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Evaluating Positive Behavior Interventions and Supports (PBIS) : examining teachers' perceptions of managing student conduct and student achievement in PBIS and non-PBIS schools.

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EVALUATING POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS (PBIS): EXAMINING TEACHERS' PERCEPTIONS OF MANAGING STUDENT CONDUCT AND STUDENT ACHIEVEMENT IN PBIS AND NON-PBIS SCHOOLS

By

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DEDICATION

For the teachers and leaders committed to making a difference in the lives of ALL children, even the most challenging ones. Your assiduous commitment to providing students with great stability, acceptance, patience and care and your unfaltering pledge to ensure each student has a learning environment centered on high expectations influences and positively impacts the lives of students and families and our society as a whole.

For my nieces and nephews, Elijah, Chloe, Peyton, Colter, Colby, Joshua, Sarah Beth, and Alyssa, for striking the passion in me to demand excellence in all I do and to challenge others to do the same. You make tough decisions simple when I make those decisions with you in mind.

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ABSTRACT

EVALUATING POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS (PBIS): EXAMINING TEACHERS' PERCEPTIONS OF MANAGING STUDENT CONDUCT AND STUDENT ACHIEVEMENT IN PBIS AND NON-PBIS SCHOOLS

Carla Marie Soeder-Kolodey

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This capstone investigated the impact of the implementation of positive behavior interventions and supports (PBIS) in schools across Kentucky on teachers' perceptions of student behavior and on student academic achievement scores, using a causal comparative design. Schools in Kentucky were selected at random according to school type: elementary, middle, and high school. Special schools, or schools serving populations overlapping into multiple categories, were eliminated from the study. Schools were then identified by their level of implementation of PBIS: Control represented the schools that had not received any training in PBIS, PBIS represented schools that had started the implementation of PBIS, and fidelity represented the schools that were implementing PBIS and had met fidelity status as recognized by the state.

Data from the Teaching, Empowering, Leading and Learning (TELL) Kentucky Survey were used to determine teachers' perception of student misbehavior in schools. The results from the TELL Survey in the Managing Student Conduct construct were used to determine if implementing PBIS had an effect on the teachers' perception of managing student conduct. A multivariate analysis of variance (MANOVA) was used to determine if there was a main effect for implementing PBIS on the teachers' perception of student

behavior. Although there was not statistical significance, the descriptive statistics revealed a slight increase in teachers' perception of student behavior at each level (elementary, middle, and high school). An analysis of variance (ANOVA) was used to determine if the implementation of PBIS had a main effect on student achievement scores. The results were similar to the teachers' perception. There was not statistical significance, but the descriptive statistics showed slightly higher student achievement scores for the schools implementing PBIS at each level (elementary, middle, and high school).

For future studies, capturing the viewpoints of the teachers' perceptions of student misbehavior has already been developed by using the Managing Student Conduct construct of the TELL Survey, but more in-depth understanding of the data needs to be revealed. Determining if there was a main effect was difficult because of the potential variables that could impact the teachers' perceptions of student misbehavior. Many variables can impact student behavior. Future research to help further explore this topic should be conducted through quantitative studies. Teachers could report their viewpoints of student misbehavior and provide insight on their perceptions of PBIS.

The implementation of PBIS did not have a statistically significant impact on the teachers' perception of student behavior or on the student achievement scores but comparing descriptive statistics did reveal slightly higher scores. PBIS is designed to be a 3- to 5-year implementation process, and most schools would not be expected to reach fidelity status until this time. District should consider this research and give schools time to develop their practices supporting the work of PBIS before deciding to discontinue the framework of PBIS. Districts also should not expect schools to make drastic reductions

in office discipline referrals (ODRs) or reduce the amount of suspension in schools after the first phase of implementation.

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INTRODUCTION

School leaders across the nation are seeing a decrease in teachers' ability to manage student behaviors, which has led to a surge in suspensions, expulsions, and removals from the classroom (Cha & Cohen-Vogel, 2011; Darby et al., 2011; Guin, 2014; Hopson & Lee, 2011; Johnson, Kraft, & Papay, 2012; Losen, 2011; Mitchell & Bradshaw, 2013). Heightened attention and awareness have been placed on the rates of suspension, expulsion, and removal from instruction for African American students and students with disabilities (Advancement Project & the Civil Rights Project, 2000; Bucher & Manning, 2003; Fenning & Rose, 2007) because of the disproportionate rates when compared to other peer groups. Analyzing the basis for the growing trend of behavioral infractions is a complex problem, and very little research has been conducted to address the subject of student misbehavior. Some researchers, such as Skiba, Michael, Nardo, and Peterson (2002), have analyzed disciplinary infractions to determine predictive factors of student misbehavior. Their research found students' racial and gender identities were strong predictors of disciplinary infractions, but the reasons for these behaviors were not determined (Skiba et al., 2002). Skiba et al. found African American males were more likely to receive a disciplinary infraction and were more likely to be suspended, removed from the classroom, or expelled from a school when compared to students of other races.

Collectively, research has discussed changes in school policy and the age of accountability as reoccurring themes when analyzing student misbehavior (Boyd, Lankford, Loeb, & Wyckoff, 2005; Crocco & Costigan, 2007). District and school leaders have attempted to curtail the growing rates of student misbehaviors by implementing behavioral frameworks such as positive behavior interventions and supports (PBIS). PBIS is a systems-change approach to providing proactive behavioral supports to all students and planning and preparing intervention supports for students needing more help to meet the desired behavioral outcome (Horner & Sugai, 2000). The purpose of this study was to analyze schools in Kentucky (elementary, middle, and high schools) to determine if there was a main effect attributed to schools implementing PBIS and their effect on teachers' perceptions of student behavior and accountability scores.

The increase in student misbehaviors and the added pressure from accountablity testing have been attributed to an increase in teacher attrition rates (Cha & Cohen-Vogel, 2011). Disruptive classroom behavior has been cited as the highest rated problem with teaching (Walter, Gouze, & Lim, 2006). Walter et al. (2006) identified teachers' feelings of inadequacy when managing student misbehavior and understanding the mental health needs of students. Teachers wanted to support the initiative to include mental health professionals in the classroom but did not feel they had the appropriate knowledge to determine when students needed mental health services (Walter et al., 2006). These issues, along with the inability to manage students, have led to higher rates of teacher turnover in public schools (Brill & McCartney, 2008).

Background of the Problem

The No Child Left Behind Act (NCLB, 2002) legislation emphasized closing the achievement gap between student populations and increasing student achievement scores in schools as measured by standardized assessments. Schools and districts were expected to increase student achievement scores each year by meeting adequate yearly progress, goals defined by NCLB and now defined by the new accountability as annual measurable objectives. These federal guidelines for accountability are outlined by each state.

In 2009, President Barak Obama delivered a speech to address a new initiative that would change decisions and challenge states and school districts to create innovative designs for student achievement. His remarks outlined how the current U.S. education system was "falling short" and gave examples of the current trends happening across the nation in the educational field (Obama, 2009, para. 5). He later released a statement:

> America will not succeed in the 21st century unless we do a far better job of educating our sons and daughters. . . . And the race starts today. I am issuing a challenge to our nation's governors and school boards, principals, and teachers, businesses and non-profits, parents and students: if you set and enforce rigorous and challenging standards and assessments, if you put outstanding teachers at the front of the classroom; if you turn around failing schools—your state can win a Race to the Top grant that will not only help students outcompete workers around the world, but will let them fulfill their God-given potential. (Obama, 2009, para. 4)

Race to the Top grant funds were offered under the American Recovery and Reinvestment Act of 2009. Race to the Top was designed to promote innovation, reform, and excellence in America's public schools (White House, 2014). States and school districts across the nation could compete for the grant funds to be used to encourage and reward schools for making gains in student achievement, creating innovative schools, closing the achievement gap, improving graduation rates, and providing preparation for

success in college and careers. States were to address reform efforts centered on four strategic areas:

1. Adopt standards and assessments that prepare students to succeed in college and the workplace and to compete in the global economy.
2. Build data systems that measure student growth and success and inform teachers and principals about how they can improve instruction.
3. Recruit, develop, reward, and retain effective teachers and principals, especially where they are needed most.
4. Turn around the lowest achieving schools.

This sparked a conditional change in schools in Kentucky. Kentucky began adopting the Common Core State Standards for mathematics and reading during the 2011–2012 school year with full accountability measures. Kentucky's accountability model, Unbridled Learning, was a series of sources designed to measure student progress and achievement in Kentucky's public schools (Kentucky Department of Education, 2012). Standardized testing, known as the Kentucky Performance Rating for Educational Progress (K-PREP), was the largest source of measurement for determining student achievement in schools (Kentucky Department of Education, 2013b). Students were tested in certain subjects in different grade levels, with the earliest testing in Kentucky's public schools taking place in third grade. This was the 1st year students would be assessed under the new model, and schools would not have an annual measurable objective during this school year because the year of measure would be used as a baseline for future years. In an effort to continue to compete for these funds, growth in these areas would have to be made in student achievement scores.

Some have argued the increased focus on standardized testing has placed unrealistic expectations on both teachers and students and has led teachers to feel less than adequate to teach their students (Crocco & Costigan, 2007). School leaders and teachers also have felt the need to place importance on the subjects being tested at each grade level, which has led teachers to reduce the amount of instructional time spent on activities and subjects that are not tested at that grade level. For example, teachers of students in the fifth grade often have not taught science, because science is tested in the fourth grade. Teachers have argued that the added pressure from NCLB has reduced the amount of time teachers are able to spend building and maintaining student and teacher relationships (Crocco & Costigan, 2007), which have shown to have a positive impact on behavioral outcomes and student achievement. Additional factors in NCLB and changes to legislative regulations have been attributed to increasing student misbehavior.

Recent changes in policies have altered the composition of the classroom and the school to include students with special needs into the general education setting. The reauthorization of the Individuals With Disabilities Education Act (IDEA) of 2004 required students with special needs to be taught in the least restrictive environment. This means the primary placement and classroom for many students with special needs was the general education classroom. Students with special needs were to be included in the general population to have exposure to the same curriculum and instruction as nondisabled peers. NCLB (2002) also outlined specific regulations for students with disabilities, requiring these students to be assessed by the same standardized test as their nondisabled peers unless meeting exemption classification, in which case an alternative assessment would be used to measure growth and academic success for these students.

Specific regulations were created to ensure students with special needs were not removed from the general education classroom unless the classroom was shown to have an adverse effect on their learning.

Subsequently, teachers are expected to have the pedagogical knowledge to provide differentiated instruction to students who previously qualified for a least restrictive environment in specially designed classrooms with the support of special education teachers (R. Freeman et al., 2006). Due to a lack of specialized expertise, teachers often feel as if the inclusion of special populations adds stress to the work environment, because teachers have not been adequately trained to meet the diverse needs of the students in the classroom (Buell, Hallam, Gamel-McCormick, & Scheer, 1999). General education teachers have expressed a lack in their own understanding and ability to teach students with varying disabilities, especially students with emotional and behavior disorders (Albrecht, Johns, Mounsteven, & Olorunda, 2009). Teachers lack the skills to manage multiple behavior episodes. Typical behaviors of students in the general population are usually easy to manage. These behaviors, such as calling out and being off task, generally cause minimal disruption to the instructional program and are easily corrected. Students with emotional and behavioral disorders display behaviors that are more extreme. These behaviors normally include blatant rule violation, extreme defiance, and sometimes include fighting or striking other peers or adults.

Teachers in schools saturated with high populations of poverty reportedly struggle with managing student misbehaviors more than other populations because of the high concentration of students with special needs and a lack of skills when beginning school for the first time (Guin, 2014). Teachers in these populations also have higher attrition

rates and teacher turnover rates and have reported lower perceptions of student behavior (Albrecht et al., 2009). Teachers in these schools are often teachers new to the profession and lack the skills needed to build classroom routines, systems, and structures. When teachers lack the skills to manage classroom discipline, they often turn to school administrators to handle disciplinary infractions, even for minor violations to school and classroom norms. Referral to administrators often results in exclusionary practices such as suspension, which has been shown to have little impact on changing the undesired behavior (Lewis, Jones, Horner, & Sugai, 2010; Mitchell & Bradshaw, 2013). Teachers and administrators in today's public schools often refer to punitive classroom management techniques that do not teach replacement behaviors for the undesired behavior being presented (Advancement Project and the Civil Rights Project, 2000). These practices, such as suspension, exclusion, and expulsion, do not curb the behavior or teach the desired behavior, and these students return to school displaying the same behaviors and repeat the cycle. These repeated behaviors create frustration for teachers and leaders and have a negative impact on teachers' perceptions of managing student behavior (Cha & Cohen-Vogel, 2011).

Of the many approaches to discipline, many school leaders during the 1990s and early 2000s were asked to implement zero-tolerance policies (Gage, Sugai, Lunde, & DeLoreto, 2013). The onslaught of zero-tolerance policies was directly attributed to a number of mass school shootings and the increased publicity being given to violent behaviors on campus. Zero-tolerance policies mimicked the judicial system approach to discipline, where an offense followed by a repeated offense leads to harsher punishment. Many zero-tolerance policies forced suspension and expulsion on students for a wide

range of disciplinary infractions, regardless of the seriousness of the offense. Students classified as at risk most often received punishment, thus creating a demographic imbalance in the students receiving harsh punishments.

Consequently, parent and advocacy groups began questioning the legality of zero-tolerance policies (Advancement Project & the Civil Rights Project, 2000). Along with disparities in suspension rates, such policies also led to students in special populations being restrained or secluded from the general population. These issues sparked debate and required the review of current policies and procedures, which led to the change and implementation of new policies regulating restraint and seclusion in public schools (Freeman & Sugai, 2013). As a state, Kentucky faced the same issues as the nation and began changing regulations to analyze the growing problem of student conduct.

In 1998, Kentucky adopted the regulation KRS 158.444, which outlined the reporting of behavioral incidents in Kentucky's public schools. This regulation was amended in 2008 to include the recording and reporting of behavioral incidents to the Center for Safe Schools. In May 2013, public schools in Kentucky were required to submit and verify behavioral data using the Safe Schools Extract within Infinite Campus. Infinite Campus is the statewide data management system for Kentucky's public schools. All public schools were required to collect data regarding instances where students were removed from instruction and all incidents involving assault or violence, weapons, drugs, alcohol or tobacco, and bullying or harassment beginning with the 2012–2013 school year. All school districts were required to verify the information at the school and district levels and report the information to the Kentucky Department of Education. The data were analyzed and summarized in the 2012–2013 *Safe Schools Annual Statistical Report*

(Kentucky Department of Education Division of Student Success, 2013). The purpose of the report was to assist schools and districts in Kentucky to address behavioral incidents and to determine a root cause of the behaviors to prevent the incidents from reoccurring.

According to the 2012–2013 *Safe Schools Annual Statistical Report* for Kentucky, the overall number of behavior incidents reported increased from 62,044 in the 2011–2012 school year to 152,604 in the 2012–2013 school year (Kentucky Department of Education Division of Student Success, 2013). The inflation of the numbers of incidents could be attributed to the new data-reporting requirement in the amended regulation. Schools in the past did not report in-school removal, but the new regulation required it. For the 2012–2013 school year, 88,836 in-school removals were reported. The Kentucky Department of Education Division of Student Success (2013) also noted 75% of the reported discipline incidents occurred in the classroom, thus showing the need to better train teachers on how to manage student discipline. Of the total students removed from the classroom during the 2012–2013 school year, 72% were male. The total student population for the 2012–2013 school year was 659,195, and 9% (59,915) were involved in a behavior incident. These data show many of the students were involved in multiple incidents. The total number of students involved in an incident increased from 35,243 students in 2011–2012 to 59,915 students in 2012–2013 (Kentucky Department of Education Division of Student Success, 2013). This staggering number of behavior infractions raised awareness and brought attention to an increasing problem of student misbehaviors. Changes in policy at the national level have been written to attempt to reduce the number of students displaying misbehaviors

PBIS is a research-based framework intended to help ameliorate problem behaviors in a school (Horner, 2008). Schools implementing PBIS with fidelity have decreased student disciplinary infractions and have shown to have an increase in student achievement (Ross & Horner, 2007). PBIS has been identified as an effective, research-based model to improve student behavior (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Bradshaw, Koth, Thornton, & Leaf, 2009; Carr et al., 2002; Ross & Horner, 2007; Sugai & Horner, 2006; Swain-Bradway, Swoszowski, Boden, & Sprague, 2013). PBIS stems from applied science, where focus is placed on education and systems-change methods to decrease problem behaviors and improve quality of life (Carr et al., 2002). PBIS is different than many behavioral systems because the goal of PBIS is to involve multitiered systems of support that enhance academic and social outcomes for all students.

