

ACCEPTANCE

This dissertation, BEHAVIOR, ACADEMICS AND EQUITY: THE EFFECTS OF POSITIVE BEHAVIOR INTERVENTION SYSTEM ON MIDDLE SCHOOL STUDENTS was prepared under the direction of the candidate's Dissertation Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Education, Concordia University Irvine.

Eugene P. Kim, Ph.D.

Eugene Kim, PhD
Committee Chair

Eric J. Mooney, Ed.D.

Eric Mooney, EdD
Committee Member

Ashlie J. Andrew, Ph.D.

Ashlie Andrew, PhD
Committee Member

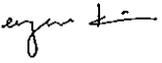
The Dissertation Committee, the Dean, and Executive Director of the Doctor of Education Program of the School of Education, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

Kent Schlichtemeier

Kent Schlichtemeier, PhD
Dean

Dwight Doering

Dwight Doering, PhD
Executive Director

Signature: 
Email: eugene.kim@cui.edu

Signature: 
Email: ejm4edu1@yahoo.com

Signature: *Ashlie J. Andrew*
Email: ashlie.andrew@cui.edu

Signature: 
Email: kent.schlichtemeier@cui.edu

Signature: 
Email: dwight.doering@cui.edu

COPYRIGHT PERMISSION AGREEMENT

Concordia University Library
1530 Concordia West
Irvine, CA 92612
www.cui.edu/library
librarian@cui.edu

I, Jared Rogers warrant that I have the authority to act on any copyright related matters for the work, AN EVALUATION OF THE EFFECTS OF POSITIVE BEHAVIOR INTERVENTION SYSTEMS ON BEHAVIOR, ATTENDANCE AND ACADEMIC ACHIEVEMENT OF MIDDLE SCHOOL STUDENTS, dated August 8, 2020 to be included in the Concordia University Library repository, and as such have the right to grant permission to digitize, republish and use the said work in all media now known or hereafter devised.

I grant to the Concordia University Library the nonexclusive worldwide rights to digitize, publish, exhibit, preserve, and use the work in any way that furthers the educational, research and public service purposes of the Concordia University.

This Agreement shall be governed by and interpreted in accordance with the laws of the State of California. This Agreement expresses the complete understanding of the parties with respect to the subject matter and supersedes all prior representations and

ACCESS RESTRICTIONS

My electronic thesis or dissertation can be made accessible via the Concordia University Library repository with the following status (select one):

Option 1: Provide open access to my electronic thesis or dissertation on the

Option 2: Place an embargo on access to my electronic thesis or dissertation for a given period from date of submission (select one):

6 months 1 year 3 years

Permission Granted

Jared S. Rogers
Candidate's Name
[REDACTED]
Address
jared.rogers@eagles.cui.edu
Phone Number or E-mail address


Signature of Candidate
August 8, 2020
Date
[REDACTED]
City/State/Zip

VITA

Jared Rogers

ADDRESS 1530 Concordia West
Irvine, CA 92612
jared.rogers@eagles.cui.edu

EDUCATION

EdD	2019	Concordia University-Irvine Educational Leadership
MA	2001	California State University-San Bernardino Educational Administration
BA	1997	Brigham Young University History Teaching

PROFESSIONAL EXPERIENCE

2016-Present	Assistant Principal Murrieta Valley Unified School District
2010-2016	Principal-Alternative Education Murrieta Valley Unified School District

BEHAVIOR, ACADEMICS AND EQUITY: THE EFFECTS OF POSITIVE BEHAVIOR
INTERVENTION SYSTEM ON MIDDLE SCHOOL STUDENTS

by

Jared S. Rogers

A Dissertation

Presented in Partial Fulfillment of
Requirements for the
Degree of
Doctor of Education
In
Educational Leadership
June 27, 2020

School of Education
Concordia University-Irvine

ABSTRACT

Throughout the nation, schools have successfully implemented positive behavior intervention and support (PBIS) strategies to improve the atmosphere on school campuses and guide student behavior (Gage et al., 2013; Sugai & Simonsen, 2012; Turnbull et al., 2001). While it has been shown that PBIS is an effective tool for student improvement in behaviors and attendance, it is recognized that there are subgroups of students that continue to struggle with conforming to their school site's behavioral, attendance and achievement expectations, particularly in their core academic subjects. This study's main objectives were to examine students' perceptions about PBIS implementation, the correlations between PBIS implementation and other variables such as student GPA and to examine how PBIS implementation varied by student demographics. By using PBIS strategies, educators can develop a culture that promotes equity for greater student engagement and improved behaviors, in a place where all students believe they can be successful contributors to the school and society, as a whole. The correlation between the implementation of PBIS, behaviors and academic achievement yielded positive correlation coefficients, suggesting that as implementation increases, student academic achievement increases as well. ANOVAs were carried out which showed that the difference in GPA and implementation of PBIS among students of various ethnicities was statistically significant. It is the hope that the findings will support schools in decreasing disruptive behaviors, improving campus culture, and increasing academic achievement.

Keywords: Positive behavioral interventions and supports, academic achievement, school culture

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	i
LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER 1: INTRODUCTION.....	1
Statement of the Problem	2
Purpose of the Study.....	6
Research Questions	7
Theoretical Framework	7
Behaviorism.....	9
Significance of Study	13
Assumptions	15
Definition of Terms	15
Summary.....	17
Organization of the Study.....	20
CHAPTER 2: REVIEW OF THE LITERATURE.....	22
Reasoning for PBIS	22
Description of PBIS.....	23
Components of PBIS	27
PBIS Implementation	29
Programs and Strategies for PBIS Implementation.....	32
Elements of PBIS Implementation	34

Data-Based Decision-Making	35
Increasing Reinforcement of Good Behaviors	35
Teaching Behavior.....	35
School Culture	36
PBIS and Student Behavior	38
PBIS and Attendance.....	41
PBIS and Academic Performance	44
Summary.....	46
CHAPTER 3: METHODOLOGY	50
Research Design	50
Setting.....	51
Participants	52
Sampling Procedure.....	54
Instrumentation and Measures.....	55
Test Score Tools	55
Questionnaires for Survey	57
Data Collection.....	58
Data Analysis.....	58
Ethical Issues	59
Summary.....	61
CHAPTER 4: DATA ANALYSIS AND RESULTS	64
Description of Participants	64
Analyses	65

Nature of the School.....	65
Student Perceptions of Behavioral Practices in School.....	67
Language Arts Class Attendance.....	69
Language Art Class Attributes	69
Language Arts Class performance.....	71
Math Class Attendance.....	71
Math Class Attributes	72
Math Class Performance.....	72
Student Perception of the School Climate.....	73
Research Question 2	74
Research Question 3	76
Summary of the Results.....	77
CHAPTER 5: DISCUSSION	80
Summary of the Study	80
Discussions	81
Research Question 1	81
Research Question 2	82
Research Question 3	82
Implications for Practice.....	84
Limitations and Delimitations	86
Recommendations for Further Research	87
Conclusion.....	88
REFERENCES	90

APPENDICES	106
Appendix B	108
Appendix C	109
Appendix D	111
Appendix E	112
Appendix F	113

LIST OF TABLES

Table 1. 1. Canyon View Middle School Student Population (by ethnicity and grade)	51
Table 2. 1. Canyon View Middle School Staff Ethnography	52
Table 3. 1. Demographic Characteristics of Participants	65
Table 4. 1. The Nature of the School	66
Table 5. 1. Descriptive Statistics about the Nature of the School	67
Table 6. 1. Students' Perceptions about Behavioral Practices in the School	68
Table 7. 1. Students' Perceptions about Practices Related to Behavior	68
Table 8. 1. Language Arts Class Attendance for Grades 6, 7 and 8.....	69
Table 9. 1. Language Art Class Attributes	70
Table 10. 1. Perceptions about Class Attributes	70
Table 11. 1. Language Art Class performance	71
Table 12. 1. Math Class Attendance	71
Table 13. 1. Math Class Attributes	72
Table 14. 1. Math Class Performance	73
Table 15. 1. Student Perception of the School	73
Table 16. 1. Pearson Correlations Between Study Variables	74
Table 17. 1. PBIS Impact Between Study Variables	76

LIST OF FIGURES

Figure 1. 1. ELA/Math/Science Venn Diagram	3
Figure 2. 1. Sample PBIS Model Utilizing Response to Intervention (RtI).....	8
Figure 3. 1. Supporting Social Competence and Academic Achievement Using Elements of PBIS.....	28
Figure 4. 1. Five Factors of School Culture (Johns Hopkins, 2019)	37

ACKNOWLEDGEMENTS

Many years ago, I read an article entitled “Seek Learning” which outlined what I truly felt was God’s plan for me regarding my education. I had always had a desire to fulfill my true potential as a student. I knew that the Lord would guide me along this path to be able to achieve whatever I could. This path led me to the doctoral program in Educational Leadership at Concordia University-Irvine. This path allowed me to realize my full potential as an educator.

I want to specifically express my deep gratitude for the following individuals who have paved the way for me to be where I am at this time. Dr. Cheryl Lampe, who started this dissertation process with me, demonstrating patience like no other. To my incredible colleagues in Irvine Cohort 6, the bonds we established throughout our time together will never be broken. The moments we shared throughout this journey have been emblazoned in my heart forever. You are forever part of my family. To my Chair, Dr. Eugene Kim. I could write another dissertation to describe my gratitude for all you have done for me. You have been my strongest support throughout this entire process. Plain and simple, you believed in me! Your depth of knowledge with educational leadership is unlike anything I have ever seen in my life. More importantly, I witnessed firsthand your deep commitment to your students, family, and God. For that, I simply say, thank you.

I want to express my love and gratitude to my family who have sacrificed so much to allow me to pursue this dream. To Toria, Jordan, Ethan, Lauren and Meaghan, thank you for being my rock and my foundation. And lastly, I want to give my sincere love and appreciation to my Lord and Savior Jesus Christ. It is through Him that weak men can become strong. I have felt His presence in my life and am eternally grateful for the blessings He has given me.

