 discipline referrals and supporting documents about attendance and grades, interviews with each of the three advisory teachers, the Youth Court trainer, and one school disciplinarian. The primary researcher also conducted 3 focus groups with 15 students.

The results showed students and teachers described traditional discipline as inconsistent or inequitable and unfair. Students reported they were often not given due process for punishment, and the majority of students expressed wanting to be heard or communicated with prior to punishment decisions being made. The three schools had suspension rates that significantly exceed the national average of six percent. The study was

limited because it was not able to show how Youth Court impacted suspension rates since the majority of school discipline was still being handled via the traditional model during the 2014-2015 school year. The study did collect student reports that indicated the students felt Youth Court was more equitable and that they felt better understood. Youth Court as an intervention in school would require more research to be done before considering it as an alternative intervention model to traditional discipline.

Rebok et al. (2019) studied if the Experience Corps (EC) intergenerational program would improve academic achievement and decrease office discipline referrals, suspensions, and expulsions in Kindergarten through third graders. EC sends trained adult volunteers over 60-years-old into school to serve 15 or more hours were week with children to assist with reading, math, and behavior skills through face-to-face mentoring, tutoring, and role modeling.

The study took place in 25 Baltimore City public elementary schools over four waves from 2006 to 2011. At the start of the study, there were no significant differences between EC and control schools. The researchers conducted a quasi-experimental study where adult volunteers over 60-years-old were randomly assigned to the EC or low-activity control condition. Academic achievement data for grades one through three, and office referrals, suspensions, and expulsions for grades Kindergarten through three were collected from the Office of Achievement and Accountability of the Baltimore City Public School System. The Stanford Achievement Test Series, Tenth Edition (Stanford-10) was given in the spring of each academic year to students in grades 1 and 2. The Maryland School Assessment (MSA) was used for grade 3. No academic testing was completed for Kindergarten students, which is why there

was no academic data collected for that age group. The number of office referrals, suspensions, and expulsions was counted for each student each year.

The results showed no significant differences in the Stanford-10 or MSA scores after year 1 or 2 of the study between the EC and control groups. There was a significant intervention effect for office referrals for Kindergarten and 1<sup>st</sup> grade students in the 2<sup>nd</sup> year of the EC program compared to the control group. The second grade EC group had fewer suspensions and expulsions than the control group after year 1. The EC intervention for this sample group positively impacted student behavior and did not impact academic achievement. Mentoring may be a preventative approach to limiting student behavior in younger age children, but this cannot be concluded based on this study alone.

Henderson and Guy (2017) examined the effects of community-based programs on social connectedness and its effects on student-teacher relationships and reducing short-term suspension. The research aimed to determine if the students who participate in community programs will feel more socially connected, if higher social connectedness will have better relations with the teacher, and if social connectedness will decrease the likelihood of resuspension.

The study included 143 of 175 students who participated in a community-based program through the local YMCA during their time of suspension from school. Thirty percent of the participants were involved with the court, and six percent of participants had attendance issues at the time of intake. The mean age of the participants was 15-years, ranging from 12-19 years. Sixty-six percent of the participants were male, 71% were economically disadvantaged, and 66% were of an ethnic minority. The average stay of students in the program was four

days, with 49% of the suspension being related to violence-related suspension. The participants were referred to the program by their school, and parents gave consent prior to their participation.

An academic coordinator who would connect the teachers and students via email or phone ran the program. The directors of the program were two licensed social workers, and the program staff received annual training on positive behavioral intervention strategies. The participants were from middle and high schools in two districts.

The study occurred during the 2011-2012 school year. The program was for unsupervised suspended students. It focused on community and family strengths, providing participants with counseling, academic support, life skills training, access to positive adults. Three hours were dedicated to academics and the remaining four hours focused on conflict resolution, life skills, and healthy relationships.

Teachers were emailed a 14 item student-teacher relationship scale. Of 213 forms sent, 51% were completed. Of the 108 teachers who completed the form, 28% completed the form more than once due to having multiple students participate in the study. Social connectedness was measured by a 20-item scale completed by the students while at the program. Resuspension data for three months post-program dismissal was collected from the participants' school districts.