PBIS was formed from three major sources: applied behavioral analysis, the normalization and inclusion movement, and person-centered values (Carr et al., 2002). Applied behavior analysis determines the process of stimulus-response reinforcing used to identify how behaviors can be reinforced. The normalization and inclusion movement is based upon the idea that those with disabilities should be included with those in the general population, supported by NCLB legislation (Carr et al., 2002). Person-centered values focus on planning and preparing for the individual child to use interventions specific to an individual. The important aspects of PBIS focus on lifestyle changes, lifespan perspective, ecological and social validity, intervention and prevention emphasis, and flexibility with scientific practices (Carr et al., 2002).

PBIS builds upon the teaching of appropriate behaviors in a preventative approach to discipline while also programming and preparing interventions for students requiring extra behavioral support. Undesired behaviors are often exhibited when students have not been taught the preferred expectation. This can cause disruptions in the academic program, which increases stress in teachers and affects working conditions (Bradshaw, Koth, et al., 2009). Little research has been conducted to study the relationship of implementing PBIS and improving teachers' perception of student misbehavior. Teachers' perception of student misbehavior has been outlined as a leading cause of teachers leaving the teaching profession (Johnson et al., 2012). Results and analysis from the Teacher Follow-Up Survey (Goldring, Taie, & Riddles, 2014) revealed teachers in urban populations within their first few years of teaching are more likely to leave their school of employment or leave the teaching profession because of their perception of student misbehavior.

Researchers have suggested that implementing and teaching positive behavioral systems will decrease the number of student misbehaviors in a school and will improve the overall perception of student misbehavior in a school (Bohanon et al., 2006). State, district, and school leaders in Kentucky have continued to be scrutinized over the increasing rates of student behavioral infractions and consistently disproportionate rates among specific peer groups. In Jefferson County Public Schools (JCPS), Kentucky's largest school district, roughly 26% of Black students were suspended during the 2012–2013 school year, as compared to about 9% of White students (Kentucky Department of Education, 2013a). With increasing awareness, parent and advocacy groups began

demanding changes in public schools. As a result, policy makers began emphasizing on the promotion of positive behavior supports across the nation and in Kentucky.

Beginning in the 2013–2014 school year, all schools in Kentucky were required by state legislation in the Use of Physical Restraint and Seclusion in Public Schools (Kentucky Statute 704 KAR 7:160, 2012) to participate in a 2-hour training promoting PBIS. The 2-hour training was a combination of videos and quizzes prepared by the Kentucky Department of Education to educate participants on positive approaches to discipline. While the training highlighted many of the key factors of PBIS, the majority of the training was to bring awareness of the changes in policy regarding restraint and seclusion. Participants were expected to watch the videos, take the quizzes, and pass a test at the end of the training to receive credit for the session. All staff members of the school, regardless of job title, were required to take the training session. Staff members were required to take a refresher 1-hour class for the 2014–2015 school year.

Some schools in Kentucky, as early as the 2001–2002 school year, were already addressing discipline in the school by incorporating PBIS. Schools in Kentucky have a wide range of implementation across the state. Some schools have been implementing PBIS for over 10 years, and others have not joined the consortium of schools moving to the positive approach to discipline. Schools in Kentucky implementing PBIS rely on the Kentucky Center for Instructional Discipline for support with the planning, implementation, evaluation, and sustainability of PBIS. According to Mike Waford, the director for Kentucky Center for Instructional Discipline, there are eight trainers for PBIS throughout the center, and each trainer has a specific area of the state to support (Kentucky Center for Instructional Discipline, 2015).

Trainers begin by working with the administration at a school of interest to create a PBIS team. The team is comprised of teachers, support staff, parents, and administration. Some middle and high schools also welcome students to participate in the team meetings to have a voice in the implementation process. Teams generally spend a year receiving training from the state trainers and usually work to outline the expectations for their school and develop a plan of implementation. Schools receiving training through the Kentucky Center for Instructional Discipline train four times a year and then receive support at the state level on a consultation basis. During the planning phase, the school completes various assessments to assist with determining the readiness for the implementation of PBIS. These instruments help teams to identify the opportunities for improvement, and the results are used to develop an action plan for the team. Teams generally spend 5–6 school days throughout the 1st year of implementation receiving training, analyzing current school behavioral data, developing school-wide expectations, and creating a plan to train all staff members. The trainings are spread throughout the course of a school year.

Statement of the Problem

The problem addressed by this study is that, despite schools increasingly implementing PBIS, little research has been conducted to determine the outcomes of PBIS in Kentucky's public schools in terms of student achievement scores and teachers' perception of student behavior. Kentucky has 1,233 public schools, with 669 elementary schools, 217 middle schools, and 220 high schools (Kentucky Department of Education, 2013a). The state also has combined groupings of schools, with 77 elementary-middle schools, 20 middle-high schools, 12 elementary-middle-high schools, and 36 preschools

(Kentucky Department of Education, 2013a). Of these schools, 433 schools in Kentucky are implementing PBIS, or 35%. Elementary schools in Kentucky represent the largest population of schools implementing PBIS, with 245 schools. There are 89 middle schools implementing PBIS and 65 high schools. An additional 8 preschools and 24 schools have "special" classification.

Further, 213 schools implementing PBIS met criteria to be considered a PBIS school meeting fidelity requirements. Fidelity status is accomplished by completing the School Assessment Survey (SAS), Team Implementation Checklist, Benchmarks of Quality, and the Year End Data Report (Algozzine et al., 2015). Many measures are used to indicate the implementation rate of PBIS in schools. These assessment tools are used to measure the level of fidelity a school is demonstrating for the implementation of PBIS. PBIS is designed to be a 3- to 5-year process, and most schools should not reach fidelity status until this time.

The SAS includes Likert-type rating scales. The survey must be answered by 90% of the staff members in the school (including results from all departments, such as custodians, cafeteria workers, office staff, teachers, and support staff). The survey consists of questions rating the school's current behavior plan, school-wide expectations, and the determination of if policy changes are needing regarding behavior. Before beginning PBIS, a school must obtain a rating scale from the SAS of 75% or higher. The SAS rating is crucial to the implementation of PBIS because it will determine if a school is "ready" for the implementation of PBIS. If a rating is below 75%, the school is not deemed as ready to implement the framework of PBIS and typically does not participate

in training and implementation until meeting the desired benchmarks for the SAS (Childs, Kincaid, & George, 2010).

Schools implementing the PBIS framework also use a Benchmark of Quality assessment to identify areas of success and areas of improvement. This assessment is performed in the spring of every year. The coach completes the form (using a 100-point scale) after the PBIS team members complete the Team Member Rating. Schools must meet a minimum score of 70 on this assessment to meet fidelity requirements (Childs et al., 2010). This is the ranking schools are seeking to achieve for the greatest impact on creating a positive behavioral culture and reducing the number of office discipline referrals (ODRs) reported (Bohanon et al., 2006). Teams also complete the Team Implementation Checklist, which is a 22-part evaluation of different components of the team. The last component for schools to complete in order to meet fidelity status is the Year End Data Report. This report is a summation of the behavioral incidents taking place in the school during the school year.

Growing numbers of schools are implementing PBIS, yet little research has been conducted to determine the outcomes of PBIS in Kentucky's public schools. The national research has suggested schools will show a decrease in student misbehavior and an increase in student achievement scores (Bradshaw, Koth, et al., 2008). However, data analysis has not been completed in Kentucky to determine if there is a statistically significant effect on teachers' perceptions of student misbehavior and student achievement scores as measured by standardized testing.

Purpose of the Study

This study was a quantitative approach to analyze the implementation of PBIS and to determine if there was a main effect associated with teachers' perception of student misbehavior and student achievement scores. The context of the study included data from 263 schools in Kentucky. The study had one independent variable: classification of PBIS. Classification of PBIS had three levels or groups: control, PBIS, and fidelity. Classification of schools had three levels as well: elementary, middle, and high. There were 30 schools represented in each category, with exception of the high school fidelity group; not enough high schools in Kentucky reported fidelity of PBIS. Schools were first grouped by their level of students (elementary, middle, and high). Schools were then grouped again by their level of implementation for PBIS (control, PBIS, and fidelity). Schools were then chosen at random to obtain 30 schools for each group. Only 23 high schools met the fidelity criterion.

The study had two dependent variables: (a) teachers' perception of student behavior as measured by the Teaching, Empowering, Leading and Learning (TELL) Kentucky Survey and (b) school student achievement scores as measured by the K-PREP. The purpose of using the TELL Survey was to analyze the results of the construct Managing Student Behavior to determine if the implementation of PBIS had a main effect on this construct. Teachers in Kentucky voluntarily take the TELL Kentucky Survey every other year. The purpose of the TELL Survey is to determine the conditions of the school. The TELL Survey results for Managing Student Conduct paint a picture of the teachers' perception of student behavior in schools. The purpose of the study was to compare the TELL Kentucky Survey data within the Managing Student Behavior

construct. The K-PREP data were used to determine if there was a main effect for the implementation of PBIS and K-PREP scores. The purpose was to see if implementing PBIS had an effect on the student achievement scores in schools or if there was an effect on teachers' perceptions of student misbehavior.

Significance of the Study

This study is significant to the field of education because teachers' perceptions of student misbehavior have been defined as a leading cause for teachers leaving the profession (Barnes, Crowe, & Schaefer, 2007). When teachers leave the profession at high rates, schools and districts lose both financially and structurally because of the amount of money resources used to train, mentor, and induct a new teacher. If schools can find a way to improve teachers' perception of student behavior, then teacher attrition rates also could improve. This could have a positive relationship with improving student achievement, because teachers will be less likely to leave the profession and school leaders then can focus energies to build capacity within teachers and teacher teams alike.

Principals and school leaders have been trying to combat student discipline problems for many decades. Many leaders have tried a litany of strategies to curtail increasing student misbehaviors. The implementation of PBIS started in the 1970s and because of the longevity of the framework, there is vast research regarding PBIS. Numerous case studies have been published to bring awareness to PBIS. Both quantitative and qualitative studies analyzing the implementation of PBIS and student behaviors have been written to lend to further research on the topic. There is also significant research on PBIS and the fidelity of implementation. The majority of the studies relating to PBIS include the study of how PBIS improves the behavior of students

across various settings. Beginning studies of PBIS focused on the use of the model in alternative schools or classrooms of students with special needs, primarily students with emotional or behavior disorders.

However, little research has analyzed the implementation of PBIS and the impact it has on teachers' perception of student behavior and student achievement scores. This research is important and relevant because it may be able to help educators and policy makers make an informed decision about the implementation of PBIS in schools. The findings in this study may allow for a more nuanced conversation about the ways in which PBIS may contribute to improved perceptions of student behavior and higher achievement scores.

Primary Research Questions

Two research questions guided this study:

1. To what extent do teachers' perceptions of student behavior and students' academic achievement differ across PBIS-implementing schools (control or non-PBIS, PBIS, and fidelity)?
2. What is the relationship between teachers' perceptions of student behavior and students' academic achievement for PBIS-implementing schools?

Hypotheses

The research questions were designed to determine if there was a main effect for teachers' perceptions of student behavior in schools not implementing PBIS (control), implementing PBIS, and implementing PBIS with fidelity. The null hypothesis, $H1_0$, was that teachers' perceptions of student behavior and achievement would remain the same regardless of the classification of PBIS (control or non-PBIS, PBIS, and fidelity). The

alternative hypothesis, H1, was that there would be a difference in teachers' perceptions of student behavior and achievement in schools with different PBIS classifications.

The same was true for student achievement scores in Kentucky's public schools. $H2_0$ was that there would be a relationship between teachers' perceptions of student behavior and student achievement scores as measured by K-PREP in PBIS-implementing schools. H2 was that there would be no relationship. Schools were not compared across levels. For example, elementary schools were only compared with elementary schools.

Research Design

The study used a casual comparative design using a three-group multivariate analysis of variance (MANOVA) with three levels. The three groups were representative of elementary, middle, and high schools. The three levels were identified as control, PBIS, and fidelity. The study focused on analyzing and comparing the results of the TELL Kentucky Survey data within these constructs to test for significance within these groups. This study could help determine if there were a significant impact from the implementation of PBIS on student achievement scores and teacher's perceptions of student behavior.

Limitations

The research for this study included public schools in Kentucky. Special schools and combined schools were eliminated for the purpose of the study. Only schools with TELL Survey data and K-PREP data for the 2012–2013 school year were used in the data analysis. The study might be limited by the status of PBIS. Internal validity could be compromised before schools administered their own surveys to report fidelity status. Schools could report being a PBIS school even if they were in their 1st year of

implementation. If they were in their 1st year of implementation, these schools would only be planning for the implementation of PBIS. Schools reporting fidelity status complete their SAS and Benchmark of Quality as a team. School teams self-report, and the data could be influenced by stakeholders finding the need to report implementation with fidelity. School teams implementing PBIS in Kentucky are receiving training from several different trainers. The most regular training is offered by the Kentucky Center for Instructional Discipline, but the center has only seven trainers for the state. Some schools implementing PBIS have hired outside vendors for the planning and implementation. This could have an impact on the implementation of PBIS.

Definition of Terms

This study will use the following terms defined for complete and correct implementation:

Academic achievement is student achievement made as measured by the K-PREP.

Annual measurable objective is an annual goal based on how much improvement is needed to reach the goal of 100.

Implementation fidelity refers to schools that have a PBIS team, complete all required surveys and assessments, meet surveys with 75% accuracy, and report all behavioral data to the Kentucky Center for Instructional Discipline

Individuals With Disabilities Education Act (IDEA) guarantees all children with disabilities are entitled to a free, appropriate public education to meet their unique needs.

No Child Left Behind (NCLB) is a U.S. federal law that is a reauthorization of the Elementary and Secondary Education Act, which included Title I, the capital aid program for disadvantaged students.

Positive behavior interventions and supports (PBIS) is a framework for providing universal systems and support for teaching expectations while planning and preparing for individualized instruction for students needing more support.

Zero-tolerance policy means behavior offenses in school will not be tolerated and will automatically result in suspension or expulsion regardless of the nature of the offense.

Summary

This chapter provides an introduction into the study of investigating the impact of implementing PBIS on student achievement scores and teachers' perceptions of student behavior. Chapter 1 provides the background of the study, the problem statement, purpose of the study, significance, methodology, limitations, and definition of key terms. The review of literature is presented in Chapter 2, methodology in Chapter 3, results in Chapter 4, and discussion and recommendations in Chapter 5. Chapter 2 provides a review of literature on student behavior, effects of teachers' perception of student behavior on teacher attrition, PBIS, and policy changes.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this chapter is to review the literature on teachers' perceptions of student misbehavior and discuss the federal, state, and local policy efforts that affect student behaviors in public schools. An overview of the current behavioral trends in the nation and the state is discussed. Next, student achievement is explained. Research regarding teacher turnover is analyzed with respect to student misbehaviors. Another component reviewed is behavior in low-income schools. Policy reform efforts are introduced, with emphasis placed on those shaping the responses schools have to student misbehaviors. The chapter concludes with the summation of research on PBIS.