CHAPTER 1: INTRODUCTION

A climate of ever-increasing accountability in the educational field places issues of student achievement at the center of educational discussions. Improvements in student achievement not only require effective instructional delivery methods, but also strategies to improve student behavior which would, in turn, lead to better student focus and engagement in an efficiently managed - classroom environment. A popular model for school-wide behavior modification is the Positive Behavior Interventions and Supports Program (PBIS). The PBIS model calls for teaching, modeling, and reinforcement of behavioral expectations by rewarding, positive behaviors proactively rather than waiting for misbehavior to occur before responding. PBIS thus plays a precise preventive rather than a remedial role by encouraging students to adopt the expected behavior as the negative behavior arises. According to Sugai and Horner (2006), PBIS emphasize “effective systemic and individualized behavioral interventions for achieving social and learning outcomes while preventing problem behaviors” (as cited in Sullivan et al., 2011, p. 971). Scheffler and Aksamit (2006) assert that the purpose of school wide PBIS is to establish a climate where appropriate behavior is the norm. Walker, Ramsey, and Gresham (2003) noted, “The fact is, academic achievement and good behavior reinforce each other: Experiencing some success academically is related to decreases in acting out; conversely, learning positive behaviors is related to doing better academically” (p. 10). PBIS can produce positive student outcomes such as positive behaviors which may, in turn, cause less disciplinary action. Students can thus concentrate on their studies and experience gains in students’ academic performance.

Statement of the Problem

There is a lack of empirical research seeking to establish causal relationships between student behavior and their academic achievement. Causal research should use regression analysis to find the cause-and-effect relationship between PBIS and academic performance so the impact of PBIS implementation on academic performance can be gauged. However, existing research on the topic continues to be speculative or correlational in nature. Variables linked with learning and behavior, and processes to evaluate classroom settings are associated with learning and behavioral consequences (Sutherland et al., 2008). Some limited studies have been more conclusive: The implementation of PBIS has resulted in decreases in problem behavior and increases in academic achievement (Lewis & Sugai, 1999; Scheffler & Aksamit, 2006); reductions in office disciplinary referrals (Nelson et al., 2002); and drops in suspensions and expulsions (Sadler, 2000a). The potential benefits of PBIS are worth considering; they can create more time for students to concentrate on their studies which can lead to improved academic performances.

Student engagement is an observable and measurable behavior which yields many educational benefits and hampers behavioral issues. Student engagement is characterized by students' passive behaviors, for example, silent reading, listening to instruction or active behaviors (for example, writing, delivering an oral report, and asking questions that are related directly to classroom instruction. Figure 1.1 demonstrates that similarities and differences of how student engagement in English Language Arts (ELA), Math and Science correlates to the standards presented.

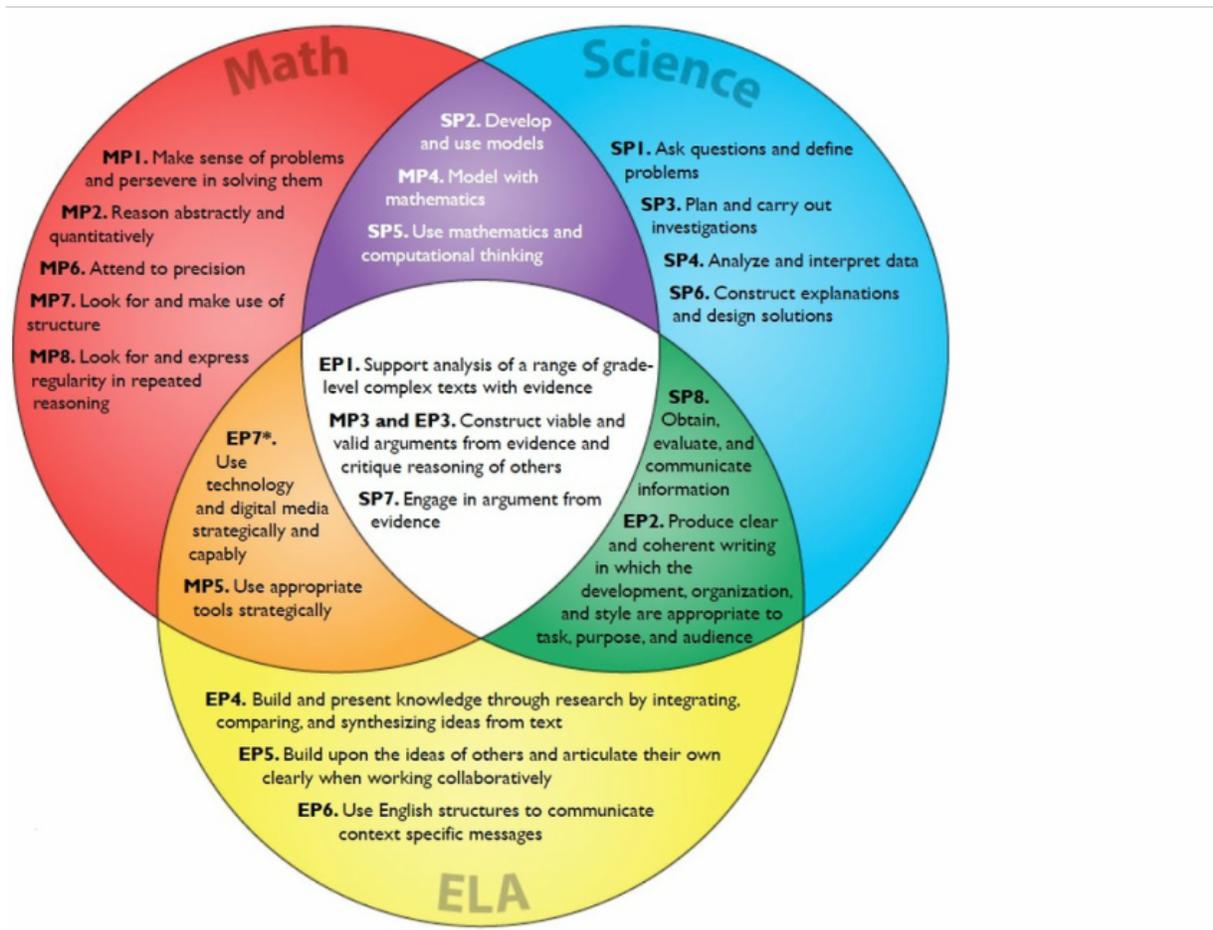


Figure 1. 1. ELA/Math/Science Venn Diagram

Another relevant factor impacting student engagement is the training of educators in increasing the academic engagement of their students through curricular modifications. Student engagement can also be influenced by direct instructional approaches such as class-wide tutoring, as well as precision teaching and positively focused interventions that reduce disruption, distraction, and negative behaviors in the classroom.

Research shows that when teachers increase, strengthen, and maintain high levels of student academic engagement, there is a corresponding improvement in academic performance and achievement (DiPerna et al., 2002; DuPaul et al., 1998; Ota & DuPaul, 2002). Students who

are engaged are more alert and concentrate more in class; they anticipate requests for increased participation such as being asked a question or being called to participate in learning activities such peer teaching. Academic engagement is an effective teaching and learning strategy that enhances acquisition of knowledge and skills since the student is actively involved in the learning process.

Educating elementary and secondary students is today a great challenge for teachers and administrators. The teachers have multiple roles: they do not only focus on equipping students with requisite knowledge and skills, but also on maintaining discipline both in and outside the classroom. The school administrator, on the other hand, is accountable for the overall school discipline and student performances; they must ensure that students adhere to the rules and regulations that are laid down and that the expected behaviors are displayed. The No Child Left Behind Act increased the emphasis on accountability for student achievement and encouraged school administrators to explore school-wide prevention models that promote a positive school culture and reduce discipline problems. Several programs are available that aim to manage student behavior problems systematically by creating school-wide plans that define positive behavioral expectations clearly, provide incentives to students who meet the behavioral expectations, and establish a consistent strategy for managing student behavior problems (Bradshaw et al., 2010; Horner et al., 2005; Sugai & Horner, 2006). One such program that has been highly effective in promoting appropriate student behavior and ensuring that the adopted behavior is sustainable is PBIS. The current study focuses on the effectiveness of PBIS in improving positive behavior, academic performance, and attendance.

Discipline problems arise due to disruptive behaviors in the classroom which interfere with learning, compete with instruction, and make it less likely for students to master academic

content goals. The lack of awareness of schools about disciplinary strategies that can lead to sustained positive changes in students' behavior further aggravates these issues. For instance, physical punishment can deter a student from engaging in problematic behaviors for a while, but after some time, there may be a relapse as the student forgets or gets used to these types of punishments. A report by the U.S. Secretary of Education and the U.S. Attorney General identified serious behavior problems that continually confront public schools and recommended various solutions (Chafouleas et al., 2010; Romer & McIntosh, 2005). There are several strategies that can be used for disciplining students but if the wrong strategy is selected, the problematic behavior is likely to persist.

Teacher workload can also lead to disciplinary issues. Teachers have the responsibility to teach academic subjects such as math, reading, science, the arts, and writing effectively. However, they must increasingly deal with nonacademic factors that can influence the instruction they provide adversely, leading to student emotional and behavioral disorders. It is estimated that approximately 10% of children and adolescents in the United States suffer from some form of mental illness that significantly impairs their ability to function well in everyday settings (Lassen et al., 2006; Shaffer et al., 1996). Children with socio-emotional issues require close monitoring and cautious correction of problematic behaviors to concentrate in class. Although not all students who present challenging behaviors, especially disruptive and aggressive behavior, have a diagnosable emotional and behavioral problem, they nevertheless consume a good deal of teacher and school resources (Sugai & Horner, 1994). This implies that teachers may need to dedicate more time to student interaction to identify the source of the problematic behavior and develop strategies to address it. Educators often complain of being overwhelmed in such situations. There is a need for schools to adopt PBIS which has been

reported to be highly effective in enhancing behavioral change. The current research was developed from this need.

Purpose of the Study

The first purpose of this study was to examine the implementation of the PBIS model from the perspective of middle school students. The school addressed in this study is known, under a pseudonym, as Canyon View Middle School. The research also seeks to examine the relationship between the implementation of PBIS, overall academic achievement, achievement in Language Arts and math, and student perceptions of their school. The third purpose of this study was to investigate how the implementation of PBIS varied by students' demographic characteristics such as gender, ethnicity, and grade.