The study found that students' perception of social-connectedness increased from the beginning to the end of the program for 76% of participants. Students who reported an increase in social-connectedness were more likely to report an increase in student-teacher relationships, but there was no statistical significance within the student-teacher relationship

data. Higher social connectedness scores did correlate with no resuspension in three months following. This suggests that students who are provided opportunities to increase their social connectedness within their community are less likely to produce behavior that results in suspension.

The primary problem with this study is that it did not compare the students who participated in the program to suspend students who did not participate in the program. Therefore, we cannot make definitive conclusions from this data. What we can do is acknowledge the need for intervention following a suspended offense that will help foster a feeling of connectedness within a student. Otherwise, the data suggest that failure to increase social-connectedness may result in resuspension.

## CHAPTER III: DISCUSSION AND CONCLUSION

### Summary

The first research question addressed was who is impacted most by school exclusion and how are they impacted. Costenbader and Markson (1998) studied the effectiveness of suspension on addressing behavior problems in urban and rural middle and high school. The results showed 12% of students reported they learned a lot, 36% reported they learned a little, and 67% reported they did not learn anything that would help them avoid future suspensions. The primary reasons for why the incident that resulted in exclusion occurred were, as reported by students, lack of self-control, failure to understand rules, frustration with schoolwork, lack of interest in schoolwork, and problems with substance abuse.

Raffaele Mendez (2003) conducted a longitudinal study on predictors of suspension and effects on academic achievement and graduation. The best predictor for future suspension was past suspension. Past suspension also correlated with poor academic performance and failure to graduate on time. Black males who qualified for free or reduced lunch and special education services and Black females who qualified for free or reduced lunch, regardless of special education status, were the most overrepresented groups. Free or reduced lunch and special education were common predictors for students of all races.

Arcia (2006) conducted a longitudinal retrospective analysis on suspensions, achievement, and long-term enrollment of students in urban schools. The results showed older students were excluded more than younger with LD and ADHD labels; age was not a predictor for students with an EBD label. The best predictor for exclusion was low SES, followed by Black students and students who qualify for special education services under the EBD label.

Jacobsen et al. (2019) studied the rate of suspension and expulsion in urban elementary schools. Black girls and boys were more likely to be suspended than any other race. The data showed schools with fewer economic resources relied more on suspension and expulsion for discipline. Theriot et al. (2010) studied the likelihood of exclusion in middle and high school students who have previously been excluded. The data showed statistically significant predictors for exclusion were Black race, free or reduced lunch status, ELL status, and special education status.

Gorgan and Gage (2011) studied the relationship between language, behavior, cognitive ability, and academic performance for students with EBD and LD labels. Students with EBD had significantly higher suspension rates than students with the LD label. The data also showed students with the EBD label had similar deficits in language, cognitive, and academic areas as students with the LD label. Hemphill et al. (2013) compared students in Australia to Washington state when they studied if school suspension was a predictor of youth non-violent antisocial behavior. The study found suspension was not a predictor of non-violent antisocial behavior. The identified predictors were peer groups, family relationships, and school relationships. Positive student outcomes were related to positive peer, family, and school relationships.

Greene and Ollendick (1993) researched how students with poor academic transitions to middle school are impacted by other social-emotional difficulties. The results showed improvement in social-emotional difficulties required separate social-emotional intervention to see improvement. The academic intervention did not improve students' social-emotional difficulties.

The second research question was, are there alternatives to traditional exclusionary discipline, and how do the alternative options impact students? The first intervention that was reviewed was the impact of PBIS. Bradshaw et al. (2017) conducted a randomized control effectiveness trial on the impact of PBIS on school climate and how fidelity of implementation impacted the outcome of PBIS in schools. Formal training and coaching allowed for the implementation of PBIS with fidelity in schools. Staff reported improved school climate and a sense of trust and confidence in school teams post-implementation of PBIS.

Ward and Gersten (2013) conducted a randomized experimental design to assess if the SCS approach to PBIS improved the development and enforcement of school discipline policy, student behavior, and academic achievement. There was a significant decrease in classroom disorder, disruptive behavior, and on-task behavior. Suspensions decreased 22% over two years, and academic performance increased 14 points in math and nine points in reading.

Gage et al. (2018) studied the effect of PBIS on the number of discipline incidents, ISS, and OSS. They compared the effectiveness based on implementation fidelity level in elementary and middle schools. PBIS schools implementing with fidelity greater than 70% had statistically fewer ISS and OSS than PBIS schools implementing with fidelity less than 70%. Gage et al. (2020) did a replication study of Gage et al. (2018). The results again showed schools implementing PBIS with high fidelity had fewer suspensions than schools implementing PBIS without fidelity. The 2018 Georgia results were replicated in the 2020 California study.