This chapter outlines the current research regarding student behaviors and strategies for improving behavior in the classroom and the effect these have on teachers' perception of student behavior. This chapter examines the relationship between student discipline issues and teachers' perceptions of student behavior and how these can make a negative impact on teacher working conditions. Teachers' perception of student discipline problems have been linked to negative teacher working conditions leading to an increase in teacher turnover and attrition rates. Numerous behavioral reform efforts have been employed in an attempt to improve behavior in schools, thus improving teachers' perception of behavior in schools to decrease teacher turnover and combat the high attrition rates in American public schools. The major behavior reform acts are explained with a discussion of the relationship between these behavioral reform efforts

and teacher turnover. PBIS is one of the most widely recognized, research-based, positive approaches to school discipline (Eber, Sugai, Smith, & Scott, 2002). PBIS has been a pivotal structure identified to decrease the misbehavior of students (Kelm & McIntosh, 2012). Misbehavior of students has been linked to poor perceptions of student behavior, lower achievement scores on standardized assessments, and higher attrition rates in public schools.

Researchers have examined the correlation of negative perceptions of student misbehavior to increased teacher attrition rates (Abel & Sewell, 1999; Barnes et al., 2007; Boyd et al., 2005; Brill & McCartney, 2008; Cha & Cohen-Vogel, 2011; Darby et al., 2011; Goldring et al., 2014; Guin, 2014; Hopson & Lee, 2011). Thorough research also has been conducted to analyze the implementation of PBIS in schools to decrease misbehavior of students and plan for success for each child (Bradshaw, Koth, et al., 2008; Dunlap et al., 2010; Dunlap, Carr, Horner, Zarcone, & Schwartz, 2008; Kelm & McIntosh, 2012; Ross & Horner, 2007). Student misbehavior has been linked to a negative impact on the organational health of the school and puts added stress on teachers (Bradshaw, Koth, et al., 2008).

Student Misbehaviors

Student misbehaviors are becoming a mounting concern for district and school leaders because of the overwhelming effects and impact misbehavior has on the climate of the school (Bradshaw, Koth, et al., 2009). Since 2000, more than 7% of the entire teacher population left the profession entirely, with the greatest numbers occurring during the 2004–2005 school year (Goldring et al., 2014). These totals equate to more than 1 million teachers leaving the profession completely in the last 14 years. Similarly, over

200,000 teachers move from their school every year to teach in another school or district. This outflow of teachers reduces the number of teachers available and has an impact on the quality of teachers able to teach in some of the highest need schools (Harris & Adams, 2007). Consistent teacher turnover affects the ability to create and maintain a strong organizational culture (Johnson et al., 2012).

A study conducted by Walter et al. (2006) found disruptive classroom behavior was the biggest problem with teaching. Their qualitative study focused on teachers' beliefs of students' mental state, teachers' knowledge of mental health, and perception of mental health providers in schools. Teachers admitted to feeling inadequately prepared to manage students suffering from mental health issues and had a lack of understanding of the aspects of mental health, but teachers were inclined to support the need for mental health professionals to join the field of education to support teachers in the classroom (Walter et al., 2006). Supporters of PBIS have argued that if teachers are trained properly to implement the positive interventions before they become a major problem, then student misbehaviors are likely to decrease (Bradshaw, Koth, et al., 2008).

Goodman (2007) made a bold assertion, claiming that the absence of discipline is hurting student achievement. Goodman claimed teachers spend a vast amount of time punishing student misbehaviors, which decreases the amount of time students and teachers spend on the instructional framework of the curriculum. Goodman used a qualitative approach to analyze behavioral scenarios in schools and surveyed 725 middle and high school teachers in both urban and suburban environments. The survey revealed 30% of the combined teachers placed student behavior as one of their main concerns in the teaching profession. Student behavior was a larger concern for teachers in urban

environments, with the survey data revealing 42% of the teachers found student behaviors to be the main concern in education. Goodman noted a significant change in behavior of students when the students were taught to process their behavioral infractions by explaining the problem with the negative behavior instead of just being punished. When students were taught how to replace their misbehaviors and were taught the correct behaviors, the students were less likely to repeat the behavior (Goodman, 2007). When students were simply punished and given a consequence, the students were more likely to repeat the same behavior. Goodman's work is comparable to other works on research on the topic of student behavior in schools and how it impacts student achievement, teacher working conditions, and overall school climate.

Student misbehavior is one of the top five reasons teachers leave the profession (Smethem, 2007), a reason to research avenues to correct these issues. Building a positive school-wide culture has been found to be one of the most effective ways to decrease student misbehaviors (Hopson & Lee, 2011). Hopson and Lee (2011) specifically focused on using data from high-poverty schools and families to determine their perception of positive school-climate. The study used these perceptions to compare student-level academic and behavioral outcomes. The researchers found when students' perceptions were high regarding a positive school climate, student academic outcomes were higher and behavioral infractions were lower. This study is important to the field because Hopson and Lee began to identify factors to reduce problem behaviors, which could have an impact on teacher turnover. Student behavior not only has been linked to teacher attrition and turnover, but also has been a main concern for policy and legislative leaders in the United States, as well as parent advocacy groups for students with special

needs. Because of the discrepancy in approaches to discipline, schools often need to confirm their ability to address behavioral issues of diverse student populations. These variances in behavioral expectations across the nation have led to important legislative decisions that have initiated the implementation of behavioral policies and practices in the United States.

Teacher Turnover and Attrition

Teacher turnover is a mounting concern for public schools in the United States (Ingersoll, 2001). District and school leaders are working to find a solution to the many reasons attributed to teacher turnover, including student misbehavior, geographic distance from school to home, low teacher salary, and teacher environment and working conditions (Hanushek, Kain, & Rivkin, 2004). Harris and Adams (2007), among other researchers studying the topic of teacher attrition and turnover, agreed that teachers are leaving the profession at high rates. However, some have argued the attrition rates and turnover rates are comparable to those in other caregiver professions (Harris & Adams, 2007). For some teachers, the cyclical process of trying to manage student behaviors interferes with teaching curriculum standards and instruction. These stresses and barriers are far too much for some teachers to combat, and they end up leaving the teaching profession, feeling unsuccessful and defeated.

A study conducted by Harris and Adams (2007) compared the attrition rates of several caregiver professions, including teachers, nurses, social workers, and accountants. The study analyzed how the employees of each group left their current profession, while remaining in the same workforce. The study concluded turnover rates were slightly higher for teachers than nurses, but lower rates of turnover for teachers were found when

compared to social workers and accountants, thus showing accountants and social workers leave their current employer to pursue the same line of work with a different employer. The study found employees in these professions stayed with their current profession but opted to explore a different location.

The study focused on the results of the Current Population Survey, a national survey conducted by the U.S. Census Bureau, and included responses from more than 18,700 teacher observations (Harris & Adams, 2007). The study then compared the results of pursuing another profession (where the employees did leave the profession). Teachers had a probability of 7.73% of leaving the profession, nurses had a 6.09% probability, social workers had 14.94%, and accountants had an 8.01% probability of leaving the profession (Harris & Adams, 2007). Though teacher rates were reported lower than social workers and slightly lower than accountants, Harris and Adams (2007) argued that these groups are not as comparable as teachers and nurses, as teachers and nurses are both considered to be caregivers. The turnover results reported were considered low, but the study found turnover rates of specific age groups to be significantly high. For teachers, the study found teachers over 56 and teachers between the ages of 21 and 26 leave the profession at higher rates than the same age groups of the other professions. Harris and Adams argued that older teachers are leaving the profession due to issues associated with pension and benefits and do not account for the major exit from the field. Yet, as leaving relates to younger teachers, Harris and Adams argued, further research needs to be explored to better understand why this population is choosing to leave the profession at such a high rate. Their study did recognize the turnover and

attrition rates for teachers but did not explore reasons why the teachers, or other professionals in the study, left their profession.

Earlier studies conducted by Ingersoll and Smith (2003) recognized the turnover and attrition problem of teachers in American public and private schools. Ingersoll noted the need to account for teacher migration (where teachers leave their current school to go to another school) and teacher retirement, because this avenue of research had not been widely studied. Ingersoll (2002) conducted an additional study to explore the concept of teacher attrition because of the growing number of teachers leaving the profession in their early years of their career. Ingersoll (2002), along with district leaders, recognized the need to account for the number of teachers leaving the profession to help curb the problem of teacher attrition in schools in America.

Ingersoll (2002) used data from the School and Staffing Survey and the Teacher Follow-Up Survey to analyze this issue. The School and Staffing Survey is a system survey of questionnaires to provide context and descriptive data on the conditions of elementary and secondary schools in the United States. The School and Staffing Survey gathers teacher responses on a wide range of topics such as teacher demands, conditions in schools, teachers' perceptions of school climate, teachers' perception of problems in schools, and hiring and retention practices (National Center for Education Statistics, 2015). The School and Staffing Survey and Teacher Follow-Up Survey are national surveys sent to more than 55,000 teachers and 12,000 principals in the United States. The School and Staffing Survey is sent the 1st year of data collection, and the Teacher Follow-Up Survey is sent to the same participants the following year to follow up on previous questions answered on the School and Staffing Survey. These surveys focus on

job characteristics such as job satisfaction. The survey also reveals if the teacher has left the profession and reasons for leaving the profession.

The analysis conducted revealed a 17% teacher turnover rate in the United States in 2000–2001 (Ingersoll, 2002). The study revealed a very small increase in turnover rates between urban public schools and suburban public schools. The results yielded a marginal difference between teacher turnover rates in secondary and elementary schools. Ingersoll then conducted a statistical analysis of the reasons teachers left the profession. The study revealed roughly half of the teachers were leaving the profession because of job dissatisfaction (Ingersoll, 2002). Teachers who reported job dissatisfaction reported low salaries, lack of support from administration, lack of student motivation, student discipline problems, and lack of teacher influence over decision making. Student discipline problems were the second leading factor in teacher turnover, following teacher salaries (Ingersoll, 2002).

Cha and Cohen-Vogel (2011) conducted a follow-up to Ingersoll's (2002) study to further explore the reasons teachers quit the profession. Their study further compared the attrition rates of teachers by having a deeper focus on the reasons the teachers left the profession. Ingersoll (2002) identified teachers as leavers (those teachers who leave the profession) and movers (teachers who move from one school to another). This grouping caused some issues because teachers could be classified as a leaver for various reasons, including retirement, leaving the profession completely, or leaving for a brief period of time to care for a child or loved one. In Cha and Cohen-Vogel's study, they only focused on teachers considered to be switchers, which are teachers leaving the teaching profession for employment outside of the field of education. Data from 4,156 public

school teachers were collected through the School and Staffing Survey (1999–2000) and the Teacher Follow-Up Survey (2000–2001) to determine the number of switchers during that year.

The data revealed 222 of the teachers surveyed met the criteria for being classified as a switcher, or about 13% of the total population of teachers surveyed. Cha and Cohen-Vogel (2011) then conducted a structural equation model to explore the reasons teachers left the profession, using the variables teacher job satisfaction, salary, working conditions, and teacher professional development experiences. Findings from the structural equation model analysis revealed a significant relationship between salary, teacher working conditions, and the impact on teacher job satisfaction, all of which lead to teachers leaving the profession (Cha & Cohen-Vogel, 2011). The findings suggested teacher working conditions (student misbehavior, parental support, administrative support, and teacher influence) were the strongest predicting variable of whether or not a teacher would leave the profession (Cha & Cohen-Vogel, 2011). Teachers reporting negatively on the Teacher Follow-Up Survey regarding student behavior were considerably more likely to leave the teaching or education profession. Their study discussed the reasons for leaving the profession but did not reveal the impact teacher turnover rates and high attrition rates had on public schools in the United States.

A study conducted by Kukla-Acevdeo (2009) outlined three of the most common reasons why teachers leave the profession: administrative support; classroom control, also called teacher autonomy; and behavioral climate, which refers to how students behave in the school setting. Since behavioral climate is one of the leading causes for teachers leaving the profession, those in the field need to look for ways to increase the

perception of the behavioral climate by reducing student misbehaviors to decrease the teacher turnover rates. PBIS has been identified as a research-based approach to discipline that can help build a positive behavioral climate (Bradshaw, Koth, et al., 2008). This study analyzed the effects of PBIS in schools in Kentucky and how the implementation affected behavioral climate in schools.

Collectively, the studies reviewed have shown the growing concern of student discipline problems in public schools. These studies began to capture the perception teachers have of the misbehavior in schools and how the stress of discipline problems leads teachers to look for other avenues to stay in the profession or ultimately to leave the profession altogether. This research explored the need for behavioral change in the public schools. The research has begun to search for answers to a growing trend that has a devastating impact on education.

Teachers in Low-Income and Low-Performing Schools

Teachers working within urban public schools that have a high concentration of low-performing students are more at risk for leaving the profession (Boyd et al., 2005). Teachers working within these populations face a wide range of specific challenges that must be overcome before attention can be placed on student achievement (Darby et al., 2011). Specifically, teachers working within these conditions first must understand the complexities associated with urban schools that have high concentrations of low-performing students. These complexities include poverty and low socioeconomic status, lack of parental involvement, lack of funding for materials and supplies, and reduced time to provide remediate instruction to low-achieving students while maintaining focus on current instructional goals (Boyd et al., 2005; Brill & McCartney, 2008; Cha &

Cohen-Vogel, 2011; Darby et al., 2011; Harris & Adams, 2007). Schools saturated with higher populations of students of poverty or low socioeconomic status have less parental involvement at the school level, and students have less support from parents in the home, leading to deficitis in school academics and socioemotional behaviors (Smethem, 2007). These issues have shown to have a negative relatioship to the aniexty and stress for teachers in these working environments and have been shown to be a cause for higher rates of teacher turnover in public schools (Ingersoll & Smith, 2003).

Guin (2014) studied the characteristics of elementary public schools with high teacher turnover rates and the relationship between high turnover rates and school climate. The school district in the study was a large, urban school district with 97 schools, 70 of which were elementary schools and the central focus of the study. Almost 47,000 students attended the school district, and there were over 4,200 certified teachers in this district, with 3,200 of these currently in a teaching position. The school district provided all employees the Staff Climate Survey, which is a portion of the questions used in the Teacher Survey developed by the Center for the Study of Teaching and Policy (Guin, 2014). Three years of data were used from the 2000–2001 to 2002–2003 school years. The study found schools with high teacher turnover rates were more likely to have high percentages of low-income and ethnic-minority students. The schools with high teacher turnover rates had a statistically significant relationship with the reporting of negative measures on school climate, teacher climate, principal leadership, teacher influence, and feeling respected; the correlation was significant at the .01 alpha level. The correlation was not statistically significant for teacher interactions as reported on the

survey. Teacher interactions referred to the interactions among teacher peers or colleagues (Guin, 2014).

Guin (2014) used this information to conduct a case study analysis of specific schools in the school district to further explore why teachers reported negative responses on the survey. Guin's case study analysis revealed several common themes in schools with high teacher turnover:

1. The instructional program was disrupted by student misbehaviors.
2. Professional development was often repeated because teachers were being replaced at high rates.
3. Teacher collaboration was difficult because new teacher teams were being formed each year.
4. There was a lack of trust among teachers.
5. There was an average of less than five teacher applicants for each teacher vacancy, forcing the school leaders to choose teacher replacements who had less experience because the applicants were typically new to the profession.

Guin's study revealed minimal relationship associated with high teacher turnover rates but did not explore what measures would increase a teacher's likelihood of remaining in the profession or remaining in a high-poverty school. In an effort to understand the influences encouraging teachers to stay in the profession, one would have to understand the causes teachers attributed to leaving the profession.

The solution to the teacher shortage will not only be solved by recruiting more teachers (Ingersoll, 2002). Researchers continue studying varying aspects of the teaching profession to determine the leading cause of teacher attrition. Because of the vast

complexities of the profession, it is difficult to determine a single cause. To attract highly qualified teachers to high-poverty schools, school and district leaders have implemented incentives to teachers remaining at the school, such as salary stipends, partnerships with local universities for tuition reimbursement, and other incentive packages. Despite these efforts, high-achieving teachers continue to leave these schools. A growing conversation in the field of education is high-achieving teachers and their flight risk to leave low-performing, high-poverty schools (Boyd et al., 2005).