The intervention process used in the implementation of PBIS, Colt Intervention Time (CIT) was developed from the PBIS model. It requires common time to be carved out during the day for all students to work with a teacher from any academic area to receive additional instruction or retake assessments. A quantitative research design was used to address the research questions. The results of this study may be utilized to develop improved professional training models, environments, and implementation strategies to promote the effective use of student engagement through a single, school-wide positive behavior intervention system. It is becoming increasingly important for teachers to utilize PBIS for immediate insight and decision-making in support of student accountability and school culture. By identifying the variables that affect the implementation of PBIS, a conceptual starting point can be established for the successful implementation of professional development training. Providing appropriate professional development training in PBIS can enhance the use of PBIS to support informed decision-making, not only at the site, but also district-wide level.

Research Questions

Three specific research questions were addressed in this study:

1. What are students' perceptions of their schools and of the implementation of PBIS in their school?
2. How does the implementation of PBIS correlate with student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school?
3. How does the implementation of PBIS and student GPA vary by ethnicity, gender, and grade level?

Theoretical Framework

According to Dunlap and Fox (2011), "in the last 10 years, researchers became interested in effective, comprehensive models for promoting healthy social-emotional development and preventing persistent challenging behavior within early care and education programs" (p. 337). The research shows that behavior expectations must be clear, interventions must be early, pyramids of interventions for varying levels of support must be established, and positive reinforcement must be provided frequently. The theoretical framework for this study is based on the conceptual foundation of school-wide positive behavioral intervention systems as described by Lewis et al. (2010), leading scholars at the National Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS Center). Elements of behaviorism were also used to guide the current study. Figure 1 demonstrates the three-tiered approach to PBIS within the school system.

School-Wide Systems for Student Success: A Response to Intervention (RTI) Model

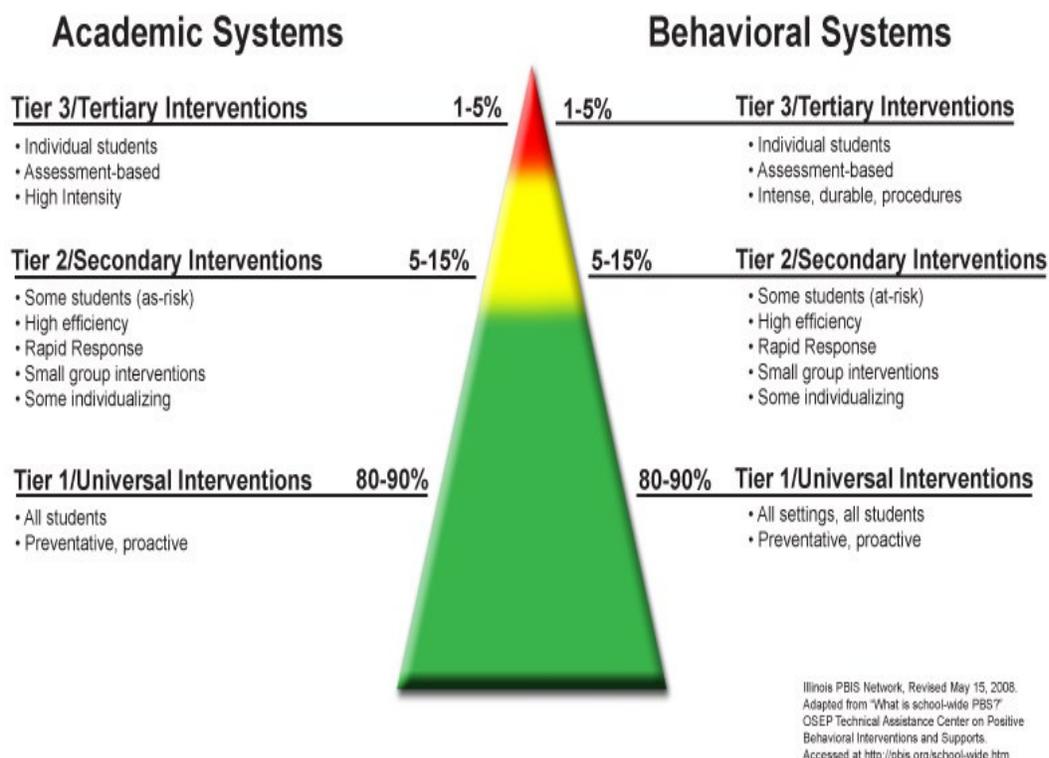


Figure 2. 1. Sample PBIS Model Utilizing Response to Intervention (RtI).

Effective school-wide positive behavior intervention systems require an emphasis on data to guide decisions “about what practices should be put in place to support student learning and social behavior” (Lewis et al., 2010, p. 3). The use of data for decision-making in PBIS cannot be overstated. The analyzed data is used to make reliable decisions on whether the PBIS should be implemented in schools. Horner et al. (2010) theorized that a continual use of data is a crucial element for developing capacity of schools to implement behavioral interventions. Research in this area has identified a data-driven culture, where data is systematically collected and used to inform decision-making, as an acute predictor of school-wide PBIS sustainability (Coffey &

Horner, 2012). Coffey and Horner's study (2012) researched 117 districts across six states that were engaged in school wide PBIS implementation and found that the use of data to plan and make necessary adjustments increased the likelihood of successful implementation. Existing studies thus point out that, in PBIS implementation, the focus should not only be placed on enhancing the expected behavior of students but also collecting and utilizing data to evaluate if the PBIS is on the right track of achieving the objective for which it was developed.

The theoretical importance of using data to inform decisions about educational practices has been validated by various researchers (Earl & Katz, 2002; Horner et al., 2005; McKeivitt & Braaksma, 2004; Means et al., 2009). It is thus critical to understand in what way PBIS teams charged with making and monitoring decisions on student behavior and academic achievement use data to problem-solve and make informed decisions. The researcher provided additional information on this crucial aspect of PBIS by examining the use of data by a school wide PBIS leadership team.

Another equally important foundational element of school wide PBIS is school support systems. They are essential for building a systematic program with innovative or revised practices for addressing student behaviors and academic achievement (Sugai et al., 2000). This means that the target of the adopted intervention should be to correct the behavior of the students and ensure that they retain the expected behaviors in school and beyond. PBIS requires a strong knowledge of data, practices, and support systems for engagement in the basic problem-solving needed to sustain implementation efforts (Lewis et al., 2010).

Behaviorism

The concept of "behaviorism" and the basic principles behind behaviorism theories served as the basic philosophy driving the Positive Behavior Interventions and Supports

Programs. Behaviorism has its roots in the beginning of the twentieth century. Psychology was in its relative infancy at the time when John B. Watson gave birth to “his viewpoint behaviorism” (Moore, 2011, p. 451). However, while Watson may be credited as the father of the theory of behaviorism, later contributions in the 1950’s by B. F. Skinner further defined and refined this philosophy to what is known today as radical behaviorism. According to Moore (2011), the “philosophy of science underlying behavior analysis is called radical behaviorism” (p. 456). In the year before his death in 1989, Skinner (as cited in Moore, 2011, p.456) defined radical behaviorism as “the philosophy of science of behavior treated as a subject matter in its own right apart from internal explanations, mental or physiological.” The focus of behaviorism was on observed conduct of an individual; however, the theory embedded the knowledge that an individual’s behaviors are influenced by internal processes such as physical and psychological wellbeing.

Positive Behavior Interventions and Supports are based on the principle of tiered interventions aimed at affecting behavioral change in individuals. It is assumed that children who behave better at school will, in turn, achieve better academically. This is one of the reasons for which teachers use a range of available strategies to ensure that students are well-behaved. The Positive Behavior Interventions and Supports system relies heavily on one of the four major principles of Skinner’s radical behaviorism. This principle is called the analytic concept. The analytic concept relies on what Skinner calls a “reinforcer” (Moore, 2011, p. 457). Moore (2011) explains a reinforcer as the “consequence of a response that increases the probability of the response” (p. 456). Positive Behavior Interventions and Supports is grounded in the concept that, through tiered interventions, an individual can be offered a reinforcer to entice or encourage them to continue exhibiting the desired behaviors. In contrast, many traditional discipline

programs offer deterrents to individuals to prohibit or prevent negative behaviors. Positive Behavior Interventions and Supports are based on rewards rather than deterrents. Students are rewarded for exhibiting the desired behavior. Supporters of this program argue that positive reinforcement is more effective than negative consequences in generating the desired behavior change.

Behavior considerations are integrated in the tiered-intervention system of Positive Behavior Interventions and Supports. Tiered interventions proactively attempt to impact behavior in the early stages; the program requires early intervention to redirect minor negative behaviors before they escalate to major behavioral issues that are more challenging to address. By reinforcing and rewarding positive behaviors early and often, dealing with minor incidents consistently and immediately with positive interventions and redirection, Positive Behavior Interventions and Supports aim to create a positive behavioral foundation that an individual can use to cope with larger behavioral challenges as they arise. Supporters of this program hope that the students' backgrounds and positive behavioral foundation would prevent poor choices leading to negative consequences. The originators of the program have based their theory and the components of Positive Behavior Interventions and Supports on a solid background rooted in the theoretical foundation of behaviorism, one of psychology's major historical concepts.

There are many researchers dealing with Positive Behavior Interventions and Support programs that stand out in the field. Dr. George Sugai, of the University of Connecticut, and co-director of the Office of Special Education Program's Center on Positive Behavioral Interventions and Supports, is one of the prominent names associated with PBIS in the literature. In the research that he and others, such as Dr. Rob Horner, Dr. Glenn Dunlap, and Dr. Bob Algozzine have conducted, different themes emerged, such as a focus on the whole-school as the

unit of intervention and the development of interventions tied to specific tiers of support mechanisms. Eber et al., (2002) point out that the students who demonstrate pronounced emotional and behavior problems in school settings constitute a relatively small percentage of the total enrollment of a school; however, they call for considerable investments in expertise, time, and resources. It is thus crucial, in a world of increased accountability, to find ways to provide behavior supports and interventions effectively while protecting instructional time for students. Boulden (2010) studied the School-wide Behavior Intervention Support Team program, a school-wide behavior management program, and demonstrated its foundation in the behavioral theory. As Anderson and Kincaid's research (2005, as cited in Boulden, 2010) has shown, programs such as the Behavior Intervention Support Team and other School-wide Positive Behavior Interventions and Supports, are founded on the behavioral theory, which underscores the relationship between physiology and environment, and the capability to influence behavior by changing environmental conditions. This means that there is a need for identifying the cause of problematic behaviors and addressing them. Once the student has adopted the expected behaviors, it should be sustained through methods such as positive reinforcement.