Norcera et al. (2014) studied the effect of positive behavior supports on student behavior and academic achievement in comparison to the traditional exclusionary reactive approach. The data showed referrals declined by 36%, and suspensions declined 39% over



three years. Teachers and administration reported leadership was imperative to the success of the plan and that consistency of discipline empowered students and teachers because the plan was predictable and didn't lead with calls home or referrals.

Freeman et al. (2015) conducted a quasi-experimental study on direct and indirect effects of PBIS on high school dropout rates. Higher student attendance correlated with fewer dropouts and higher standardized test scores. Implementing PBIS with fidelity had a significant positive effect on student attendance.

Eraldi et al. (2019) conducted a pilot study on the impact of tier 1 PBIS interventions on ODRs and tier 2 PBIS interventions on diagnostic severity for children who are at-risk for have internalizing and externalizing problems in urban elementary schools. The data showed ODRs decreased, and diagnostic severity showed significant change only for students who were at-risk.

The second alternative reviewed was CPS. Greene et al. (2004) studied the effectiveness of CPS on children with ODD compared to the PT program. Both treatments were equally effective at improving behavior, limit setting, and communication in children with ODD. The CPS intervention group showed continued improvement four months posttreatment, while the PT group showed deterioration in skills four months posttreatment. Ollendick et al. (2016) compared the effectiveness of CPS, PT, and WLC for children with ODD. The PT and CPS interventions were more effective than WLC. The PT and CPS interventions were equally effective for middle-class Caucasian families and were more effective for younger than older children. Martin et al. (2008) studied the patterns of restraint and seclusion before and after implementing CPS with aggressive children and adolescents in an inpatient psychiatric unit.

Posttreatment the number of restraints and seclusions decreased significantly, and the duration also decreased. Epstein and Saltzman-Benaiah (2010) studied how to adapt CPS to work in a group setting for parents and children with ODD and TS. Parents reported significant improvement posttreatment in intensity and severity of child behaviors. Ninety-five percent of parents felt confident in their ability to use CPS with their child independently posttreatment. Miller-Slough et al. (2016) studied the impact of parent-child synchrony on emotional lability, aggression, and overall functioning. Higher parent-child synchrony was associated with lower emotional lability, less aggression in children, and a higher impact of behavior intervention.

Other alternative interventions for child behavior were also reviewed to determine how they impact student outcomes. Johnson et al. (1997) studied middle school students' ability to learn conflict resolution procedures and generalize the skills when presented with a conflict situation outside of the controlled classroom setting. Students' significantly increased their reported use of conflict resolution strategies from pretreatment to posttreatment. Students in the control group did not identify conflict resolution strategies when asked how they would address a conflict. Choi and HeckenLaible-Gotto (1998) studied the effectiveness of using regular education teachers and certified school psychologists as co-facilitators when implementing a social skills training program within a regular education classroom. There was a significant increase in peer willingness to work and play with one another posttreatment. Wyman et al. (2010) conducted a randomized trial on the impact of RRP on classroom behavior, social-emotional functioning, and ODRs. Students who received the intervention improved in all areas of behavior, and ODRs were significantly reduced. Crosby et al. (2018) studied the effectiveness of trauma-informed intervention for court-involved African-American female

students. Students reported having the intervention available allowed them to improve their mood, calm, de-escalate, and self-soothe so they could return to class. Brasof and Peterson (2017) compared the perceived fairness of Youth Court to traditional discipline. Students and teachers reported traditional discipline was inequitable and unfair. Students reported Youth Court was more equitable and that they felt better understood. It was noted that students who rejected traditional discipline consequences accepted the same consequence willingly when given to them through the Youth Court process. Rebok et al. (2019) studied the effectiveness of EC on improving academic achievement and decrease ODRs, suspensions, and expulsions in Kindergarten through third graders. There were no significant intervention effects on academics. The data showed significant intervention effects on ODRs for Kindergarten and first graders. Henderson and Guy (2017) studied the effects of community-based programs on social connectedness, student-teacher relations, and reducing short-term suspensions. Seventy-six percent of students who participated in the program during suspension reported increase social-connectedness. Higher social-connectedness correlated with no resuspension in three months following the end of program.