There is a vast amount of research regarding the alarming rate that teachers, especially those new to the profession, are exiting the field and pursuing other careers that are deemed less demanding (Abel & Sewell, 1999; Barnes et al., 2007; Billingsley, 1993; Boyd et al., 2005; Brill & McCartney, 2008; Cha & Cohen-Vogel, 2011; Friedman, 2000; Goldring et al., 2014; Guin, 2014; Hanushek et al., 2004). Brill and McCartney (2008) hypothesized improved teacher working conditions and professional development could influence attrition. The study suggested districts should focus on strong mentoring programs to support beginning teachers in managing the many tasks of being a new teacher and juggling the demands of the job. The various jobs and tasks a teacher must perform within the school day add stress, which has been shown to be a reason for teachers to burn out and leave the profession (Abel & Sewell, 1999).

Teacher attrition and retention are concerns for district and school officials not only because of the impact on student achievement, but also because of the monetary investment and human-resource investment to coach and mentor new teachers. Some school districts have estimated losing $16,000 to $20,000 for every teacher who leaves the profession because of the amount of training and retraining that needs to take place to

induct every new teacher to the profession (Ingersoll, 2001). Kukla-Acevedo (2009) used three of the most common reasons for teachers to leave the profession (administrative support, classroom control or teacher autonomy, and behavioral climate) to examine the relationship these reasons had on a teacher leaving the profession. In the study, data from the 1999–2000 School and Staffing Survey and Teacher Follow-Up Survey were used to measure teachers' mobility decisions during the 1999–2000 school year and the 2000–2001 school year. The sample included 3,505 full-time, public school teachers. For the purpose of the study, leavers were defined as a teacher who left the teaching profession completely, movers were defined as teachers who switched schools but remained in the teaching profession, and stayers were those teachers who remained at their current school (Kukla-Acevedo, 2009).

The analysis revealed the strongest correlation between behavioral climate and administrative support (Kukla-Acevedo, 2009). This means teachers felt the administrators contributed to a negative behavioral climate because they did not address the student misbehaviors in a way that was approved by the teacher. The data also revealed 5% of the teachers surveyed left the profession completely, 8% switched schools, and 87% remained in their school. Kukla-Acevedo then conducted a comparison for beginning teachers and found these teachers were almost 1.5 times as likely to leave the profession completely and almost twice as likely to switch schools. When the three variables (classroom autonomy, administrative support, and behavioral climate) were analyzed with their relationship to teacher turnover, administrative support was the only variable that showed statistical significance with teacher turnover (Kukla-Acevedo,

2009). This is contrary to what the previous research had indicated; other researchers noted student misbehavior as being one of the top reasons teachers leave the profession.

Teachers new to the profession are at a greater risk of leaving. The first 3 years of teaching are the most critical to teacher turnover. One in five teachers leaves the profession during this time frame, and teachers in urban schools have a slightly higher rate of leaving the profession than those not teaching in urban settings (Ingersoll & Smith, 2003). Teacher turnover in urban settings is about 6%, and the national average is about 5% (Goldring et al., 2014). Replacing teachers causes a strain on fiscal allocations because time and resources are spent to induct these teachers into the profession. A study conducted by the National Commission on Teaching and America's Future found losing a teacher costs school districts between $4,000 and $10,000 (Barnes et al., 2007). Exit from the profession has been attributed to high levels of stress, student misbehavior, negative relationships with coworkers, and pressure from high-stakes testing (Smethem, 2007). Researchers label these reasons as working conditions of teachers. The growing number of teachers leaving the profession increases the importance of improving working conditions for teachers. Misbehavior of students is one of the top five reasons these teachers leave the profession (Smethem, 2007). Thus, research involving behavior support foundations and working conditions is important.

The growing amount of research conducted and collected on the topic of teacher attrition and retention have a common theme: Teachers, especially those new to the field, are leaving the field of education at high rates, leaving school and district leaders with less qualified teachers to fill their places. Although research on this topic has not come to a consensus on the reasons why teachers are leaving the field, the major contributors to

teacher turnover have been identified as teacher working conditions, administrative support, and student misbehavior (Barnes et al., 2007; Boyd et al., 2005; Brill & McCartney, 2008; Cha & Cohen-Vogel, 2011; Guin, 2014; Hanushek et al., 2004; Harris & Adams, 2007; Ingersoll, 2001, 2002; Ingersoll & Smith, 2003).

Call for Change (Policies)

In the 1960s, the Coleman Report sparked conversation between educators and communities, as it suggested the family background of a student, not the school, was a major predictor of the achievement of a student (Meier, 1967). This report instigated the Effective Schools research movement. In an effort to put together common characteristics of effective schools, researchers began identifying and studying schools noted to be successful regardless of the socioeconomic status or race of their students (Lezotte, 2001). The common characteristics between successful schools included strong instructional leadership, strong sense of mission, effective instructional behaviors, high expectations for all students, frequently monitored student achievement, and safe and orderly operation (Lezotte, 2001). This work began to highlight the changes needed in schools but did not prepare educators for a growing concern of how students with disabilities were educated in the public school setting.

Mills v. Board of Education of the District of Columbia (1972) challenged how students with disabilities were being treated and excluded in general education settings. The court found students with disabilities were being excluded from the general education setting because of behavior, and this called for the need to address such issues in Congress (*Mills v. Board of Education of the District of Columbia,* 1972). Updates

and new regulations and policies continue to be developed as stakeholders learn more about the inclusion of students and how to adequately prepare and plan for all students.

NCLB (2002) called for improving the academic achievement of the disadvantaged. The purpose of the act was to ensure all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at minimum, proficiency on challenging state academic achievement standards and state academic assessments. Drastic changes were made to accountability efforts for schools, requiring testing at specific grade levels to measure the growth of the school and students (Woodside-Jiron & Gehsmann, 2009). This reform effort called for students in special populations to be included in the general education classroom so these students could be provided with equal access to the curriculum being taught. These students were also measured by the same assessment as their peers unless they qualified for alternative testing. Many teachers of these students had very little training or expertise to provide adequate instruction for the wide range of abilities in the classrooms. Teachers were not prepared to meet the diverse needs of the students in the classroom, and behavior for some became a growing concern, while continuous demands were placed on students, teachers, and schools to meet the adequate yearly progress goal, or face disciplinary measures as outlined in the regulation of NCLB (Woodside-Jiron & Gehsmann, 2009).

The original enactment of the Education for All Handicapped Children Act of 1975 brought a requirement to guarantee students with special needs a free, appropriate, public education. Prior to the enactment of IDEA, students with special needs were frequently not accepted in the general education setting. Schools were not accessible to students with special needs, who were likely to be excluded from school altogether

(Burke & Sandman, 2015). IDEA required schools to include these students in the school, but often students with special needs were placed in classrooms with low standards for academic achievement and growth. These students were frequently placed in special populations regardless of their disability and not allowed to focus on their strengths and abilities. The reauthorization of IDEA in 2004 required teaching students with special needs in the least restrictive environment. This meant students formerly being placed in state agency schools, special schools, or self-contained classrooms would be taught in the general education classroom. As a result, teachers confronted an increase of behavioral issues in the general education setting, as general education teachers were less equipped to effectively differentiate for these students.

Response to Intervention

Response to intervention (RtI), more recently known as *multitiered systems of support*, is a framework designed to provide early interventions to students at risk of failing to meet standards in schools (Fuchs & Fuchs, 2006). Growing research on early intervention has shown such strategies reduce the number of students being referred for special education services when adequate interventions are implemented, monitored, and analyzed. The RtI framework operates under a three-tiered premise, where all students receive core instruction; 10–15% of the population needs additional instruction or intervention; and 5% needs intense, individualized intervention to bridge the gap in deficits in learning. Tier 3 is most often used to boost achievement in the areas of reading and mathematics. Educators are beginning to use this same approach to identify and target problem behaviors to support students in the educational setting. Researchers are beginning to study the relationship of RtI principles to social behavior outcomes and

have found the RtI process can help shape problem behaviors in students when intensive interventions are employed (Fairbanks, Sugai, Guardino, & Lathrop, 2007). A specific study conducted by researchers from Assumption College and the University of Connecticut found increasing praise as a Tier 3 intervention helped change the negative or nondesired behaviors in students (Myers, Simonsen, & Sugai, 2011). Using check-ins and check-outs also can have a positive impact on students' behaviors when applied as a Tier 2 intervention as a way to prevent problem behaviors and encourage positive behaviors (Filter et al., 2007).

When educators begin to determine the leading cause for a child's disruptive behavior, they typically find other deficits impeding the success of the child. Children with disruptive or aggressive behavior generally have been found to have lower performance skills in reading or mathematics (Bradshaw, Buckley, & Ialongo, 2008), leaving educators to make a determination for the cause of the behavior. Subsequently, educators are often unsure if the behavior is caused by the lack of academic success or if the academic success is impeded because of the disruptive behavior. Many researchers have begun to explore this topic to better understand the patterns that emerge between behavioral outburst and academic performance. A growing amount of research has suggested combining and tracking the RtI three-tiered model to increase reading achievement and improve student behavior (McIntosh, Horner, Chard, Boland, & Good, 2006; Sadler & Sugai, 2009).

Bradshaw, Zmuda, and Kellam (2009) explored this topic to determine if early intervention in both academics and behavior would make a difference over time in students. Their study was implemented in Baltimore City public elementary schools in

1993 in 27 classrooms. Students in kindergarten were selected for the study, implemented during the students' first-grade year of schooling. Parents attended an information session, with 678 agreeing to participate. The students participated in either a classroom-centered intervention or a family–school partnership intervention. The design of the classroom-centered intervention was to enrich the classroom curriculum and teacher instructional and behavioral practices. Various strategies were utilized to support students. When students failed to respond to the universal intervention, additional adaptations were made to the instructional practices to help support the student in need. Some students participated in the family–school partnership intervention to bridge the gap between school and home. Teachers, mental health support professionals, and other school members participated in professional development sessions designed to include parents and caregivers. The parents participated in a series of nine teacher-led workshops to help parents and caregivers develop strategies for improving student behavior and academic skills (Bradshaw, Zmuda, et al., 2009).

Academic and behavioral data were collected to establish if the interventions had a statistically significant impact. At the end of first and second grades, students receiving the classroom-centered intervention showed significant improvement in academic achievement for reading and mathematics and showed improved classroom behavior (Bradshaw, Zmuda, et al., 2009). The trend continued as the students were tracked during their sixth- and seventh-grade years. The students continued to show significantly better outcomes than their peers not receiving the classroom-centered intervention. Students receiving the classroom-centered intervention also yielded less risk for tobacco or drug use in middle school. Students receiving these interventions were less likely to

participate or be identified as students needing support in special-needs programs. Although students in the family–school partnership did not yield the same results, they still had better outcomes than their peers not receiving an intervention (Bradshaw, Zmuda, et al., 2009). This approach used the RtI framework to develop instructional and behavioral practices centered on the student. The study added to the research of using universal interventions and focused interventions to help support students.

A study conducted by researchers from the University of Oregon (McIntosh et al., 2006) tackled the issue of problem behaviors and decline in academic performance. McIntosh et al. (2006) contended that a student's achievement on reading scores as early as kindergarten could predict the number of ODRs later in the student's elementary school career. The researchers had a different approach to looking at the relationship between academic decline and negative behavioral responses. The researchers tried to determine if problem behaviors stemmed from a lack of understanding of academic material. However, instead of trying to determine if problem behavior stems from academic decline or if academic decline stems from problem behavior, McIntosh et al. looked at the relationship as a pathway.

McIntosh et al. (2006) built on previous research showing problem behaviors can begin to manifest in children as early as kindergarten and that early detection and intervention is needed to make up for deficits in academics and social behavior (Fuchs & Fuchs, 2006). Interventions implemented after the third grade have shown to have little impact on changing negative behavior or for making up for deficits in academics (Fuchs & Fuchs, 2006). The team identified two pathways that could lead to problem behavior: social behavior deficit pathway and academic skill deficit pathway. The social behavior

deficit pathway identifies students who enter school with a lack of social skills and have displayed problem behaviors due to lack of intervention or of teaching of correct social skills (Kellam, Ling, Merisca, Brown, & Ialongo, 1998). The academic skill deficit pathway describes students who arrive at school with deficits in academics but do not display behavior problems. Even though the academic skill deficit pathway does not identify students with problem behaviors, if the student does not receive effective interventions to compensate for the academic deficit, problem behaviors are likely to surface (McIntosh et al., 2006).

McIntosh et al.'s (2006) study focused on reading achievement data and behavioral data from students attending seven schools in a Pacific Northwest school district. The schools served students ranging from kindergarten to eighth grade. Each school implemented the same school-wide reading-improvement model to determine reading achievement. Behavior data were collected through ODRs. Samples were grouped from fourth to fifth grade, second to fifth grade, and kindergarten to fifth grade. The results found ODRs in fourth grade were a predictor of the number of ODRs in the fifth grade. The achievement scores for reading had a negative relationship with ODRs. When reading achievement increased, the number of referrals decreased, and when reading achievement decreased, the number of referrals increased (McIntosh et al., 2006). This finding is important to the field because early detection and intervention are needed. Without early detection and intervention, these behaviors can increase, leading to less structured environments and higher risks of violent behavior. Students entering school with a deficit in reading can become a behavior problem in the classroom because

adequate supports have not been provided, causing increased frustration and misbehaviors (McIntosh et al., 2006).

The research has shown early detection is key to changing and shaping problematic behaviors, but early detection also can help determine if academics impact the behavioral problems of students. RtI, or multitiered systems of support, provide students with layered approaches to be successful in schools. PBIS is part of the core instruction for shaping problematic behaviors. PBIS is used to increase the desired behaviors and is considered to be part of the Tier 1 layer of RtI. PBIS also identifies supports for students in Tier 2 (needing more intervention to shape behavioral change) and provides interventions for Tier 3 students, those needing intensive supports (Eber et al., 2002).

Increase of Behavior Leading to Restraint and Seclusion

The U.S. Government Accountability Office (2009) noted some students display behaviors that are considered to be aggressive in nature and require intensive intervention and supports. In some cases, extreme issues involve the use of restraint or seclusion of these individuals. The increase of the number of restraints and seclusions used in public school settings became an alarming concern for parents and advocacy groups. In May 2009, the House and Education Labor Committee responded to the concerns and called for a review of restraint and seclusion in schools (U.S. Government Accountability Office, 2009). In all 50 states, the review found over 100 cases of death or injury of a student by physical restraint. The review also found there was not a system for reporting these incidents or a way to collect data of these events. No state had adopted a policy for restraint or seclusion. Education advocates called for the discussion of policies,

regulations, and statutes in schools regarding restraint and seclusion. This was the beginning of much-needed reform regarding restraint and seclusion laws in public schools.

In 2009, restraint and seclusion became the target of discussion after parents and educational stakeholders began to disclose how students had been abused, neglected, or killed from restrain or seclusion (U.S. Government Accountability Office, 2009). Parent advocacy groups began creating their own websites, councils, and groups to spread the word about the misuse of restraint and seclusion in schools and call for a policy to limit the inappropriate use of restraint and seclusion in schools. As a result, Secretary of Education Arne Duncan asked for a review of legislation and policies regarding restraint and seclusion. The results of the review led to the creation of additional regulations to ensure the safety of every child and required specific training for educators in the state of Kentucky.

In March 2010, the U.S. Department of Education Office for Civil Rights (2012) of the U.S. Department of Education began collecting data on students being restrained or secluded from the general education population. The collected data sparked concern from educational advocates, who called for immediate changes to policies, regulations, and statutes regarding restraint and seclusion. The manner in which students were restrained was lax and resulted in injury in some cases. Many educators in public schools did not receive training to restrain students, and students were often secluded without proper supervision.

During this time, a wave of lawsuits was filed on the basis of the inappropriate use of restraint and seclusion where students were injured or even killed as a result of

improper use of restraint and seclusion (Jones & Feder, 2010). The basis of these suits claimed restraint and seclusion was unconstitutional because it denied students their Fourteenth Amendment right of due process. Cases such as *Rasmus v. Arizona*, where a student was locked in a closet for hours, caught legislators' attention (Jones & Feder, 2010). The U.S. Government Accountability Office reported restraint and seclusion were being used as discipline measures instead of as emergency safety measures (Freeman & Sugai, 2013). Advocacy groups partnered with legislators to create HR 4247/ HR 1381, or the Keeping All Students Safe Act. This act, if passed, promised to protect each student from physical or mental abuse, aversive behavioral interventions that compromise the student's health and safety, or any physical restraint or seclusion imposed for the purpose of discipline or convenience. This piece of legislation died in committee, but many policies outlined in the regulation began to surface in many state regulations.