Marr et al. (2002) discuss the demands placed on school administrators as teachers lack specialized resources to deal with increasingly disruptive and violent behaviors. The goal of both teachers and administrators is to promote a safe school environment that encourages learning (Marr et al., 2002). A proactive approach to ensuring a safe and appropriate learning environment is to establish classroom and school-wide expectations collaboratively while frequently reinforcing them. Another key component is to "include data-based strategies for

supporting all students along a continuum of need and intensity based on a three-tiered model of prevention” (Freeman et al., 2006, p. 4).

The increased accountability pervading the education field today poses an unprecedented challenge to school administrators who need to develop and implement systems that are both effective and efficient. Pont et al. (2008) share that local, state and federal mandates are requiring increased justification and documentation of program results. Parents are questioning school programs, policies, and procedures in relation to discipline, attendance and academics. Pont et al. (2008) assert that parents are demanding greater participation in their child’s school programs. School administrators must respond by devising more effective methods for student management and accountability.

Significance of Study

One primary indicator schools’ use to gauge how well they are doing in educating students is student performance on benchmark assessments and standardized achievement tests. Although there are many, complex and interactive factors that account for student academic scores on such tests, research suggests that one factor is student problem behavior (Scott et al., 2001). Disruptive behaviors typically result in loss of instructional time, compromising learning. Consequently, interventions must recover and maximize instructional time by keeping students in class which could eventually lead to improvements in academic areas. Horner et al. (2005) reported preliminary descriptive data suggesting a relationship between school wide PBIS and changes in academic performance, noting the need for further analysis in this area.

Several research findings have highlighted the significance of PBIS in improving academic performance; therefore, the findings of the current research are significant to the school and district administration. The school administration will utilize these findings as a basis for

making decision on the allocation of resources to support the implementation of PBIS. The school district can also use these findings to determine the best course of action that need to be taken to improve the academic performance of students with problematic behaviors. They can support the different schools financially to adopt and implement the PBIS program. The implementation of PBIS is likely to bring about many benefits to the community at large. The problematic behaviors of students such as aggression and violence will reduce since the students will be well-behaved.

The delimitations set by the researcher were determined by a desire to gain a better understanding of the relationship between school-wide positive behavior intervention system implementation and its effects on discipline, attendance, and student achievement at Canyon View Middle School. The researcher restricted participation to students and staff at Canyon View Middle School. The sole focus of Canyon View Middle School in this study did not allow the researcher to gain the views of other middle schools within the school district, nor in neighboring school districts where school wide positive behavior intervention systems are in place.

A second delimitation was the data collection and intervention processes that were available to the school at the time the study was conducted. The researcher limited the analysis of the data to those students and teacher participants who had been at Canyon View Middle School over the past two years as a close relationship is required between teachers and their students to fulfill the responsibilities of program implementation and outcomes. The researcher believed, based on the work of Senge (1990) and Nygren (1992), that the process of creating a successful school-wide positive behavior intervention system required an extended period which would allow for the true picture of the school culture to be determined.

Assumptions

The study included the following assumptions:

1. The participants in this study responded accurately to the survey and interview questions by sharing genuine perceptions of Positive Behavioral Intervention Systems and their effect on students' academic performance.
2. Teachers understood the vocabulary and concepts associated with PBIS and the decision-making process involved in their implemented in the classroom.
3. The data collected allowed measurement of the site leadership team's knowledge, skills, and perceptions of their roles in the utilization of school wide PBIS in supporting decision-making.
4. The interpretation of the data reflects a positive response to the research.
5. Students who have good connections with others have better behaviors and academic performances.

Definition of Terms

The definitions to the key terms used in the current study have been provided:

Academic Performance Indicators: Assessments used by the school districts to measure the academic areas of Reading and Math. Assessments consist of California Assessment of Student Performance and Progress (CAASPP), Reading Inventory (RI) and Think Through Math (TTM) along with classroom formative and summative assessments.

Free and Reduced Lunch: Students whose family's income level qualifies them for free and reduced lunch prices.

Functional Behavior Assessment (FBA): A systematic process of identifying problem behaviors and the events that predict those behaviors and determine the reason for their occurrence.

Colt Intervention Time (CIT): Middle school students in Grades 6-8 have 30 minutes of CIT. The primary purpose for CIT is for students to work on homework or contact teachers for instructional support. Student options on how to use CIT include personal reading time, retaking tests, visiting with a teacher for the opportunity of re-learning skills, accessing the library or computer labs, or PBIS lessons. Each student is in the same CIT class for the school year; the teacher of that class becomes the child's advocate and personal contact at school. CIT teachers assist students in tracking work progress and hold them accountable for effectively using their CIT time.

Discipline Referral (DR): A process in which the student is referred to the school office to meet with an administrator due to the severity of behaviors.

Response to Intervention (RtI): A process that involves: (a) screening students to identify those who are not meeting grade level expectations through classroom-based assessments, CAASPP and/or benchmark assessments; (b) providing research-based interventions to students in need; (c) monitoring student progress frequently to make decisions about changes in instruction; and (d) applying child response data to important educational decisions, such as special education eligibility under the category of specific learning disabled.

Positive Behavior Interventions and Supports (PBIS): They constitute a broad range of systemic and individualized strategies for achieving important social & learning outcomes while preventing problem behavior from students.

AERIES Student Information System: This system is a web-based platform designed to help teachers and support staff in using office referral data to create school-wide and individual student interventions.

California Assessment of Student Performance and Progress (CAASPP): Achievement tests which consists of the English/Language Arts and Math. The CAASPP is administered one time per school year in Grades 3-8 and 11.

Reading Inventory (RI): Benchmark assessment in Language Arts that is given in Grades 3-12. Students are assessed every six weeks.

Think Thru Math (TTM): Benchmark assessment in math that is given in Grades 3-8: Students are assessed every 6 weeks.

Panorama Survey (PS): Nationwide survey of resiliency, protective factors, risk behaviors, and school climate.

“Students at Promise”: Students at promise are, for the purpose of this study, identified from student performance on the CAASPP assessment, RI and TTM benchmark assessments, along with formative and summative assessments in the classroom. A student who performs below proficiency on the CAASPP, and/or performs below the 50th percentile on both the RI and TTM benchmark assessments was identified as a student at promise.

Summary

The purpose of this study was to examine the utilization of PBIS, its practices and impacts on behavioral referrals, attendance, and academic success for middle school students. The school addressed in this study was assigned a pseudonym, Canyon View Middle School. Three research questions were addressed: What are students’ perceptions of their schools and of the implementation of PBIS in their school? How does the implementation of PBIS correlate

with student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school? How does the implementation of PBIS and student GPA vary by ethnicity, gender, and grade level? The theoretical framework for this study is based on the conceptual foundation of school wide positive behavioral intervention systems as described by Lewis et al. (2010). The behaviorism theory was used to provide more explanation and justification for using the adopted theoretical framework.

The research provides many reasons for using PBIS systems. As school administrators struggle with increased accountability, decreased financial resources and increasingly diverse school populations, traditional methods for classroom management are no longer sufficient in meeting the needs of schools. Research has improved instructional delivery methodologies to make them more targeted, effective, and efficient. The same trend can be observed in student discipline practices. Schools and districts are also constantly working on improving instructional methodology to prepare students for success on high-stakes standardized testing. Many school districts have also made concerted efforts to increase the rigor and relevance of their instructional delivery, to prepare students to be competitive in a twenty-first century environment. With this increased rigor and relevance, many school districts are choosing to implement more of a project-based learning approach to instruction. Project-based learning requires that teachers provide students with much more freedom than is traditionally experienced in the classroom. This increased freedom makes Positive Behavior Interventions and Supports programs even more necessary, as it provides students with acceptable routines and procedures, as well as internal coping skills. Students respond to instructional methods differently. The same can be said for discipline methods.

Positive Behavior Interventions and Supports systems use data to implement targeted, tiered intervention strategies in a proactive manner, to manage these behaviors before they become major disruptions in the classroom and educational settings. The use of data makes Positive Behavior Interventions and Supports programs attractive to schools and school divisions. Through constant data monitoring, schools can successfully target areas of need through specific interventions. This allows schools to customize their Positive Behavior Interventions and Supports program to meet specific needs. Positive Behavior Interventions and Supports programs provide a common structure and framework, but they are not a one-size-fits-all solution. The framework and structure can be customized using a variety of interventions and consistent techniques provided through Positive Behavior Interventions and Supports. This adaptability makes the program not only efficient, but also effective across a broad spectrum of school environments.

Relying heavily on modeling positive behaviors, rewarding those positive behaviors, and operating in a consistent school-wide manner, students have clear expectations that do not change from day-to-day or classroom-to-classroom. This consistent positive reinforcement allows students to cope with the pressures of peer influences better and to make positive behavior decisions more consistently. While there is an abundance of research that shows that Positive Behavior Interventions and Supports programs have a positive impact on behavior, the number of office referrals and more serious behavior infractions and consequences, less research has been conducted to the relationship between PBIS implementation and student academic achievement.

Several research findings have highlighted the significance of PBIS in improving academic performance. The findings of this research are therefore highly significant to the

school administration, the policy makers, and the government. The limitations include missing data about PBIS implementation, the late implementation of AERIES discipline platform, the presence of extraneous variables that had not been accounted for in the current study, the small participant sample and the collection of self-reported data from participants. The target population was delimited to students and staff at Canyon View Middle School, and the data that was available to the school district at the time the study was conducted. The researcher assumed that the participants responded accurately that they understood the common vocabulary and concepts associated with PBIS, and that the data collected measured the site leadership team's knowledge, skills and perceptions. He also assumed that the data was appropriately interpreted and thus reflects teachers' responses accurately.

Organization of the Study

This current dissertation consists of five chapters. Chapter 1 provides an overview of the background of the study. It also describes the practical and research problems that gave rise to the current research. The purpose of the study and the four research questions guiding the study are outlined. Chapter 1 also covers the significance of the study, theoretical frameworks used, limitations, delimitations, assumptions, and the definition of key terms.