### **Limitations of Research**

The reviewed research was limited in several ways. Exclusion data was often pulled from databases that reflect one school district during one school year. These trends alone cannot be generalized to the greater populous and require replication in multiple settings, as well as identifying trends that occur over many years. Also, data on exclusionary discipline was only collected on who was excluded and how it impacted the students who were excluded. There were no studies that addressed the impact of exclusion as a behavior intervention. There

was also no research that reviewed the impact of exclusion on students who remain in the classroom, so it is unknown if excluding certain students improves the outcomes of the remaining students in the classroom. Studies on PBIS lacked longitudinal data, so it cannot be determined if the impact of the intervention increases, decreases, or plateaus over time. CPS studies lacked direct application in school settings and only included participants with an ODD diagnosis. PBIS and CPS both lacked comparison studies that compared student outcomes before the intervention to student outcomes after the school shifted to PBIS or CPS. This was true for other alternative interventions as well. No research was found that was able to support causal findings, and few were able to identify correlation due to lack of randomization and controlled environments. The only limitation imposed by the author was studies that were excluded if they did not partially or fully take place in the United States.

### **Professional Applications**

The research presented should be used to draw attention to current school disciplinary practices and prompt reflection upon how the current practices being used on impacting students. For schools using exclusionary data, patterns in exclusion data should be analyzed to determine what predictors exist for exclusion. This would allow for early identification of at-risk students and allow for early intervention. It could also start a conversation with staff about implicit bias, culturally relevant teaching, and how to support all students within the classroom. School administration may also consider analyzing the impact of exclusion on students. Are students who are excluded less likely or more likely to be excluded in the future? If a district finds that exclusion is leading to more exclusion, the administrative team may consider a shift to an alternative disciplinary practice.

PBIS research repeatedly showed that implementation fidelity was the key component to positive student outcomes. Implementation fidelity was achieved through school-wide plans, staff training, ongoing coaching, and a PBIS school team. Schools who claim to use PBIS interventions may be doing so, but without implementation fidelity, the intervention is likely not impacting students as it does in schools implementing with fidelity. I currently work in a school that says they are a PBIS school. In five years, I have not received training or been informed of the school-wide plan beyond tier 1 behavior. The research has empowered me to begin the conversation with my district administration about what we can do as a building to improve our practice so we can support students by using PBIS with fidelity.

CPS research suggested that parent-child collaboration in proactive problem solving was effective for students with ODD and aggressive behavior. I wonder if this would also prove to be a more effective practice in schools. Teachers and students could problem-solve together while the administration covers the classroom, instead of the administration handling a behavior situation that often was not present for. CPS is developing more research and materials to make the intervention more accessible to schools. I plan to continue to monitor the research for direct application in schools.

The research has caused me to look at school discipline through a reflective lens. What are the impacts of discipline practice on students? Is traditional discipline equitable and fair? Is there a practical way to change the current practice to improve student outcomes? Moving forward, I will be more intentional with how I approach student behavior in my classroom to ensure that I am doing the best that I can to support students' growth in all areas, not just academics.

## Conclusion

The review of the research looked at the impact of traditional discipline and alternative options. Traditional discipline data showed an over-representation of certain student populations, including Black students, males, special education students, and students who qualify for free or reduced lunch. The best predictor for future exclusion was past exclusion, suggesting that exclusion is not an effective intervention for students who present behavior in school. PBIS showed positive outcomes for students, including lowering suspension rates, improving academic outcomes, and improving student attendance. CPS data showed it was an effective behavior intervention for children with ODD, but the studies were not conducted within the school setting. Other alternative interventions showed that students need to be taught social-emotional and social skills in order to improve and grow in those areas. The academic intervention did not improve student behavior or social-emotional skills. Traditional disciplinary practice does not double as an intervention. Future research should compare the impact of traditional discipline paired with targeted behavioral interventions to alternative discipline strategies like PBIS and CPS. Schools do not send students home who cannot read and expect them to return to school with that ability, yet students who have deficits in social-emotional and self-regulation skills are expected to return to school ready to behave. This unrealistic expectation needs to end. School districts need to reflect on their current discipline system and determine how they will help students who are being excluded from school learn the skills needed to stay in school.

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