The aforementioned court cases all had the recurring theme of students being inappropriately restrained or placed in seclusion without proper supervision, and the effects of the restraint or seclusion impacted the student negatively (Jones & Feder, 2010). The educators facing allegations for the neglect and abuse of students had not been properly trained to adequately respond to misbehaviors from various students. This common theme became the backdrop for inclusion of adopting PBIS in state policies regarding behavior. In 1997, positive behavior intervention was outlined in the IDEA as the primary intervention for students with challenging behavior disabilities (Sugai & Horner, 2006).

Freeman and Sugai (2013) conducted a study to analyze current practices in the United States regarding restraint and seclusion. The study was designed to analyze the

changes states had made to their policies of restraint and seclusion and to determine how restraint and seclusion was outlined in state-level policy or legislation. The study found only 30 states had updated their policy on restraint and seclusion, and only 15 states had policy or guidance documents. Of these, four common themes were addressed: using preventive techniques (sometimes mandated), limiting specific restraint and seclusion procedures, reporting to parents, and debriefing with students after a restraint or seclusion (Freeman & Sugai, 2013). The preventive techniques called for the use of PBIS with students and equipping educators with de-escalating strategies.

In 2010, the racial disparities in school suspensions and expulsions began to be highlighted, prompting Arne Duncan to deliver a speech on the topic that promised more civil rights enforcement in public educational settings (Losen, 2011). Losen (2011) outlined collected data from 2006 showing male students and students of color were at a higher risk for being suspended for nonviolent behaviors . Subsequently, school districts across the nation were asked by legislative bodies to implement strategies to reduce the suspension rates of students; to collect, review, and report data for students being removed from the instructional program; to reduce the disparities between the students being suspended; and to provide positive interventions for students (Losen, 2011).

Zero-tolerance policies created after mass acts of violent crimes at public schools to protect students were now being scrutinized because of the harshness of the policies and numbers of suspensions and expulsions (Advancement Project & the Civil Rights Project, 2000). During the peak of zero-tolerance policies, more than 3.1 million students in America's public schools were being suspended for items such as nail clippers, scissors, cough drops, toy guns, Swiss Army knives, or shared over-the-counter

medications like aspirin or ibuprofen; another 87,000 were expelled (Advancement Project & the Civil Rights Project, 2000). During this time, protestors against zero-tolerance policies began to push for a review of school data and encouraged further professional development for teachers to manage and respond to classroom misbehaviors. Advocates pushed for schools to redefine their zero-tolerance practices and work to include positive approaches to discipline (Advancement Project & the Civil Rights Project, 2000). Further examination of zero-tolerance polices found at-risk students were disproportionately suspended or expelled from school under the zero-tolerance guidelines (Gage et al., 2013). Gage et al. (2013) found students were also being held to exaggerated interpretations of the zero-tolerance policies, such as being suspended or missing grade points for infractions like being tardy or absent from school; again, ethnic-minority students were the most likely to be reprimanded under these situations.

Fabelo et al. (2011) outlined the growing number of students being suspended or expelled from school. The report also outlined the disproportionality of ethnic-minority students. Shortly after the report was published, the Supportive School Discipline Initiative was announced to create safe, supportive, and productive learning environments while keeping students in schools. This initiative supported the development of behavioral reform efforts with an $840,000 budget to support schools in various ways to deter the school-to-prison pipeline and redesign policies to make equitable treatment for infractions of all students regardless of race (U.S. Department of Education, 2014). Many of these behavioral reform efforts suggested the use of positive approaches to discipline, namely PBIS, to help reduce the likelihood of students displaying negative behaviors in the school setting.

In February 2013, Kentucky passed its first regulation on these issues. The Use of Restraint and Seclusion in Public Schools: 704 KAR 7:160 was passed and would be a requirement for all schools to be in full compliance by the 2013–2014 school year. Much of the law addressed the use of restraint and seclusion. An added component of the regulation required training for every staff member in a school building to be trained on Promoting Positive Behavior in Schools. Kentucky passed the restraint and seclusion legislation in February 2013 but gave schools until the 2013–2014 school year to gain compliance with the new regulation. This included training every staff member on PBIS, regardless of their role group. This training was a 4-hour, web-based training, which consisted of watching videos relating to PBIS. The major focus of the training was on promoting positive behaviors in students and in schools by decreasing or minimalizing the behaviors.

Approaches to Discipline

Educators can use a multitude of behavioral strategies to deter problem behavior in schools. Some school administrators prefer punitive strategies when students are excluded from classroom activities, some foster mutual feelings of respect where students are part of the decision-making process, and some offer token-based economies encouraging students to behave accordingly. More emphasis is being placed on strategies that foster mutual respect between the student and the adult and include positive approaches to discipline. Although positive approaches to discipline are research based, school administrators are finding difficulties implementing and sustaining these strategies (McIntosh et al., 2011).

Current demands of high-stakes accountability testing have put added pressure on teachers and administrators to achieve the annual goals set by the state. Teachers have little time to teach appropriate behavior and are often trying to focus on academics rather than the social and emotional well-being of the child. Because of the mounting concern of problem behavior and little time to teach replacement behaviors, curriculum specialists have started new programs to integrate the prevention of nondesired behaviors and build on the foundation of the healthy social-emotional status of the child. Integrated programs have shown a positive influence on the development of the student and have helped support and sustain long-term academic achievement (Domitrovich et al., 2010). Schools and administrators feeling pressure from high-stakes accountability testing tend to stray from teaching these integrated models and have deferred to exclusionary practices (Advancement Project & the Civil Rights Project, 2000). Changing behaviors in students and implementing positive behavioral systems require additional time from teachers, educators, and administrators. The purpose is to teach the desired behavior when the student misbehaves. Sometimes a student will need to be taught the desired behavior multiple times before beginning to display the desired behavior. Many educators lack the time needed to devote to shaping these behaviors and resort to methods of punishment that are viewed as faster ways to discipline, such as suspension.

Educational advocates are calling for a change to decrease the use of exclusionary strategies when responding to problem behavior because of the disproportionate use when disciplining targeted populations such as African American males (Fenning & Rose, 2007). The study conducted by Fenning and Rose (2007) found African American males were at a higher risk of being expelled or suspended than their peers who display

the same behaviors. A recent study by Mitchell and Bradshaw (2013) examined the use of exclusionary discipline approaches and positive behavioral approaches in 37 elementary schools. The study targeted 93 classroom teachers and 1,902 fifth-grade students. Mitchell and Bradshaw found statistical significance between exclusionary discipline strategies and lower scores for discipline and order (order was determined to mean students followed adult direction). The same study also reported positive discipline strategies resulted in higher scores for discipline and order. This is important information for educators and stakeholders, but research is still needed to show how the use of PBIS impacts teacher working conditions. Mitchell and Bradshaw's research displayed how implementing a positive approach to discipline could deter less desired behaviors from students, but the researchers did not explore if reducing problematic behaviors had an impact on the teachers' perception of student behavior.

Teacher self-efficacy has been a large discussion in connection with teacher working conditions. Self-efficacy has been defined as one's ability to have a positive effect on a subject (Bandura, 1977). When referring to teacher self-efficacy, researchers refer to the teacher's belief that his or her practices have a positive influence on students. Student behavior has been suggested to have correlation with negative results of a school's overall organizational health rating (Hoy & Woolfolk, 1993). Organizational health refers to a sense of belonging, staff members' willingness to help, response to student misbehaviors, and cooperative effort to meet the school's mission. Teachers who viewed their school as having higher rates of organization health also had higher rates of self-efficacy (Hoy & Woolfolk, 1993). Teachers' having higher rated self-efficacy also had a positive relationship with student achievement scores (Caprara, Barbaranelli, Steca,

& Malone, 2006). Principal support was not found to have a significant impact on teacher self-efficacy (Hoy & Woolfolk, 1993). Teachers and staff members felt included in the decision making of the school, felt staff members were working toward the same goal, and felt supported by members of the staff (Hoy & Woolfolk, 1993).

Teachers preparing their classrooms at the beginning of the year often post their rules before students enter the building and expect the students to follow these rules. Goodman (2007) argued that this behavior leads to a decline in student behavior because there is no student buy-in to the process or the rules surrounding the classroom. He suggested teachers including students in the decision-making process for classroom rules and norms have a higher likelihood of the students following the norms and rules agreed upon. Schools that include parents and students in the process of creating school-wide norms and behaviors also have a greater chance of having those followed (Goodman, 2007).

Further research explored the personal and school cultural factors and how these affect teachers' efficacy in dealing with student misbehaviors. Tsouloupas, Carson, and Matthews (2014) found teachers who considered themselves to be extroverts (engaged in social interaction) were more likely to rate themselves as having higher efficacy and were more likely to build a strong rapport with students in the classroom. Teachers who viewed themselves as having higher efficacy were likely to have better results in handling student misbehavior.

PBIS

PBIS can also be known as positive behavior support. PBIS stems from an applied science that focuses on using educational and systems-change methods to

increase quality of life and decrease problem behaviors (Ross & Horner, 2007). Founders of PBIS (Carr et al., 2002) have separated the words to include the definitions of positive behavior and supports:

> By positive behavior, we mean all those skills that increase the likelihood of success and personal satisfaction in normative academic, work, social, recreational, community, and family settings. By support, we mean all those educational methods that can be used to teach, strengthen, and expand positive behavior, and all those systems change methods that can be used to increase opportunities for the display of positive behavior. (p. 3)

PBIS was formed from three major sources: applied behavioral analysis, the normalization and inclusion movement, and person-centered values (Carr et al., 2002). Applied behavior analysis determines the process of stimulus-response reinforcing used to identify how behaviors can be reinforced. The normalization and inclusion movement is based upon the idea that those with disabilities should be included in the general education classroom, supported by NCLB (2002) and IDEA (2004). Person-centered values focus on planning and preparing for the individual child to use and develop interventions specific to an individual. The important aspects of PBIS focus on lifestyle changes, lifespan perspective, ecological and social validity, intervention and prevention emphasis, and flexibility with scientific practices (Carr et al., 2002).

As previously noted from the Effective Schools movement, schools that operate in a safe and orderly manner display a characteristic of being an effective school (Lezotte, 2001). PBIS builds upon the premise that schools will operate in a safe and orderly manner and provide strategies for teaching all staff members how to establish a safe and orderly school. A substantial amount of research has been conducted on PBIS. The research includes both qualitative and quantitative studies relating to the implementation, training, fidelity, types, tools, and models of PBIS. Research of PBIS has been

conducted mostly relating to student behavioral outcomes. Research regarding the foundational use of PBIS and the effect on teacher working conditions is very limited. In many states, PBIS or PBIS-like approaches to discipline have been adopted as part of the state education law. One of the common themes between the Effective Schools definition for safe and orderly schools and PBIS is that all staff members, regardless of job title within the school, must understand they are responsible for all student behaviors in the school (Lezotte, 2001; Ross & Horner, 2007).

PBIS is classified as a social and emotional learning framework designed to help students succeed in the classroom environment by focusing on teaching expectations and building on the social and emotional capacity of the child. This positive approach to discipline is designed to reduce problem behaviors and improve the quality of life of a student (Dunlap et al., 2010). PBIS is a research-based practice and includes data-driven implementation, research-based interventions, and school-wide structures and procedures to enhance utilization and sustainability (Dunlap et al., 2008).

Research has shown students who receive instruction in social and emotional learning are more likely to display positive behaviors and are more likely to respond to corrective strategies when redirected (Durlak, Dymnicki, Taylor, Weissberg, & Schellinger, 2011). In Durlak et al.'s (2011) study, a sample of 270,034 students in kindergarten through Grade 12 received instruction in social and emotional learning and consequently displayed higher rates of improved social and emotional functioning and increased academic achievement scores. Other studies have shown similar results in reducing the amount of ODRs and showing increases in positive student behaviors (Dunlap et al., 2010). The PBIS approach is based on the practice of improving student

academic and behavior outcomes by ensuring all students have appropriate instruction and behavior practices and interventions. PBIS is based on building positive interactions with students in an effort to decrease off-task behaviors and stems from applied behavior analysis (Carr et al., 2002). PBIS can be classroom based but also has a school-wide component. PBIS is not a program, but rather a framework to build relationships in an effort to decrease off-task behaviors and increase time in the classroom and time on task.

Before implementing PBIS, a school must undergo an assessment of its practices using the SAS. This assessment survey includes Likert-type rating scales. The survey must be answered by 90% of the staff members in the school (including results from all departments such as custodians, cafeteria workers, office staff, teachers, and support staff). The survey consists of questions rating the school's current behavior plan, school-wide expectations, and whether policy changes are needed regarding behavior. Before beginning PBIS, a school must obtain a rating scale from the SAS of 75% or higher. The SAS rating is crucial to the implementation of PBIS because it determines if a school is ready for the implementation of PBIS. If a rating is below 75%, the school is not deemed as ready to implement the framework of PBIS and typically does not participate in training and implementation.

Additional measurements are used within a school implementing the framework of PBIS to measure the quality of the implementation. Schools implementing the PBIS framework also use the Benchmark of Quality assessment to identify areas of success and areas of improvement. This assessment is performed in the spring of every year. Schools also use the School-Wide Evaluation Tool assessment to determine the level of implementation of PBIS. The School-Wide Evaluation Tool (Todd et al., 2012)

examines seven areas of the school's implementation process: expectations defined, behavioral expectations taught, acknowledgement procedures, correction procedures, monitoring and evaluation, management, and district-level support. These areas are evaluated by 28 research-based questions. This assessment helps to identify schools implementing PBIS with fidelity, or achieving a measure of 80% or higher. This is the ranking schools seek to achieve for the greatest impact on creating a positive behavioral culture to reduce the number of ODRs reported (Bohanon et al., 2006).

The two constructs of PBIS and the results from the TELL Survey may have a relationship. PBIS is a framework for responding to behaviors of concern and using precorrective strategies to decrease problem behaviors. If this framework is implemented the way it is designed, one would expect to see a relationship between implementation and the results from the TELL Survey. One would expect to see higher scores on the Managing Student Conduct construct from the TELL Survey in the schools implementing PBIS. The TELL Survey is designed to measure various aspects of the school including school climate. School climate refers to teacher and student interactions and the physical atmosphere of the school (Marshall, 2014). Higher rates of school climate have been found to help students succeed in a positive learning environment (Marshall, 2014; Zullig, Koopman, Patton, & Ubbes, 2010).

PBIS is layered into three different components to focus on the needs for each construct. School-wide PBIS focuses on the RtI model. The foundational framework is comprised of three levels: primary (school-wide PBIS), secondary (small-group or classroom PBIS), and tertiary (individual supports). The framework focuses on proactive strategies to teach to students to reduce the amount of student misbehaviors through

teaching expectations, rules, and routines. This foundational practice is aimed at creating a positive environment where students want to learn and be a part of the school community (Sugai & Horner, 2006). Efforts at the primary stage are aimed at ensuring everyone in the school has the same agreed-upon rules and expectations for common areas in the school such as the cafeteria, hallways, and restrooms. This stage also focuses on building the school-wide community and ensuring when a behavioral infraction occurs, the behavior is addressed and measures are used to correct the problematic behavior. The secondary level focuses on small-group or classroom behaviors. Efforts at this level are designed to target behaviors that have been persistent but are not extreme behaviors. The tertiary level of PBIS focuses on providing supports for students who display the highest intensity of behavior.

An effective component of PBIS is the focus on relationships between the student and the teacher and student-to-student interactions. A key factor to having a successful classroom is the ability to build and maintain a positive classroom environment (Bucher & Manning, 2003). Building positive relationships with students requires thoughtful planning of the lessons and core subjects. Positive teacher–student relationships have many advantages. When students feel cared for, they are more likely to comply with behavioral and academic expectations. Students in a positive school climate have fewer problem behaviors, better attendance, and higher academic scores (Mitchell & Bradshaw, 2013).