Chapter 2 presents a review of the literature, which includes various subtopics related to the core concepts presented by the research questions of the current study. Examples include the efficacy theory, teacher efficacy, principal leadership, trust, and principal trust. Chapter 3 describes the methodology used for this research study, a mixed method research design. It includes the procedures for the selection of participants, instrumentation, data collection, and data analysis procedures.

Chapter 4 presents the study's findings through descriptive demographic information, confirmatory factor analysis, and the results of other data analyses for the research questions. Chapter 5 begins with a summary of the entire study. It discusses the findings and states the implications of the findings for theory and practice. The researcher uses the current study's findings as well as existing research to propose a set of recommendations for better PBIS implementation and identifies areas for further research.

CHAPTER 2: REVIEW OF THE LITERATURE

PBIS is not a new program or behavioral theory. It is a behaviorally based framework which improves schools', families', and communities' capability to create effective environments that boost the association between research-based practices and the environments in which teaching, and learning take place. The current study focuses on building and sustaining school settings that promote lifestyle outcomes such as the personal, health, social, and recreation for children and young people by minimizing the impact of problem behaviors and increasing the attractiveness of desired behavior. PBIS is school-wide, proactive, systems level approach that makes it possible for schools to support student behavior.

This chapter will be addressed under the themes developed from the research questions namely description of PBIS, programs and strategies for PBIS implementation and the effects of PBIS on student behavior, attendance, and academic performance.

Reasoning for PBIS

PBIS became a need because school administrators, teachers and support staff have become increasingly frustrated with the impact of student behavior on their schools. The public perception is that student behavior is out of control, so the teachers and the support staff generally do not make extra efforts for ensuring that students are well-behaved. Isolated situations of violence that occur in school settings such as shootings contribute to this perception, and often lead to the interpretation that schools lack discipline and control (Rose & Gallup, 2005; Simonsen et al., 2008). In a 2004 survey, 75% of teachers acknowledged that they would spend more time teaching effectively if they experienced less student indiscipline and disruptive behaviors in their classrooms (Chafouleas et al., 2010). Teachers continually struggle with mastering classroom management strategies that are proactive, preventative, and relatively

simple to implement within the classroom while providing minimal disruption to the classroom (Guardino & Fullerton, 2010). The lack of teacher competence in this area leads to disruptive behavior remaining mostly unaddressed, which gives room to recurrence and hence poor academic performance.

However, there have been school-wide discipline programs that have been implemented over the years which emphasize preventive intervention. Several studies have reported good results from whole school discipline programs (Langland, et al., 1998; Lewis et al., 1998; Luiselli, et al., 2001), leading to several evidence-based and “best practice” recommendations (Walker et al., 1996). Researchers have reported that when both behavioral and instructional supports are provided, improvements in academic performance are seen (Horner et al., 2005; Lewis & Sugai, 1999; Schaughency & Goodman, 2003; Sugai, 2003). Coupling powerful behavioral interventions and instructional strategies has been found to result in sustained gains in student achievement (Marzano, 1998; Marzano, et al., 2001). Horner and Sugai (2000) introduced a series of brief reports that included two-data based studies that indicated that the outcomes could be maintained. Another longitudinal study by Luiselli et al. (2002) further supports longitudinal evaluation of whole-school discipline practices indicating positive long-term results.

Description of PBIS

In the past several years, Positive Behavior Interventions and Supports (PBIS) have been used increasingly in schools as a means to shift from reactive strategies, such as detention, suspension, and expulsion, as the primary response to problem behaviors to more proactive and positive approaches that address the entire school as well as individual students (Colvin & Fernandez, 2000; Elias, 1998; Mayer, 1995; Nakasato, 2000). PBIS specifically requests schools

to follow four critical elements for implementation: the outcomes, the data, the practices, and the systems. PBIS outcomes are specific to the targeted group of students and are often proactive in nature to prevent behaviors from becoming chronic. Data is collected on behaviors to measure the progress of implementation towards the outlined outcomes, which may include measures of appropriate behavior such as office discipline referrals. Other common examples of outcomes include adopting the required behavior and attending school as expected (Vaughn et al., 2009). The collected data is usually analyzed, and the results used to determine whether the PBIS is effective or not (Baker, 2005). The analyses focus on the intensity of the supports provided in the primary tier and the steps undertaken to increase structure, provide more intensive social skills training, and deliver more frequent reinforcement. The support from the teachers, the parents and the support staff contribute significantly to students' sustained adoption behavior (Chafouleas et al., 2010). Systems are established to guarantee the fidelity of implementation of the adopted practices and data are regularly collected, reviewed, and used to make decisions.

PBIS establishes a positive and preventive continuum of behavior support in which, behavioral expectations are taught directly and are formally acknowledged, data is used for decision-making and action planning, a function-based continuum of supports is established, and durable outcomes and accurate implementation of interventions are stressed (Sugai, et al., 2000). PBIS is neither a curriculum nor a program of prescribed strategies. Rather, it can be conceptualized as a framework under which systems identify predictable problems, select logical strategies to improve outcomes, facilitate consistent implementation, and use data to evaluate their success (Baker, 2005).

PBIS does not focus primarily on reducing problem behaviors. It calls for systemic changes such as community inclusion, expansion of social relationships, improved family life,

and personal satisfaction to improve interactions in both the student and family's life (Clarke, et al., 2002). PBIS is a universal prevention strategy aimed at altering the school environment by creating improved systems based on discipline, reinforcement, data management, and procedures such as office referrals, training, and leadership that promote positive change in staff behaviors, which, in turn, translate into positive student behaviors. The model draws on behavioral, social learning, and organizational behavioral principles (Lewis & Sugai, 1999), which were traditionally used with individual students but have been generalized and applied to an entire student body consistently across all school settings (Durand & Carr, 1992). PBIS uses specific strategies for assessment and intervention to ensure that interventions are technically sound. PBIS is also process-oriented, involving team organization and methods to promote active involvement of stakeholders and the development of contextually appropriate support plans (Bambara et al., 2001).

PBIS is an intervention method that has shown promise. The traditional approach assumes the student's behavior is the only problem that needs to be changed. PBIS plans integrate multiple facets of causality; they include multiple strategies which alter environments, teach skills, and reinforce positive behavior rather than intervening on one, specific, challenging behavior (Ruef et al., 1998). PBIS strategies must effectively meet student and teacher needs to be accepted and implemented by schoolteachers and support staff in the long term (Ruef et al., 1998). Functional Behavior Assessment (FBA), is one method which focuses on why a student acts a certain way. It uses different methods to understand what's behind behavior challenges.

The basic idea of functional behavioral assessment is that a student's behavior serves a purpose. Whether they know it or not, kids act in certain ways for a reason. If schools and families can understand what's causing a behavior, they can find ways to change it. FBAs that

are blended with classroom friendly interventions, such as self-management, PBIS plans were effective with elementary-aged children, both children with and without disabilities (Fantuzzo & Polite, 1990; Kern et al., 2001).

The three-tiered model of Positive Behavioral Intervention Supports (PBIS) aligns with the continuum of the Response to Intervention (RtI) process; the students who respond to the strategies within each tier need less behavioral or academic intervention (Cheney et al., 2008). Both PBIS and RtI approaches incorporate effective practices for working with students' challenging behavior (Hawken et al., 2008). PBIS highlights the need for the application of school-wide strategies to boost productive behavior while reducing the problem behaviors of students at Tier 1 (Horner & Sugai, 2005), the PBIS system provides increasingly customized support at higher tiers. Targeted interventions are offered to at-risk students at Tier 2 while tailored, rigorous services are offered at Tier 3 (Horner & Sugai, 2005). Educators methodically teach and strengthen socially valued behaviors across the tiers. Behavioral interventions should be efficient and economically effective to encourage schools to use them to promote the social skills of students (Hawken et al., 2007).

Problem behaviors can originate in the home environment. Children who experience interpersonal challenges with their parents have a greater probability of having behavioral issues at school (Pianta et al., 1995). Children's positive social outcomes are also considerably affected by both the nature of the interpersonal relationships developed between teachers and students and the kind of activities that students engage in at school. Research carried out over the past 20 years, have led to the conclusion that there was a relationship between the quality of students' relationships with school staff and student outcomes (McPartland, 1994; Murray & Malmgren, 2005). Poor social relationships can bring about adverse outcomes on classroom adjustment,

academic performance, and cause school failure (Anderson et al., 2004; Sinclair et al., 1998). It is crucial that prevention programs include teaching about and reinforcement of desired social behaviors to students, a strategy that is aimed at reducing problematic behaviors in educational settings and thwart negative social and academic issues (Gottfredson & Gottfredson, 2002; Hawkins et al., 2001; Sugai et al., 2002).

Components of PBIS

Previous school models often involved waiting for a student to fail before providing support. This type of support is termed as reactive and has been viewed as ineffective (Algozzine et al., 2011). This may be attributed to the negative emotions associated with failure which may hamper students from highlighting the issues that affect their performance. PBIS utilizes a three-tiered model to behavior support to address social behaviors of all students proactively and prevent social and academic failure. The primary tier is intended to support all students throughout all school settings. When implemented effectively and accurately, schools can expect 82% of middle school students to respond to the primary tier of intervention (Simonsen et al., 2008). The second-tier is designed to support the group of students who have not responded to the first tier of interventions, but do not pose a threat to themselves or others (Bradshaw et al., 2010). This means that the strategies implemented at the first tier may not effectively address the needs of all students because their needs may vary. Tertiary tier interventions are designed to help individual students who require additional support to benefit from Tier 1 and 2 interventions. Tier 3 interventions are also applied when student behaviors become serious enough to require more immediate and intensive support (Simonsen et al., 2008). PBIS and its practices are founded on the association between academic performance and social behavior which is a widespread belief in education (see Figure 2.1). Correlations between

behavior and attainment draw strength in ongoing efforts to reduce learning problems, particularly for students incurring the risk of academic failure (McIntosh et al., 2006; Stewart et al., 2007; Vaughn et al., 2009; Wehby et al., 2003). It becomes challenging for students to learn when they are spending more time in discipline-related interactions than in learning academic content (Miles & Stipek, 2006). If a student is being disciplined, the teaching time reduces, and his probability of poor academic performance is high.

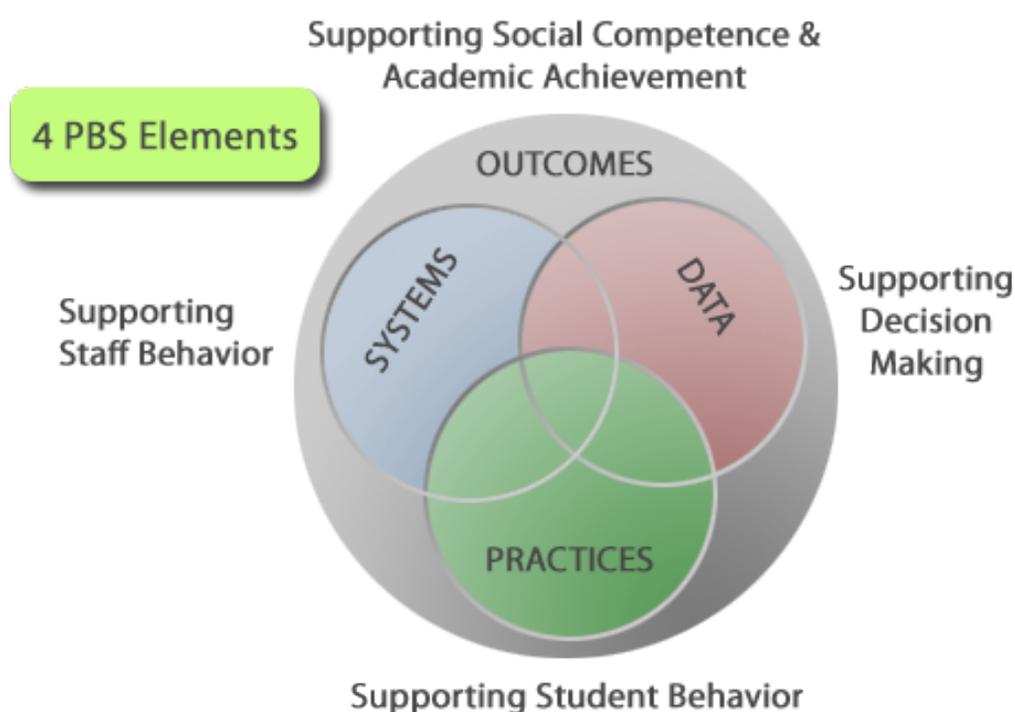


Figure 3. 1. Supporting Social Competence and Academic Achievement Using Elements of PBIS.

Currently, there is a wide disparity in disciplinary practices across schools, ranging from schools that implement zero tolerance policies and demand behavioral compliance to those that stress student autonomy and independent decision-making (Stronach & Piper, 2008). Popular yet ineffective treatments are often utilized in schools which do not necessarily show good effect sizes. Reform policies on discipline can range from systematic reinforcement of positive

behavior to automatic expulsion for a growing list of offenses (American Psychological Association Zero Tolerance Task Force, 2008). The relationship between the classroom environment, student behavior, and academic engagement has been investigated by various researchers (Guardino & Fullerton, 2010; Hood-Smith & Leffingwell, 1983; Visser, 2001). A well-organized classroom allows the teacher to interact more positively with students while reducing the probability for challenging behaviors to occur (Nelson et al., 2002).

The universal level of the three-tiered model, referred to as School-Wide Positive Behavioral Interventions and Supports (SWPBIS), is being widely disseminated by the U.S. Department of Education (Knoff, 2000) and several state departments of education (e.g., Illinois, North Carolina, Colorado, Maryland, and Oregon). It is estimated that SWPBIS has been implemented in more than 9,000 schools across the United States (Horner, 2009). For example, the teachers and support staff at Canyon View Middle School decided to work together to implement Positive Behavior Interventions and Supports (PBIS) for all students and to address the academic needs of all students and their challenging behaviors using a three-tiered model of interventions. Canyon View Middle School worked with each grade level several times a year to teach the students the expectations called for by the PBIS system. Each grade level was explicitly taught appropriate behaviors to adhere to in school areas such as the classrooms, multipurpose room, and the library. Students were also taught about appropriate behaviors to adopt when exiting the building after school. Instruction was based on the application of these three principles namely be safe, be respectful, and be responsible in each one of these areas.

PBIS Implementation

PBIS can be effectively implemented at three levels namely the primary, the secondary, and the tertiary with each level adopting different strategies and programs. At the primary level,

the focus is on the prevention of the negative behaviors and the areas of emphasis is on routine and adherence to the developed rules (Boulden, 2010). At this stage, the students need to be aware of the behaviors which are acceptable and those that are not acceptable. The teachers need to develop and post either a matrix or an outline of the expected behaviors around the school setting to create awareness of the required behaviors among students (Chafouleas et al., 2010). This means that the student should always behave positively whether inside or outside the classroom. In addition, the teachers as well as the team members of PBIS need to teach the students about the expected behaviors. The teachers are also trained by the PBIS team on the application of the techniques that will help students adhere to the laid down rules and regulations (Dunlop, 2013). Thereafter, the PBIS team keeps on surveying the school to ensure that the program is running effectively and to provide any new idea that may contribute to the success of the implementation process. At the primary level, there is also reinforcement of behaviors, either positively through rewards or negatively through punishments. According to Coffey and Horner (2012), approximately 80% of the students usually respond accordingly with the needed behavior at the primary level. Those students who do not present a change of behavior will need additional support which is normally given at the secondary level.

At the secondary level, the behavioral support is intense since these students are viewed as difficult. Reinke et al. (2012) assert that students at the secondary level are those who are at a high risk of being involved in challenging problem behaviors. These are students who have been involved in disciplinary issues several times, at most five times in a year, and who usually need to undergo functional behavioral Assessment (Boulden, 2010). The functional behavioral assessment informs the instruction of students on new skills and behaviors that are supposed to replace the old problematic behaviors. The attention given to students at this level is more than

that which is given to those at the primary level, although less than the attention given to those at the tertiary level.

The tertiary level typically includes few students of about 5%, yet these students require a lot of attention to exhibit the expected behavior (Cheney et al., 2008). The students that have been escalated to the tertiary level present problematic behaviors consistently, which are dangerous, extremely disruptive, and thus impede the learning process (Chafouleas et al., 2010). This level of prevention focuses on students who are suffering from conditions such as developmental disabilities, attention deficit hyperactive disorders, and autism. The teachers and the staff need to be conscious of the students who are at the tertiary level and develop an implementation plan which is individualized. FBA is utilized, similarly to the secondary level, to determine the student behaviors and the course of action to take to correct the students' behaviors (Boulden, 2010). For instance, a student who has been constantly disarranging the classroom can be given a reward if such a student stays calm for a certain period like two hours.

According to Dunlap and Fox (2011), during the implementation of the PBIS at the tertiary level, it is crucial for the student to be exposed to the prevention strategies of the primary level. This exposure to the primary level strategies helps the student understand the expectations, school rules, and regulations that all students should embrace. Some of the common students' goals at the tertiary level include enhancing participation in school activities, achieving as well as increasing significant relationships with others, and helping these students to make choices independently (Dunlop, 2013). Despite the guidelines about the strategies that should be implemented at each PBIS level, the implementation process varies from one student to the other based on students' individual needs which require an individualized approach.

Programs and Strategies for PBIS Implementation

PBIS is a school-wide program that utilizes rewards, as well as praises to motivate students to behave in the right manner. The correct implementation of PBIS will result in all students succeeding both inside and outside the classroom setting (Boulden, 2010). According to Chafouleas et al. (2010), rewarding is one of the strategies that should be initiated early during the learning experience to stimulate students to increase their efforts during the process of aiming for more rewards in the future. There are several forms of rewards that can be used by middle school teachers such as praising a good behavior or performance and giving tangible gifts such as a pencil or a certificate of recognition. The teacher should systematically ensure that all the students have an equal opportunity of getting the rewards.

On the other hand, the excess use of rewards reduces the learning drive of students due to acquisition of knowledge and skills and increases the desire to learn because of the reward attached to it (Dunlop, 2013). This means that if the teacher withdraws the reward, there is a high likelihood that the students will stop behaving well and that those who were trying to improve their behavior will stop attempting. According to Boulden (2010), the PBIS processes should be designed in such a way that, as students' progress in the training, the reward is slowly withdrawn so that the learners work harder to get the recognition. The ultimate award should be praises and recognition as this will boost the students' intrinsic motivation towards achieving academic goals as well as appropriate behavior. The award needs to be something that the students prefer or else the PBIS is likely to fail (Coffey & Horner, 2012). It is indeed evident that the students should be involved in the choice of the awards to be given if the PBIS is to be effective.

Feedback is another strategy that has been found to be highly effective in PBIS in the molding of students' behavior. Feedback should be given in both a positive and negative situation but should be communicated in a positive manner to the students. Dunlop (2013) concurs with Coffey and Horner (2012) by asserting that student feedback should be given in a manner that is specific, encouraging, and positive. This way of communicating feedback offers the students the opportunity to comprehend the problem being addressed without feeling intimidated. Besides, when the teacher is giving feedback to the students, he has the chance to encourage them to reflect on what they could have been done instead of adopting the negative behaviors. This will help the student to shape his actions to the expectation of the teacher. Praise, which is one of the commonly used types of feedback enhances a student's positive behavior (Reinke et al., 2012). Praise instills intrinsic motivation which encourages the student to keep on behaving in the required manner.

The other strategy found to be effective in the sustainability of PBIS is the incorporation of rules and policies, followed by the creation of awareness among the students on the developed rules and policies. For a rule to be effective, students need to be aware of the consequences (Boulden, 2010). In addition, the consequences need to vary according to the type of rule that has been broken (Cheney et al., 2008). For instance, the consequences of a problem such as stealing should not be similar to that of an individual being loud in class. The consequences should be applied as soon as possible so that other students understand the school's intolerance of misbehavior; this could deter other students from repeating them. The rules should be specific, easy to understand, and outlined in a manner that is positive (Coffey & Horner, 2012). Specificity of the rule is also important as it guides staff into applying them consistently. Students are thus more likely to be treated equally, which increases the effectiveness of PBIS.