The loss of instructional time is a critical component of low-performing schools. Increased on-task behavior leads to more instructional time. Positive relationships between the teacher and the student lead to students having a greater sense of belonging

(Swain-Bradway et al., 2013). When students feel teachers have genuine concern for their well-being, they are more likely to take ownership over their own learning and are less likely to be removed from the classroom.

The positive relationship between the teacher and the student also increases the desire of the student to be engaged in the classroom activities and involved in extracurricular school activities (Freeman et al., 2006). Participation in the classroom increases (Lewis et al., 2010). This engagement has a positive impact on the amount of time spent on instruction. Educators who spend time building positive relationships with their students are able to spend more time instructing and less time correcting off-task or disruptive behaviors (Swain-Bradway et al., 2013). Teachers who have more positive relationships with students report higher self-efficacy and are more confident in influencing positive student outcomes (Kelm & McIntosh, 2012).

A large component of PBIS ensures student misbehaviors are acknowledged and corrected in a timely fashion. This means that teachers and staff members need to see the whole school as their students and must correct the misbehaviors of any child in the school and acknowledge the positive behaviors of any child in the school. PBIS includes the entire school and provides training to not only the teachers and instructional staff but also members of the noninstructional staff such as custodians, cafeteria staff, and office staff. This training helps to ensure all stakeholders recognize the students in the school.

Recent research has included the study of school-wide positive behavior supports (SWPBS) and general education teachers. Much of the research has compared SWPBS and teacher self-efficacy. Teacher self-efficacy has been defined as how the teacher perceives his or her ability to affect student outcomes (Caprara et al., 2006). Ross and

Horner (2007) conducted a pilot case study to examine the implementation of SWPBS and any statistically significant relationships to teacher self-efficacy and teacher stress. Results showed statistical significance for positive teacher self-efficacy when SWPBS was implemented, but there was no statistical significance relating to stress and the implementation of SWPBS (Ross & Horner, 2007). The information from the study is relevant, but the sample size was small. Teacher self-efficacy and teacher stress are considered to be part of teacher working conditions, but further study needs to include more indicators of teacher working conditions. There is little research comparing the effects of PBIS or SWPBS on teacher working conditions and the impact on teacher attrition.

Research surrounding PBIS and teacher working conditions often includes teachers' perception of school climate and teachers' perception of student behavior. School climate is also often referred to as organizational health. Implementing PBIS has had a significant effect on schools' overall organization health or school climate (Bradshaw, Koth, et al., 2008). Further research has indicated that schools implementing PBIS quickly show greater short-term positive effects on overall school climate or organizational health, but schools taking longer to implement PBIS with fidelity have larger improvements in school climate (Bradshaw, Koth, et al., 2009). School climate can also have an impact on a teacher's commitment to the school, as shown in a study conducted by Tsui and Cheng (1999). The results revealed teachers were more committed to the school and profession when there was a positive school environment and a positive relationship with principal involvement.

Teachers with the highest attrition rates work with students with special needs, particularly students with emotional and behavioral disorders, and work in schools with extreme rates of poverty (Billingsley, 1993). Albrecht et al. (2009) examined the working conditions of teachers of students with emotional and behavioral disabilities. The study compared many factors, but the one most relevant to my study was the use of PBIS and non-PBIS approaches to classroom structure and discipline and the teacher's likelihood to stay in the profession. Albrecht et al. found 89.8% of teachers in settings teaching students with emotional and behavioral disabilities using PBIS approaches were likely to remain in the position, compared to 75% of teachers in similar settings using non-PBIS approaches. The study began to address why teachers leave the profession, but the classification sample was small (teachers of students with emotional and behavioral disabilities), and the study needs to be replicated to include general education teachers as well.

The research supports the implementation of PBIS and shows how using the three-layered approach has helped to reduce problematic behaviors in schools and has increased students' responses to corrective strategies. PBIS builds upon creating and maintaining genuine relationships between the teacher, the student, and the school community, and this is introduced at the primary level. The secondary level helps to teach and reteach students who are more likely to display nondesired behaviors. This level helps to support these students by teaching and modeling the appropriate behaviors. The tertiary level helps to provide intensive supports for students who have the most intense behavior issues. This research provides support for implementing PBIS to reduce

student misbehaviors in schools. Reducing student misbehavior in schools could have an impact on teachers' perception of student misbehaviors, the purpose of this study.

Summary

Student misbehavior is a major concern for school and district leaders because of the negative impacts to student achievement and to the school community and climate. Schools often use exclusionary methods and practices when a student behavioral infraction occurs, yet these practices have been deemed as least effective when trying to change the behavior. The research has shown that students are more likely to change their behavior and less likely to repeat the nondesired behavior when students are taught the desired behavior and have explicit instruction in behavioral expectations. Because of the disproportionate rate of suspensions and exclusionary methods for groups such as African American males, state and school district leaders are seeking alternative ways to approach discipline. Some states, like Kentucky, have adopted policies and have changed current legislation to require a positive approach to discipline and require all school employees to be trained on PBIS for students.

Student misbehavior has been targeted as one of the three main reasons teachers leave the profession (Cha & Cohen-Vogel, 2011). Teachers have noted student misbehavior to be one of the main problems with teaching. Responding to problematic behaviors takes time and attention away from instructional concepts and activities and has a negative impact on student achievement. Teachers leaving the profession creates added pressure to schools and negatively impacts the school culture and climate. A negative school culture and climate leaves teachers and educators feeling isolated. These

effects of student misbehavior negatively impact the school climate and culture, decrease student achievement, and impact teachers' decisions to leave the school or the profession.

Student misbehavior has been shown to be one of the major factors for teachers deciding to leave the profession. PBIS has been shown to have a positive impact on reducing student misbehaviors and is a more effective approach to discipline than exclusionary methods. PBIS requires time to teach the desired behaviors, and thus schools often resort to exclusionary approaches to disciplinary infractions. Teachers and administrators feel pressure from high-stakes accountability testing, along with other initiatives, and perceive the need to focus their efforts on continued growth and achievement because of the expectations to meet federal, state, and local accountability goals.

The existing research has not outlined specifically the correlation how the implementation of PBIS impacts teachers' perception of student misbehavior as well as the school culture and climate. The research is also limited in the design of implementation for schools and districts, because school staff follow a framework and have the autonomy to interpret levels of implementation. More analysis is needed of PBIS implementation in schools and of how successful implementation impacts the school climate and teacher attrition rate.

In this study, I sought to explore the implementation of PBIS in schools to determine if there was a main effect on student achievement scores and on teachers' perception of student misbehavior. School leaders are often looking for ways to increase student achievement scores and improve school culture and climate. In this study, I wanted to determine if PBIS increased student achievement scores. I also wanted to

determine if PBIS could improve teacher working conditions while focusing on the construct of managing student behavior. If these were positively related, I would suspect an improvement in the school culture and climate.

This study could help district and school leaders make decisions to bolster student achievement while also improving the climate and culture of the school. If these are improved, the school would be likely to have lower rates of teacher turnover and attrition. The study was designed to add to the research to explore efforts that could decrease teacher turnover in schools, increase student achievement, and increase teachers' positive perceptions of student misbehavior, thereby positively impacting the school culture and climate.

Changes in school policy have led to increased student misbehavior, which have had a negative impact on student achievement scores. Misbehavior of students also has been attributed as a leading cause for teachers to leave the profession. This study examined the impact of implementing PBIS in Kentucky's public schools at three levels: elementary, middle, and high school. This study compared student achievement scores and teachers' perception of student behavior to the classification of PBIS in these schools across levels (elementary, middle, and high). Chapter 3 provides the methodology and details of how the study was conducted.

CHAPTER 3

METHODOLOGY

The methodology of the present study is outlined in this chapter. The purpose of this study was to examine the relationship of the implementation of PBIS (control, PBIS, fidelity) on Kentucky's K-PREP assessment scores and teachers' perceptions of student behavior. The setting of the study is discussed in this section as well as the study design. This study relied on data previously collected by the Kentucky Department of Education using the TELL Survey results. Procedures and steps to retrieve these ex post facto data are discussed. This study also relied on the Kentucky Department of Education Unbridled Learning standardized test data known as the K-PREP. Classification of schools meeting PBIS status and fidelity PBIS status was also previously collected from the Kentucky Center for Instructional Discipline using the Benchmark of Quality, SAS, and Team Implementation Checklist (Childs et al., 2010), and these measures are discussed in detail. Finally, the statistical procedures and analysis used in the study are explained and summarized.

Research Questions

Two research questions guided this study:

1. To what extent do teachers' perceptions of student behavior and students' academic achievement differ across PBIS-implementing schools (control or non-PBIS, PBIS, and fidelity)?

2. What is the relationship between teachers' perceptions of student behavior and students' academic achievement for PBIS-implementing schools?

Setting

Kentucky has 174 public school districts with 1,233 schools. Among these public schools, 669 are elementary schools, 217 are middle schools, and 220 are high schools. The state also has combined groupings of schools, with 77 elementary-middle schools, 20 middle-high schools, 12 elementary-middle-high schools, and 36 preschools. As of 2013, there were 42,767 teachers in Kentucky's public schools. Kentucky has faced a growing attrition problem of teachers leaving the profession (almost 8%) and has relied upon TELL Kentucky Survey data to help analyze the issue to address the problem. In 2013, Kentucky's public schools served 675,530 students. These students represented the following demographics: 81.4% White, 10.7% Black, 4.2% Latino, 1.4% Asian, less than 1% Hawaiian or Pacific Islander, less than 1% Native American, and 1.3% other ethnicity (Kentucky Department of Education, 2013a). Further, 56% of the student population qualified for free or reduced-price lunch.

Of these schools, there are 433 schools in Kentucky implementing PBIS. Elementary schools in Kentucky represent the largest population of schools implementing PBIS, with 245 schools. There are 89 middle schools implementing PBIS and 65 high schools. There are an additional 8 preschools and 24 schools with "special" classification. There are 213 schools implementing PBIS that met fidelity requirements. Fidelity status is accomplished by completing the SAS, Team Implementation Checklist, Benchmark of Quality, and the Year End Data Report.

Research Design

The author used a nonexperimental causal comparative design using a sample of existing data. Specifically, a MANOVA was used. A MANOVA was selected because there were two dependent variables and I wanted to be able to compare groups on the dependent variables simultaneously (Stevens, 2009). According to Stevens (2009), with two dependent variables, conducting a univariate analysis would increase the risk of a Type I error. Conducting a MANOVA also allowed for measures to be considered mutually. The independent variable for this study was the classification of schools as control (non-PBIS), PBIS, and fidelity, and each of these groupings have three levels to represent elementary, middle and high schools. There were two dependent variables: (a) teachers' perceptions of student behavior, as measured by the TELL Kentucky Survey, and (b) students' academic achievement, based on end-of-grade K-PREP scores.

Instrumentation

Dependent Variable: TELL Kentucky Survey

The TELL Kentucky Survey is used to evaluate teaching and learning conditions in schools in Kentucky. These conditions are correlated to have an impact on teacher retention and student learning, which are two major experimental conditions for school leaders (New Teacher Center, 2014). The Kentucky Department of Education administered the TELL Survey to Kentucky educators in the spring of 2013, and 86.7% (43,691) of the educators responded to the survey. Of the respondents, 88% were teachers, 2% were principals, 2% were assistant principals, and 7% were classified as other education professional (e.g., school counselors, psychologists, and social workers).

Schools must have 50% participation to have the results correlated to the individual school. If schools do not have a 50% participation rate for the TELL Survey, the results of those taking the survey are reported for the district and state but not for the school. Schools meeting the 50% requirement for TELL Survey results data correlated to the school were considered for this study.

The TELL Survey is comprised of eight core constructs: time, facilities and resources, community support and involvement, managing student conduct, teacher leadership, school leadership, professional development, and instructional practices and supports. Basic demographic information is collected as part of the survey as well. Participants respond to survey items using a Likert-type scale where ratings are recorded from 1 (*strongly disagree*) to 4 (*strongly agree*). Participants can also respond with a "don't know" option for each question.

The purpose of the TELL Kentucky Survey is to measure teaching and learning conditions in the state. The external validity of the TELL Survey was reviewed using the Rasch Rating Scale Model to analyze the item-measure correlations, item fit, rating scale functioning, unidimensionality, and generalizability of the survey (New Teacher Center, 2014). Based on the results of the external validity testing, a 4-point scale was used instead of a 6-point scale to ensure adequate scoring and reporting. The analysis also revealed some items may overlap in multiple constructs, and each response should be analyzed.

Reliability testing for the TELL Survey was conducted through the Rasch model person separation reliability and Cronbach's alpha. The reliability testing ensures the survey is reliable and therefore can be repeated to produce similar results across settings

(New Teacher Center, 2014). The analysis revealed the TELL Survey is a statistically relevant model for measuring teaching and learning conditions. This means the survey results from the TELL Survey convey an accurate measure of the working conditions in schools.

The New Teacher Center (2014) assessed and analyzed the 2013 TELL Kentucky Survey to ensure the eight constructs measured what they were intended to measure. A confirmatory factor analysis was conducted to ensure the validity of these constructs. The results met the minimal standards for variance explained. This analysis ensures the responses on the TELL Survey are correct and are not influenced or skewed by extreme outliers.

Dependent Variable: K-PREP Score

The Kentucky Department of Education changed the way academic performance is measured in public schools with the passing of Senate Bill I in 2009. This bill sparked an accountability reform system and resulted in the construction of the Unbridled Learning accountability model (Kentucky Department of Education, 2012). The Unbridled Learning accountability model measures the end-of-grade or end-of-course state standards to determine the proficiency level of students exiting the grade or course. This model would encompass four priority areas for students in Kentucky: next-generation learners, next-generation professionals (data will not be added to the Unbridled Learning system until the 2015–2016 school year), next-generation support systems (also called Program Review), and an overall score for next-generation schools and districts (see Table 1). The new model of accountability under Unbridled Learning assesses student achievement in elementary and middle schools in reading, mathematics,

science, and social studies. Writing is assessed in all grade bands to include assessments in elementary, middle and high schools. High schools are assessed through end-of-course exams.

Table 1

Unbridled Learning Accountability Scoring Model

School level	Next-generation learners	Next-generation support systems	Next-generation Professionals
Elementary	Achievement Gap Growth	Program Review	Not applicable during the year of study
Middle	Achievement Gap Growth College readiness	Program Review	Not applicable during the year of study
High	Achievement Gap Growth College or career readiness Graduation rate	Program Review	Not applicable during the year of study

From the Unbridled Learning model stems the K-PREP. According to the K-PREP technical manual (Kentucky Department of Education, 2013b), K-PREP includes both norm-referenced and criterion-referenced tests to report achievement scores at the state and national levels. The norm-referenced section of the test includes content from the Stanford Achievement Test Series, 10th edition, and uses score norms to report student achievement in Kentucky on a national level (Kentucky Department of Education, 2013b). The criterion-referenced section of the test is designed specifically to assess Kentucky content. Student achievement scores are reported as novice (the lowest), apprentice, proficient, and distinguished (the highest) for student-level reporting. The

student-level scores are combined to report the overall next-generation learner score for the school.

The K-PREP assessments determine one portion of the overall next-generation school score. These scores are used to calculate the achievement, gap, and growth of students and are used to obtain the next-generation learner score for the school. Schools receive a point for individual students scoring proficient or higher on the K-PREP assessment for the achievement score. The achievement score percentage calculated for the overall score varies from each level. The next-generation learner score includes 30% of the achievement score for elementary, 28% for middle schools, and 20% for high schools.

The school then receives a gap score indicating the performance and improvement among historically underachieving students. These students include African Americans, Hispanics, Native Americans, students with special needs, students meeting poverty criteria, and English language learners. Schools receive a point for these students who score at or above the proficient level (Kentucky Department of Education, 2013b). The gap score is then calculated as 30% of the overall next-generation learner score for elementary schools, 28% for middle schools, and 20% for high schools.

Growth scores are calculated by awarding schools a point for each student showing typical or high growth. In elementary and middle schools, these calculations are made from the reading and mathematics assessments. For high schools, these calculations are based on the PLAN assessment for Grade 10 and the ACT for Grade 11. Growth equates to 40% of the next-generation score for elementary schools, 28% for middle schools, and 20% for high schools (see Table 2).

Table 2

Next-Generation Learner Score Calculation as Percentage of Total Score

School level	Achievement	Gap	Growth	College- or career-readiness	Graduation rate
Elementary	30	30	40	Not applicable	Not applicable
Middle	28	28	28	16	Not applicable
High	20	20	20	20	20

Middle and high schools have additional components to calculate their next-generation learner score. This additional area is college and career readiness, based on various tests at different levels. Middle schools use the EXPLORE test results to calculate this additional component, which equates to 16% of the overall next-generation learner score. High schools use a series of assessments and certifications to determine this score. The college- or career-readiness score in high schools equates to 20% of the overall next-generation learner score (Kentucky Department of Education, 2013b). High schools have an added component to determine the overall next-generation learner score, graduate rate, which represents 20% of the next-generation score for high schools.

Schools also have next-generation programs and supports and receive scores for these as well. School leaders collect data on their instructional programs and review the progress made for their instructional programs in what is known as Program Review. The school leaders then assess their instructional programs and report the evidence to the Kentucky Department of Education. These scores are then calculated to give schools a raw score for their instructional program. Schools receive an overall next-generation school score, 77% of which is the next-generation learner score and 23% the next-generation instructional programs and supports score.

Independent Variable: Classification of School (Control, PBIS, Fidelity)

PBIS is based on the practice of improving student academic and behavior outcomes by ensuring all students have appropriate instruction and behavior practices and interventions. PBIS is based on building positive interactions with students in an effort to decrease off-task behaviors. PBIS can be classroom based, but also has a school-wide component: school-wide PBIS or SWPBS. PBIS is not a program, but rather a framework to build relationships in an effort to decrease off-task behaviors and increase time in the classroom and time on task.

Before implementing PBIS, a school must undergo an assessment survey called the SAS. This assessment survey includes Likert-type rating scales. The survey must be answered by 90% of the staff members in the school (including results from all departments such as custodians, cafeteria workers, office staff, teachers, and support staff). The survey consists of questions rating the school's current behavior plan, school-wide expectations, and whether policy changes are needed regarding behavior. Before beginning PBIS, a school must obtain a rating scale from the SAS of 75% or higher. The SAS rating is crucial to the implementation of PBIS because it will determine if a school is ready for the implementation of PBIS. If a rating is below 75%, the school is not deemed as ready to implement the framework of PBIS and typically does not participate in training and implementation.

Schools implementing the PBIS framework also use a Benchmark of Quality assessment to identify areas of success and areas of improvement. This assessment is performed in the spring of every year. Schools also use the School-Wide Evaluation Tool assessment to determine the level of implementation of PBIS. The School-Wide

Evaluation Tool examines seven areas of the school's implementation process: expectations defined, behavioral expectations taught, acknowledgement procedures, correction procedures, monitoring and evaluation, management, and district-level support (Todd et al., 2012). These areas are evaluated by 28 research-based questions (Todd et al., 2012). This assessment helps to identify schools implementing PBIS with fidelity. This is the ranking school staff seek to achieve for the greatest impact on creating a positive behavioral culture.

The two constructs of PBIS and the results from the TELL Survey may have a relationship. PBIS is a framework for responding to behaviors of concern and using precorrective strategies to decrease problem behaviors. If this framework is implemented the way it is designed, one would hypothesize a relationship between PBIS implementation and the results from the TELL Survey. One would expect to see higher scores on the Managing Student Conduct construct from the TELL Survey in the schools implementing PBIS.

Null Hypotheses

The research questions were designed to determine if there is a main effect for teachers' perceptions of student behavior in schools not implementing PBIS (control), implementing PBIS, and implementing PBIS with fidelity status. Therefore, $H1_0$ was that teachers' perceptions of student behavior would remain the same regardless of the classification of PBIS (non-PBIS, PBIS, and fidelity). This null hypothesis is represented by the following equation: $H1_0$: $\mu1 = \mu2 = \mu3$. The alternative hypothesis was there would be a difference between the teachers' perception of student behavior in schools with different PBIS classifications, as represented by this equation: H1: $\mu1 \neq \mu2 \neq \mu3$.

$H2_0$ was that there would be a realtionship between teacher perceptions of student behavior and student achievement scores as measured by K-PREP in PBIS-implementing schools.

Statistical Procedures

The independent variables were identification of behavioral framework for the school as control (non-PBIS), PBIS, and fidelity with the three levels of elementary, middle, and high schools. I wanted to compare the implementation of the PBIS framework on teachers' perception of student behavior and the school's overall K-PREP score. Schools were chosen at random once they were categorized as control, PBIS, or fidelity and sorted by level of the school. Special schools were not utilized in this study because of the lack of special schools having TELL Kentucky Survey results and results from the Unbridled Learning system for K-PREP. There were not enough special schools with this information to be used in the study to meet the requirements for statistical power. The data were obtained from the open data sets included from the Kentucky Department of Education.

The data used in this study are considered to be secondary data. The data sets do not include data identifiable to students or individuals in the study. The data are only presented at the school level. Open data banks from the Kentucky Department of Education provided data for the K-PREP scores and for the teachers' perceptions of student behavior scores using the TELL Survey data sets. K-PREP data were located on the public domain on the Kentucky Department of Education website (e.g., Kentucky Department of Education, 2014). I completed a data request to the Kentucky Center for Instructional Discipline to obtain classification of participation in PBIS at the school

level. I guaranteed schools participating in PBIS and obtaining fidelity status would remain anonymous. The Kentucky Center for Instructional Discipline approved the list and provided a list of the schools in Kentucky implementing PBIS and obtaining fidelity status. The Statistical Package for the Social Sciences was used to conduct all statistical procedures.

The purpose of using a MANOVA was to compare multiple means across two or more groups. In this study, I wanted to compare the multiple means across the groups of TELL Survey results and the K-PREP results. To determine the minimal sample size for the study of MANOVA, while also maintaining appropriate statistical power, I performed a statistical power analysis using information and guidelines as specified by Cohen (1988). The purpose of conducting a power analysis is to minimize the probability of committing a Type II statistical error (Cohen, 1988). The minimal sample size for this study was 26 schools per group, but 30 schools per group (30 PBIS schools for each level (elementary, middle, and high) and 30 non-PBIS schools for each level were used in the study.

Sources of Data

Data from the 2013 TELL Kentucky Survey were used in this study to determine the relationship, if any, between teacher working conditions and the implementation of the PBIS framework. The TELL Survey consists of eight constructs: time, facilities and resources, community support and involvement, managing student conduct, teaching leadership, school leadership, professional development, and instructional practices and support. Each of these constructs has several items respondents rate to determine if they agree or disagree with the statement. This study focused on the Managing Student

Conduct construct from the TELL Survey results. This portion of the survey asked participants to respond to statements relating to student conduct. The survey was based on responses using a Likert-type scale from 1 (*strongly disagree*) to 4 (*strongly agree*). Data from this survey were then combined to report the percentages for each response. Teachers are given this survey every other year and are asked to respond to the survey. Teachers are given an unidentifiable code to take the survey so their answers can be reported anonymously. The teachers' unidentifiable codes are matched with the individual school to provide school-level TELL Survey results. This construct of Managing Student Conduct has seven items:

1. Students at this school understand expectations for their conduct.
2. School administrators consistently enforce rules for student conduct.
3. Policies and procedures about student conduct are clearly understood by the faculty.
4. The faculty work in a school environment that is safe.
5. Students at this school follow rules of conduct.
6. School administrators support teachers' efforts to maintain discipline in the classroom.
7. Teachers are relied upon to make decisions about educational issues.

First, these seven items were compared to determine if there was a main effect between PBIS and non-PBIS schools. A follow-up post-hoc test was conducted to compare the seven items in elementary schools, middle schools and high schools. A final test was conducted to determine an interaction effect between these constructs.

Sample

This study used random quantitative sampling (Creswell, 2012) to purposefully select 263 schools in Kentucky. The schools first were categorized by level: elementary, middle, high, and special schools. For the purpose of the study, special schools were not in the study. The schools then were identified as PBIS or non-PBIS. Schools were removed from the selection process if they did not have TELL Kentucky Survey results. Once the schools were categorized, random sampling was used to select 30 schools at each level to represent PBIS schools and 30 schools at each level to represent non-PBIS schools (see Table 3). In total, 263 schools were used for this study.

It was more beneficial to conduct a MANOVA than an analysis of variance (ANOVA). Conducting an analysis using ANOVA would lead to the risk of a Type I error (false rejection of the null hypothesis) because the alpha level for each test is .05. This means for each test, there is 5% chance of committing a Type I error. Three tests would need to be conducted, because there are three groups in the design of this study. This would mean three individual *t* tests would need to be conducted, which would increase the overall alpha level to .15. This would mean a 15% chance of a Type I error. With MANOVA, the researcher can decrease the chances of conducting \a Type I error. Conducting a MANOVA allows for small differences to be detected, whereas a univariate analysis would not be able to highlight these differences (Stevens, 2009).

Table 3

Demographic Information from the Kentucky School Report Card and Mean Scores by Enrollment by School Group and Level

School level & group	Enrollment	Free-reduced price lunch (%)	Ethnic-minority students (%)	Proficient/ distinguished (%)
Elementary				
Control	444.56	69.07	18.06	45.52
PBIS	456.50	57.67	11.46	50.71
Fidelity	516.00	54.43	17.89	48.54
Middle				
Control	547.10	58.56	16.66	49.12
PBIS	642.80	54.85	14.99	53.13
Fidelity	619.57	53.33	17.08	53.19
High				
Control	755.96	56.12	12.34	48.89
PBIS	1018.03	47.58	12.69	46.74
Fidelity	1048.61	48.71	10.09	48.43

Note. $n = 30$ for all groups except high school fidelity, $n = 23$. PBIS = positive behavior interventions and supports. Data from 2012–2013.

Limitations

Some variables that may limit the study and may need further analysis to determine a more accurate reporting of the results. Limitations in this study included knowing the length of implementation for PBIS, the training a school received for the implementation of PBIS and sustainability for maintaining the implementation of PBIS, and the lack of ability to link outcomes to PBIS. These issues pose potential threats to the study because of the variance associated with the results.

Determining the length of implementation of PBIS was not an identifiable characteristic when reporting and determining schools that had implemented PBIS. A school could be determined a PBIS school during the 1st year of implementation.

Schools determined to be in the PBIS group in Kentucky ranged from 1 year of implementation to 14 years of implementation. This could pose a problem to the study. Schools within their 1st year of implementation are in the planning phases of PBIS and may not have shown any impact on the school's climate or culture. During this year of implementation, it is not likely schools will see a decrease in behavioral infractions because the PBIS team for the school is planning how to implement PBIS and may not actually be changing anything within the school. Schools with longer rates of implementation would be expected to have a greater impact on the behavior of the school and would likely report better teacher perceptions of student behavior.

The variance in the training of schools across the state also created possible variance because of the different groups offering training for schools in the implementation of PBIS. The state offers training in PBIS to schools in Kentucky for free and allows these schools to take part in a cohort training. The state has eight trainers, and each trainer meets with a cohort during the 1st year of implementation during four to five full-day trainings. State trainers then correspond with the school on a consulting basis after the 1st year and do not have regular scheduled visits or trainings with the schools. The PBIS training model for the state is a train-the-trainer model where the PBIS lead for the school would then go back and share his or her state training with teachers and staff members.

Some school leaders in Kentucky opted to hire private groups to train their schools in PBIS. Some of these private companies created cohorts similar to those at the state level, but some companies worked with individual schools to train teachers and staff members in closed sessions specific to the school. Individualized training for each school

could be suspected to have a greater impact on the implementation rate because one trainer is training all of the staff members and delivering the same message.

Another limitation to the study is the inability to directly relate the implementation of PBIS to the teachers' perception of student misbehavior and the student achievement results. Many other variables could affect the results, such as other initiatives that are taking place at the school. Despite an abundance of research supporting PBIS in schools, very little research has focused on the implementation of PBIS and outcomes of student achievement and teachers' perception of student misbehavior. Therefore, despite these limitations, this study fills a gap in the research.

CHAPTER 4

RESULTS

Descriptive statistics were used to analyze teachers' perception of student behavior (TELL Survey results) and the academic scores (K-PREP) of schools at the elementary, middle, and high school levels in relation to their implementation of PBIS. Schools were categorized according to the following groups: control (no implementation), PBIS (partial implementation), and fidelity (implementation with fidelity). If the implementation of PBIS were a valid indicator of teachers' perceptions of student behavior and academic scores, then implementation of PBIS should reflect higher scores on teachers' perception of student behavior and higher academic scores. One also would suspect implementation of PBIS with fidelity would relate to higher rates of teachers' perception of student behavior.

MANOVA

An MANOVA was completed to determine the effect of the implementation of PBIS on teachers' perception of student behavior (TELL Survey) and academic achievement (K-PREP). Schools were classified by the implementation status of PBIS: control, PBIS, and fidelity. Split-plot analysis was conducted to analyze elementary schools, middle schools, and high schools separately.

The validity of the MANOVA replies on the assumptions of independence, normality, and homogeneity of variance (Stevens, 2009). The first assumption that must be met for an MANOVA is independence, which means each score is independent and

unaffected by any other score in the group. In this study, the data for student achievement scores were analyzed and data from the TELL Survey results were analyzed. Data from the schools' student achievement scores (K-PREP) and teachers' perception of student behavior (TELL Survey) could be safely reported to be independent.

The last assumption of MANOVA is the homogeneity of variance. This assumption ensures the variance in the population is equal and is checked by using Box's test. The analysis verified the results from the Box's test were not significant.

Results for Research Question 1

To what extent do teachers' perceptions of student behavior and students' academic achievement differ across PBIS-implementing schools (control or non-PBIS, PBIS, and fidelity)? The data were analyzed to determine if the groups showed variance in teachers' perception of student behavior. Table 4 reports the mean and standard deviation for each of the groups.

Teachers' scores for their perception of student behavior were lowest for each control group (not implementing PBIS) across settings (elementary, middle, and high). Teachers' perceptions of student behavior scores were the highest in the PBIS group across all settings. Table 4 shows detailed statistics. Across school types, mean scores were lowest for control groups, with fidelity groups in the middle, with highest scores for PBIS groups.

Table 4

Teaching, Empowering, Leading and Learning (TELL) Kentucky Survey: Mean Scores and Standard Deviation per Group and Level

School level & group	*M*	*SD*	Min.	Max.
Elementary				
Control	83.42	14.33	16.1	97.8
PBIS	91.62	5.05	81.0	99.4
Fidelity	88.67	10.08	55.3	99.0
Middle				
Control	80.53	15.29	29.1	97.7
PBIS	81.73	10.87	56.6	98.5
Fidelity	81.33	13.42	45.6	98.3
High				
Control	74.25	12.70	51.5	95.1
PBIS	78.92	12.56	42.1	95.8
Fidelity	76.27	14.59	42.1	93.9

Note. $n = 30$ for all groups except high school fidelity, $n = 23$. PBIS = positive behavior interventions and supports. Data from 2012–2013.

Table 5 displays the descriptive statistics for school types and PBIS implementation levels. As shown, the table reports the mean scores for the TELL Survey results for the construct of managing student conduct. The PBIS group had the highest mean score for all groups (elementary, middle, and high). While the levels all have higher mean scores for the PBIS grouping, the elementary group had the highest mean score for the TELL Survey results. The control groups report the lowest mean scores for all school levels.

Table 5

Kentucky Performance Rating for Educational Progress (K-PREP): Mean Scores and Standard Deviation per Group and Level

School level & group	*M*	*SD*	Min.	Max.
Elementary				
Control	57.18	10.17	36.4	73.2
PBIS	60.12	7.51	47.0	73.3
Fidelity	60.36	7.74	42.0	73.4
Middle				
Control	54.59	7.63	27.9	68.3
PBIS	57.44	7.75	41.8	75.5
Fidelity	56.33	7.00	41.3	71.6
High				
Control	58.80	6.06	42.8	69.1
PBIS	60.89	5.74	48.5	71.8
Fidelity	62.21	5.95	52.9	71.0

Note. $n = 30$ for all groups except high school fidelity, $n = 23$. PBIS = positive behavior interventions and supports. Data from 2012–2013.