Further studies have shown improvements in student behavior and school climate that are related to improvements in academic outcomes (Fleming et al., 2005; Horner et al., 2008; McIntosh et al., 2006; Nelson et al., 1996; Wentzel, 1993). The critical components include: (a) setting behavior expectations; (b) teaching critical interpersonal skills; (c) providing systematic positive reinforcement for meeting behavioral criteria; (d) monitoring intervention data through a consistent data collection and analysis process; (e) involving all teachers and support staff in the development of discipline practice; and (f) reducing and eliminating reactive, punitive, exclusionary strategies with support of a proactive, preventative, and skill-building technique (Horner & Sugai, 2000; Nelson, 1996; Walker et al., 1996).

Positive behavior interventions and supports (PBIS) are intended to improve the climate of schools using a “systems approach to enhancing the capacity to adopt and sustain the use of effective practices for all students” (Lewis & Sugai, 1999, p. 4). Empirical intervention research, as well as other data and perspectives of PBIS, has been published in the *Journal of Positive Behavior Interventions* since 1999. The importance of research in the area of behavioral supports for children is straightforward: It is difficult for students to learn when they are spending more time in discipline-related exchanges than in learning academic content (Miles & Stipek, 2006). The research significance for teachers is reflected in the belief that “dual deficits of learning and behavior problems may make it difficult for practitioners to provide effective instruction” (Sutherland et al., 2008, p. 223).

Elements of PBIS Implementation

Data collection and analysis followed the guidelines and implemented structures consistent with SWIS for data collection and interpretation.

Data-Based Decision-Making

Each month during staff meetings, data from the previous month was reviewed and discussed to determine locations and frequencies of behaviors. The PBIS leadership team would meet and share information concerning specific student behavior at each grade level. Grade level teams would meet with students individually to develop a plan for improving behavior.

Increasing Reinforcement of Good Behaviors

Utilizing the 5-Star reward system, which is a cloud-based program that allows students, teachers and administrators to track student involvement, students were asked by their teachers to provide access to their 5-Star rewards account when appropriate behaviors were observed. Once the teacher scanned a student's account, the student was automatically entered for an opportunity to win prizes. The students also earned 5-Star points for academics, attendance, and community service.

Teaching Behavior

Appropriate student behaviors were taught at the classroom level. Behaviors across multiple school areas were addressed: classrooms, hallways, lunchroom, media center, bus, and recess area. The PBIS leadership team developed lessons and PowerPoint presentations for each teacher's use in their classroom lessons. The PBIS leadership team developed the lessons for consistency and fidelity of implementation. However, each teacher could use their individual lesson plan if the content instructed was the same. After the students learned about the expectations of PBIS, they were requested to take the role of the instructor. The students were given the opportunity to teach the lesson about the same topic in a mode of their choice. Students prepared the lessons using PowerPoint presentations, videos, and skits.

School Culture

Culture can impact learning positively or seriously inhibit the functioning of a school. Culture is the stream of “norms, values, beliefs, traditions, and rituals built up over time” (Peterson & Deal, 1998, p. 28). School culture is continuously being built and molded through exchanges with others and reminiscences about life and the world (Finnan, 2000). Freiburg and Stein (1999) described school climate as the heart and soul of the school that draws teachers and students to love and want to be a part of it.

There are many factors that affect school culture (see Figure 3.1). A strong culture is grounded in a common philosophy that is evident in the moral vocabulary, rituals, discipline, academic expectations, and relationships among students, teachers, and the larger school community. In schools, culture is often referred to as “the way we do things around here.” School culture is represented by the stable, underlying factors that shape the beliefs, expectations, and behaviors of the institution. A school’s culture becomes observable as it guides the behavior of community members and helps organize and shape the school community on a subconscious level. A strong school culture is linked to numerous positive academic and civic outcomes, from performance in short-term assessments to long-term civic engagement and educational attainment.

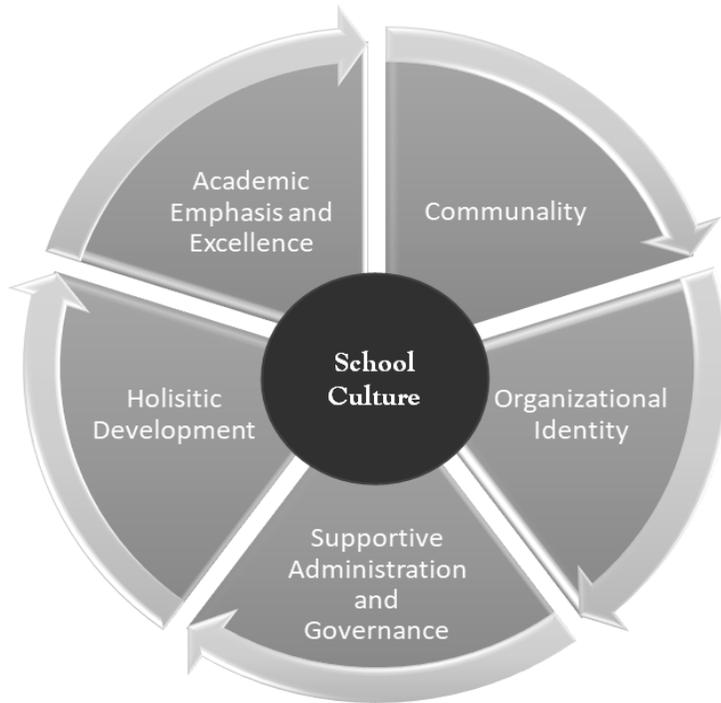


Figure 4. 1. Five Factors of School Culture (Johns Hopkins, 2019)

Interactions between staff members, the students and the community at large nurture school culture. School culture becomes the guide for behavior that is shared among members of the school. School leaders can use several channels to shape a school's culture or climate. For example, meaningless practices and symbols used in the school need to be analyzed and revitalized (Deal, 1987). Emerging visions, dreams, and hopes need to be articulated and celebrated.

The governance of schools also shapes culture (Hollins, 1996). Site, district, and state level school administrators create the parameters within which cultures can be created. Teachers are expected to follow the directives of the principal and other administrators. Students are expected to follow the directives of the teacher and other school staff. The way teachers and site administrators manage students, other staff and parents is the key focus to determining whether

the culture of a school (or district) is conducive to positive behaviors, increased attendance, and positive academic performance.

The literature on school culture makes it clear that effective schools, in other words, schools that demonstrate high standards of achievement in academics, have a school culture that is characterized by a well-defined set of goals that all members of the school (administration, staff, and students) value and promote. If a site administrator or teacher can establish and communicate goals that define the academic, behavioral and attendance expectations of the school clearly, and if the site administrator can rally all the stakeholders around these goals, then the motivation to achieve them is likely to follow.

Most reviews reach a consensus about the centrality of school culture and climate to academic success (Mackenzie, 1983). Purvey and Smith (1983) also found a close correlation between positive school culture and academic achievement. They assert that a student's chance for success in learning cognitive skills is heavily influenced by the climate of the school. An academically effective school would be likely to have clear goals related to student achievement, teachers and parents, and a structure designed to maximize opportunities for students to learn. A central focus on academic success increases the probability of realizing that academic goal as compared to a climate that emphasizes affective growth or social development.

PBIS and Student Behavior

Violations of discipline by students are misbehaviors which have been reported by many schoolteachers. The issue of problematic behaviors among students is enhanced if the students are boarders (Dunlap & Fox, 2012). Although the behaviors which are being reported as indiscipline may be classified as mild such as making noise in class, these behaviors negatively influence the learning of students (Algozzine et al., 2011). Currently, the cases of problematic

behaviors among students are increasing although most schools have implemented preventive and remedial strategies such as crisis planning and interventions (Bradshaw et al., 2010). This implies that the teachers spend a lot of their time planning and handling crises among students, rather than focusing on teaching and learning. PBIS can thus be used to lessen the occurrence of problematic behaviors among students and thus provide the teachers with adequate time for instruction (Chafouleas et al., 2010). The implementation of PBIS means that a team will be largely responsible for the behavior change of the students and work collaboratively with the teachers, thus minimizing the time teachers spend on disciplinary processes. PBIS is also highly effective in enforcing discipline among students and thus fostering good behavior. According to Bradshaw et al. (2010), PBIS has been found to be effective in correcting problematic behaviors because it focuses on developing a predictable and efficient school climate and on educating students on the expected behaviors. The implementation of PBIS ensures that students get the necessary support regarding behavior such as direct instructions and acknowledgement when an individual behaves in an unexpected manner.

The adoption of PBIS at one of the elementary schools resulted in positive outcomes such as an improvement in the school climate and reduced rates of referrals to the office due to disciplinary issues (Chafouleas et al., 2010). Lewis et al. (2010) concur with Bradshaw et al. (2010) by asserting that the implementation of PBIS led to reduced cases of suspension and that, as a result, there was an improvement in academic performance. The effectiveness of PBIS in supporting behavioral changes of the students varies depending on the context of application. Schools differ from one another, providing various contexts of application. The most significant variables that need to be considered are the attitude of the teachers towards the student's behavior, the size of the school, the number of people in the administration, and the size of the

faculty (Horner et al., 2010). There is need for teachers to believe that a change of behavior can occur for PBIS to be effective. In addition, the school needs to have an adequate number of staff, teachers, as well as administrative staff who can ensure that, once the student has been taught the expected behaviors, he adheres to the established rules and regulations.

Several studies have highlighted the superiority of PBIS as an alternative to the reactive and punitive rules that have been used over the years to reinforce desirable behaviors across schools. PBIS is a model that encourages the holistic development of students by addressing their identified behavioral needs individually (Bradshaw et al., 2010). PBIS is particularly effective in enhancing the behavioral change of students because they promote social competence among the students; the staff and the families are involved in enhancing the behavior of students and enforcing the training of the required behavior (Algozzine et al., 2011). This means that it is easier for the student to sustain an adopted behavior when he receives appropriate support both at school and at home.