Table 5 displays the descriptive statistics for school types and PBIS implementation levels. As shown, the table reports the mean scores for the KPREP overall score results. The fidelity groups report the highest mean scores for the elementary and high school grouping. The PBIS group reports the highest mean score for the middle school grouping.

Elementary Results

The differences between implementation of PBIS on the combined dependent variables were not statistically significant, $F(4, 172) = 2.45$, $p = .048$, Wilks's $\Lambda = .895$ (Partial eta squares = .054; Power = 692). When the implementation of PBIS was tested on the combined dependent variables, there was not a statistically significant correlation.

A follow-up univariate ANOVA reported that TELL Kentucky Survey scores for teachers' perceptions of student behavior were statistically significantly different, $F(2, 87) = 4.67$, $p = .01$ (partial eta squared = .10, power = .77).

A subsequent pair comparison was conducted to determine which of the PBIS implementation levels had statistically different scores (based on Bonferroni correction). Results indicated that PBIS partial implementation schools had statistically higher TELL Kentucky Survey scores (i.e., teachers' perception of student behavior) than the control group ($p = .01$). The effect size, based on Cohen's d, was .76 (95% confidence interval: 0.24–1.29), indicating a medium effect.

Middle and High School Results

The differences between the implementation of PBIS on teachers' perception of student behavior and academic achievement were not statistically significant for the middle schools, $F(4, 172) = 6.02$, $p = .662$, Wilks's $\Lambda = .973$ (partial eta squared = .01, power = .20), or the high schools, $F(4, 158) = 1.46$, $p = .218$, Wilks's $\Lambda = .930$ (partial eta squared = .04, power = .45). Since the results of the multivariate analysis were not statistically significant, there was no need to conduct follow-up post hoc tests.

Hypothesis

The null hypothesis, $H1_0$, was that teachers' perceptions of student behavior would remain the same regardless of the classification of PBIS (control or non-PBIS, PBIS, and fidelity). Teachers' perceptions of student behavior (TELL Survey scores) from the PBIS group of elementary schools had statistically significantly higher mean scores than the control group.

Results for Research Question 2

What is the relationship between teachers' perceptions of student behavior and students' academic achievement for PBIS implementing schools? Pearson correlation coefficients were conducted between the two dependent variables in order to test the assumption that the dependent variables would be correlated with each other in the moderate ranges (Cohen, 1988). The Pearson correlation coefficients were performed at each school level (elementary, middle and high school). There was a positive correlation between the two variables at the elementary school level, $r = .581$, $n = 90$, $p < .0005$; middle school level, $r = .524$, $n = 90$, $p < .0005$; and the high school level, $r = .345$, $n = 83$, $p = .001$. Overall, there was a strong, positive correlation between the teachers' perception of student behavior (TELL Survey scores) and academic achievement (K-PREP scores). Improvements in teachers' perception of student behavior were correlated with increases in academic achievement.

CHAPTER 5

DISCUSSION

School leaders are challenged to create a positive learning environment for students to enhance student achievement and provide a positive school climate for staff members (Cha & Cohen-Vogel, 2011). Student misbehavior has been an ongoing issue for school and district leaders, and adapting the culture of the school climate is a growing concern (Tsouloupas et al., 2014). The implementation of PBIS has been shown to improve school climate and decrease student behavior (Ross & Horner, 2007). This study supports the current research on the implementation of PBIS, but only with slightly higher scores on the TELL Survey and on student achievement.

Like many states, Kentucky began requiring some form of PBIS training in every school because of the increased awareness of disproportionate rates of suspension for specific populations of student groups and because of specific changes in legislation to train staff members in a positive approach to discipline. School districts are also trying to mitigate the effects of teacher turnover, and student behavior has been noted as one of the highest causes for teachers to leave the profession (Hanushek et al., 2004). If school leaders can find a way to increase positive student behavior, it may have a positive impact on teachers' perception of student behavior, and thus teachers would not leave the profession because of student behavior. If student misbehavior is decreased, teachers can spend less time managing student interruptions and spend more time teaching the key standards and concepts required.

In the state of Kentucky, some schools began training in PBIS over 10 years ago. Some schools began training through the Kentucky Center for Instructional Discipline. This model is designed to train school teams in PBIS during four sessions over the course of a year. The team then trains the staff members at the school level. Training through the Kentucky Center for Instructional Discipline also allows schools to have a consultant from the state level, but this becomes difficult because there are so few trainers at the state level. Larger school districts have greater difficulty because of the amount of schools. A school district like JCPS would be assigned one trainer, even though there are over 100 schools in the district. School districts have relied on other avenues for training, which could lead to gaps of understanding and implementation of PBIS in schools (Fallon, McCarthy, & Hagermoser Sanetti, 2014).

This study was designed to analyze the results of teachers' perception of student behavior and academic achievement scores and determine if a main effect existed when schools implement PBIS. First, descriptive statistics found schools implementing PBIS (either partial or with fidelity) at the elementary, middle and high school level yielded slightly higher academic achievement results as measured by K-PREP. The largest difference for implementation of PBIS on K-PREP scores was at the high school level. The smallest difference occurred at the middle school level. Descriptive statistics also revealed schools implementing PBIS (partial or with fidelity) reported moderately higher (better) results for teachers' perception of student behavior at the elementary level, slightly higher at the high school level, and a minimal difference at the middle school level.

For the first research question, this study sought to find if a main effect existed for the classification of schools based on their implementation of PBIS on teachers' perceptions of student behavior. Based on the results of the MANOVA, the implementation of PBIS at the elementary level was statistically significant. There was not a main effect for the implementation of PBIS at the middle school and high school levels on teachers' perceptions of student behavior. In terms of the second research question, this same analysis was conducted to determine if there was a main effect on a schools' K-PREP overall score by level of PBIS implementation; the results from the ANOVA did not find any statistical significance at the elementary, middle, or high school level. The third research question was designed to determine if a significant interaction effect existed with the classification of schools implementing PBIS on teachers' perception of student behavior and academic achievement. The results indicated that there was a statistically significant interaction effect. If teachers' perception of student behavior increased, an increase in KPREP scores would occur as well.

Limitations

While some schools met with fidelity status, the length of implementation of PBIS was not determined for each school. Schools in Kentucky have a wide range of implementation of PBIS. Some schools in the state have been implementing PBIS for over 10 years, others have just started implementation, and some have not started the work to develop PBIS practices in their schools. Some schools are in their 1st year of implementation and are considered to be a PBIS school, but trainings do not require schools to make any changes during the 1st year of implementation. This could skew the results of the PBIS implementation group. For example, a school in the 1st year of

implementation has a team working to devise a strategic plan for the implementation of PBIS. During this planning year, schools make minimal, if any, changes to their current approach to discipline. Schools in this planning phase are not expected to yield any changes in student behavior outcomes. Schools should be focused on analyzing current behavior trends, utilizing data related to behavior outcomes to determine the highest need for their school. These behavior outcomes should include careful analysis of ODRs.

The analysis of the ODRs should provide schools with information to target specific areas or classes of concern. School staff should be able to track school ODRs or behavioral infractions by the participant, the infraction, when it occurred, where it occurred, and the frequency of the behavior. This work should help to create solutions for problematic areas of the school and plan for more successful outcomes (Bohanon et al., 2006). The Technical Assistance Center on Positive Behavioral Interventions and Supports (2015) termed this the analysis of the Big Five: who, what, when, where, and how often. The increased awareness of disproportionate statistics involving student behavior outcomes for specific populations of students has increased the need for accurate reporting. Starting in 2011, schools were required to document and submit behavioral infractions to the Office of Civil Rights at the end of each year using the state-wide data management system, Infinite Campus.

Schools were mandated to report loss of instructional time for all students utilizing this system. Behavioral trends in the state continued to rise, and some school districts, including JCPS, were penalized financially from the government because of the disproportionate rates of managing student behaviors (JCPS, 2015). Although the regulation was put in place to ensure proper reporting, this created an additional issue.

Since schools and districts were being penalized by reducing fiscal financial funds, schools and districts felt the pressure to quickly reduce the number of behavior infractions in their schools. This has caused some errors in reporting. Some schools are hesitant to document every behavior infraction because the data are analyzed at the school level. Principals are responsible for school behavior trends, and negative behavior trends do not reflect well for a principal. PBIS teams are expected to analyze the behavior trends in a school, but without accurate documentation and reporting, school staff cannot implement PBIS successfully because they are not addressing the potential behavior issues in the school.

For example, JCPS has placed additional emphasis on schools' suspension trends. This common problem in JCPS is recognized as a growing trend in schools across the nation (Kentucky Department of Education Division of Student Success, 2013). Every month, select members of a school (usually the principal and the assistant principal) are e-mailed a detailed monthly report of the suspensions taking place for that month. The intention behind the practice is to continuously monitor behavior trends so interventions can be put in place. Instead, JCPS is seeing a common trend of schools showing a decrease in suspensions and an increase in unexcused absences. It is common knowledge that some schools are not coding suspensions in Infinite Campus as suspensions. This makes it difficult to analyze the implementation of PBIS when accurate data are not reported.

Another limitation of the study is the varying degree of training for school teams across the state. Some schools were trained through the Kentucky Center for Instructional Discipline, which provides a trainer for four, full-day trainings with a team

of members from individual schools. This model is supported by the state. There are few trainers at the state level, which is a positive because it ensures trainings are similar across the state. However, large school districts have not been able to rely on one model of training. For example, in JCPS, some schools have received training utilizing the state model presented by the Kentucky Center for Instructional Discipline. Some schools have been trained by Safe and Civil Schools, and some schools have received training through a local university model. The different trainings and models pose problems for analyzing the results of PBIS, because not all schools received the same materials, training, and support. The implementation of PBIS has varying results, and several studies have been conducted to help schools plan for more successful rates of implementation (Fallon et al., 2014).

Implication for Policy and Practice

The implications for this study are very apparent in an age of increased accountability for student academic achievement and student behavior. School leaders can be penalized for their student achievement scores and for their high rates of student discipline, especially when discipline rates are not equal across various populations. School staff have to be honest about their disciplinary infractions so they can address the causes of the behavior and teach the desired expectation. Schools also need to have similar trainings that encompass the same foundational practices and have equitable levels of support for implementation.

In an effort to ensure accurate data collection and analysis, school leaders must first seek to develop a mutual understanding of all stakeholders of the school to recognize the need for a positive approach to discipline (Goodman, 2007) and the need to have

honest conversations about the behaviors being displayed in a school. Teachers with higher rates of disciplinary infractions may be less likely to report student misbehaviors for fear of negative connotations associated with high rates of behavior infractions. Teachers with higher rates of disciplinary referrals may need additional support, however, which becomes apparent when behavioral data are analyzed. Members of the school may not see the value in PBIS and may have the mentality of thinking they can "wait it out" until the next behavior reform comes around, so they are hesitant to explore changes in their approach to discipline. These changes will take years to master; therefore, policy makers and district leaders need to be support and sensitive to the data reporting. Because of the fear of reductions in financial support, school leaders feel the burden and urgency to reduce the number of suspensions in a school. If behavior infractions are not accurately reported, schools cannot make an attempt to change the negative behaviors.

JCPS is in the beginning phases of the implementation of PBIS. Some schools first began implementation during the 2013–2014 school year. The schools were placed in cohorts, and different cohorts had different trainers. In the middle of the 2014–2015 school year, the district hired a PBIS coordinator to ensure the quality of the trainings and to have one person in front of all the schools. This was a common problem seen in the implementation of PBIS. When schools had different trainers and were not receiving the same message, the results were uneven (Sugai & Horner, 2006). Providing support and feedback for schools is an important part of the implementation, and JCPS also has hired PBIS leads to support schools through the implementation phase. The PBIS district leads work with the PBIS school lead to help support by facilitating PBIS meetings, helping

with the assessments and surveys, conducting walk-throughs, and providing feedback to the school.

JCPS is beginning with the primary level (school-wide PBIS) of implementation for PBIS. Once school staff have a vast understanding of the primary level, JCPS will begin training schools for the secondary level, which is supporting groups of students needing additional supports. The last phase of training will focus on training schools how to successfully plan for the tertiary level, which is individual supports for students displaying the most intense behaviors. This formation of training is common throughout the implementation models of PBIS, but not all researchers agree that this is the best method. Vaughn (2006) discussed the beginning designs of PBIS were to support intense students with interventions that were individualized to the student. After successfully providing interventions for these students, growing research and awareness brought on the idea of using PBIS to shape all behaviors in schools, not just the behaviors of the most intense students. Major acceptance of PBIS caught the attention of policy makers, and concepts of PBIS were then written into new policies and regulations for the teaching of all students and educators (Vaughn, 2006). Vaughn did not discredit the work of PBIS, but warned schools and districts about the potential harmful effects of implementing PBIS in the three stages of primary, secondary and tertiary stages. He also discussed potential issues with trying to implement all stages at the same time and that doing so could lessen the positive effects of PBIS.

This is all useful information for JCPS, because the schools are using the staggered approach to implementing PBIS first at the primary level. Once school staff are comfortable with this level and have gained enough knowledge, they are then to be

trained on the secondary stage of providing supports for groups of students. They will again stay at this level of training until they reach proficiency and will be trained on the last stage of PBIS, the tertiary supports aimed at supporting the most intensive students in the school. Vaughn (2006) warned that this could cause some issues with implementation, because the most intense students are not getting the interventions and supports they need. This is pertinent information for JCPS to consider because district leaders are expecting to see a drastic decline in the number of disciplinary infractions reported on ODRs and also expect to see a decline in the number of suspensions in schools after the implementation of PBIS. The most intense students are the ones that will likely be suspended, and if schools are not being trained on the supports for these students until a few years of training, then school leaders can expect to see a decline only after that level of training has been completed.

Future Research

Researchers should include the number of years of implementation for PBIS. This will allow for remove the schools that are coded as a PBIS school but are only in their 1st year of implementation. This could be valuable information to this study, because trends can be analyzed by the number of years the school has implemented PBIS. School leaders not seeing changes in student behavior may give up on the PBIS approach, but if there is a determination for the average number of years for implementation yielding the highest results, schools may be more likely to continue with the practice.

Further research should also incorporate qualitative methods. This will help to understand the gaps in the implementation of PBIS. Qualitative research helps to tell the

story of a particular component and contains valuable information pertinent to a study (Patton, 2002). Qualitative methods could begin to explore the practices taking place for behavior reporting and could help determine various aspects of the school that quantitative research cannot capture.

This study sought to determine if there was a main effect from the implementation of PBIS on teachers' perceptions of student behavior and student academic achievement scores. Capturing the viewpoints of the teachers' perceptions of student misbehavior has already been developed by using the Managing Student Conduct construct of the TELL Survey. Determining if there was a main effect was a little more difficult because of the potential variables that could impact the teachers' perceptions of student misbehavior. In order to control for these variables, a follow-up study could include a covariate for the turnover rates for teachers in a school. Another covariate that could be used would be the fidelity rates for the implementation of PBIS. These potential covariates could help to control for the variation in the reporting. For example, teachers could perceive student behavior as negative because of a lack of administrative support. The Managing Student Behavior construct does not account for the implementation of PBIS. Future research to help further explore this topic should be conducted through quantitative studies. Teachers could report their viewpoints of student misbehavior and provide insight on their perceptions of PBIS.

I conclude that the implementation of PBIS did not have a statistically significant impact on the teachers' perception of student behavior or on the student achievement scores, but did reflect slightly higher scores when comparing the descriptive statistics. PBIS is designed to be a 3- to 5-year implementation process, and most schools should

not reach fidelity status until this time. District leaders should consider this research and give schools time to develop their practices supporting the work of PBIS before deciding to discontinue the framework of PBIS. District leaders also should not expect schools to make drastic reductions in ODRs or reduce the amount of suspension in schools after the first phase of implementation.

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