The incorporation of RtI in PBIS enhances the use of the program for behavioral change because of the valuable elements it contributes (see Figure 1). According to Reinke et al. (2012), one of the key elements of RtI is supporting positive behaviors. Positive behaviors can be supported through a reward system which may lead to higher student motivation in maintaining expected behaviors and a school culture where students are disciplined. The other equally important element of RtI is the use of early interventions for students who are experiencing academic difficulties (Horner et al., 2010). If an individual's behavior is molded at an early stage, the likelihood that the student will adopt and internalize the expected behavior is higher since problematic behaviors had not yet been developed into a habit. Another key element of RtI is the continuous monitoring of the behavior of students (Dunlap & Fox, 2012). Continuous

monitoring of student behavior supports the evaluation of PBIS in assisting students to maintain desirable behavior. Corrective measures are then instituted for any deviation from the expected behaviors.

The appropriate application of the three levels in PBIS is a key factor promoting the adoption of expected behaviors by students. At the first level, the expected behavior is communicated to students in a repetitive and positive but less precise manner (Cheney et al., 2008). The student is thus more likely to be aware of behavioral expectations and to strive towards maintaining them. Lewis et al. (2010) add that at this level, several strategies as well as systems are developed and implemented to support the students in maintaining the behaviors. One of these strategies is praise and recognition for the students who maintain the expected behavior. At the second level, the interventions that are developed to drive behavioral change are intense (Algozzine et al., 2011). The focus in this level is placed on the students who were not able to adjust their behaviors accordingly after strategies were implemented in the first level. Students at this level would be referred to their counselor for further consultation and additional assistance through peer groups. At the last level, the focus of the PBIS is on the students who did not develop a change of behavior at the first and the second levels (Cheney et al., 2008). There is a strong need for further investigations to identify the issues compelling the student to engage in problematic behaviors. This calls for individualized assessment followed by the implementation of individualized behavioral change strategies.

PBIS and Attendance

The problem of lack of attendance in schools has increased over the years, becoming a serious issue. The notion of not attending school has been traditionally considered as fun but has become a problem of concern especially among the students in middle schools (Horner et al.,

2010). The government body has shown its concern and developed policies to encourage higher attendance. If a student attends school, the likelihood for him to attain an improved academic performance is high. According to Clarke and Dunlap (2008), a good academic performance has been correlated with a good record of school attendance. When a student does not attend school, he or she misses on the instruction time which is an important component in enhancing academic performance.

Several factors have been found to contribute to the lack of school attendance by students. A major factor that contributes to the lack of attendance among students is a school climate that is not welcoming (Guardino & Fullerton, 2010). Although the lack of attendance to school by students may be related to individual as well as family issues, most of the instances of absenteeism are due to an unfavorable school climate (Crews et al., 2007). A positive school climate has been linked with a reduction in problematic behaviors such as violence and aggression among students. According to Hawken et al. (2007), the focus of most studies is on the roles of schools in enhancing the attendance of students, however, little research attention is given to the factors which motivate the students to go to school.

School attendance is a highly significant element in the academic success of an individual. A positive correlation exists between school attendance and academic performance (Horner, 2009). This means that the higher the attendance of the students, the higher the increase in academic performance. When students, especially those at the middle school level do not attend school, their achievement suffers. A reduction in school attendance by students has been described by McIntosh et al. (2006) as harmful to the process of learning, leading to a drop in the academic performance. A decrease in school attendance, specifically at the middle school level,

can pose a risk to academic performance in the subsequent years of education especially at the high school level.

Chronic absenteeism is a term used to describe the situation that arises when a student does not attend more than 10% of the number of years of schooling. A lack of attendance to school increases the risk for a student to resort to social isolation, substance abuse, violence, and aggressive behaviors (Horner et al., 2010). Lassen et al. (2006) reported the same line of reasoning as Horner et al. (2010) by stating that the lack of attendance to school has long-term effects such as social problems and economic difficulties in adulthood. There is a need for ensuring that at an early stage, students are aware of the need for attending school and develop a habit of always going to school. One of the most important programs that has been found to enhance the attendance of students is PBIS (Bradshaw et al., 2010). The focus of PBIS is on supporting the development of good behavior among students, including regularly attending school.

Initially, correcting the behavior of students was based on the administration of penalties, which, over time, have been demonstrated to be ineffective. Penalties for students such as punishment has been proven to increase the problematic behavior (Lewis et al., 2010). A student who is always given a physical punishment for not attending school will get used to the punishment and will not be afraid of it. As a result, the problem of lack of attendance will aggravate. Guardino and Fullerton (2010) acknowledge that when a student gets in trouble such as by not attending school, he develops anxiety, irritation and other unpleasant feelings towards attending school. The ultimate effect is that the problematic behavior will continue, and the academic performance will drop further, calling for the implementation of PBIS.

PBIS has been found to be effective in promoting required behaviors among students such as regular school attendance (Crews et al., 2007). The main goal of PBIS is the creation of a school environment that is positive through the development of systems that are improved and procedures that enhance a positive change in students' behavior (Reinke et al., 2012). Once the goal has been achieved, the students will always be motivated to attend school. PBIS is highly effective in improving the school attendance of students (Lassen et al., 2006).

PBIS and Academic Performance

Several researchers have reported a positive association between PBIS and academic performance. In a systematic review of the literature, Algozzine et al. (2011) reported that several research studies based on interventions revealed that there is an existing association between performance in academics and undesirable behaviors at the elementary school all the way to the high school level. This means that if a student has a negative behavior in elementary school, the likelihood of that behavior continuing is high. The probability of a continuous poor academic performance from elementary to high school is also increased. Reinke et al. (2012) agree with Algozzine et al. (2011) about the correlation between the reading skills of students in school and disciplinary issues. There is usually a variation in the reading skills of students at different levels of learning. If a student experiences poor achievement, his chances of developing problematic behaviors is very high. This is further highlighted by Crews et al., (2007) who reported that when learning becomes difficult, the likelihood of the students misbehaving is very high as it is a defense mechanism for avoiding the assigned tasks. It is thus evident that the success of academic performance of a student is largely dependent on the behavior.

The effect of negative behavior on academic performance is a cumulative effect. According to Algozzine et al. (2011), students who fail academically had a history of suspensions from school at the middle grade levels. Hawken et al. (2007) report that students in sixth grade who are involved in violent behaviors such as bullying and fighting had a record of poor academic performance. The focus of PBIS is on correcting behavior, it can thus be utilized effectively to ensure that students are well-disciplined, which can ultimately lead to improved academic performances.

For the performance of a student to improve, there is a need for adequate instruction time between the teacher and the learner. PBIS helps to correct problematic behaviors of students, thus increasing the instruction time available to the student (Bradshaw et al., 2010). This is because a student who is well-behaved does not only sit in class for a long time but also has an improved attention span. Another research by Lassen et al. (2006), reported, that following the implementation of PBIS, the attendance of students to school increased and the attendance for the period of study improved. A comparative study by McIntosh et al. (2006) on a school that implemented PBIS and one that did not indicated that about 62% of the students in third grade where PBIS was implemented recorded an improved academic performance while, on the other hand, approximately 40% of students in the school where PBIS was not implemented reported improved academic performance. This strongly supports the notion that PBIS helps improve academic performance. Lassen et al. (2006) reported that districts that had adopted PBIS had consistently high academic performance in comparison to the districts that had not. These findings are consistent with the effectiveness of PBIS in the enhancement of learning, leading to improved academic performance.

Despite the research-based benefits associated with PBIS, there have been some mixed findings reported on the influence of PBIS in academic performance. Research findings by Means et al. (2009), indicated no significant relationship between PBIS and mathematic test scores from examinations. In the same line, Simonsen et al. (2008) report that even though PBIS impacted the behavior of students positively, it did not have a significant effect on the test score of students at the elementary level. The existing variation in effect of PBIS on academic performances of students could be due to chance or an influence of extraneous variables and thus the reason why this research was conducted.

Summary

PBIS is neither an intervention nor a theory, but a behaviorally based framework which has been applied in various contexts to strengthen the capability of schools, families, and communities and to enhance the relationship between research-based practices and the settings in which teaching, and learning happen. PBIS specifically requests schools to follow four critical elements for implementation, which are the outcomes, the data, the practices, and the systems (Center on Positive Behavioral and Intervention Supports, 2019). Previous school practices included a model that often waited for a student to fail before providing support. The relationship between academic achievement and social behaviors and the need for non-punitive corrections of behavior are widely held beliefs in education that form the foundation for PBIS, and its practices.

School administrators, teachers and support staff have become increasingly frustrated with the impact of student behavior on their schools. The public perception is that student behavior is out of control and as a result, the teachers and the support staff do not make an extra effort of ensuring that the students are well-behaved. Currently, there is a wide disparity in

school discipline practices, ranging from schools who implement zero tolerance and demand behavioral conformity to those that emphasize student autonomy and independent decision-making. School-wide discipline programs emphasize preventive intervention. In addition to instructional supports, a widely held belief is the interconnection between PBIS, academic achievement, and social behavior. The universal level of the three-tiered model, referred to as School-wide Positive Behavioral Interventions and Supports (SWPBIS), is being widely disseminated to schools by the U.S government.

In the past several years, Positive Behavior Interventions and Supports (PBIS) have been used increasingly in schools to shift from reactive strategies, such as detention, suspension, and expulsion, as the primary response to problem behaviors to more proactive and positive approaches that address the individual students as well as the entire school. PBIS is characterized by a comprehensive focus on systemic changes such as community inclusion, expansion of social relationships, improved family life, and personal satisfaction to improve interactions in both the student and his family's life. Appropriate implementation of PBIS can impact students succeeding both inside as well as outside the classroom setting.

Reward has been used, as part of the PBIS implementation process, as one of the strategies for motivating students to adopt the expected behavior. On the other hand, the excess use of rewards reduces the learning drive of students due to the acquisition of knowledge and skills. It also increases the desire to learn because of the reward attached to it. Feedback is another strategy that has been found to be highly effective in PBIS in the molding of students' behavior. Feedback should be given in a situation that is positive as well as a situation that is negative but should be communicated in a positive manner to students. The other strategy found to be effective in sustaining PBIS implementation is the incorporation of rules and policies

followed by the creation of awareness among the students on the developed rules and policies. For a rule to be effective, students need to be aware of the consequences.

PBIS can be effectively implemented at three levels namely the primary, the secondary, and the tertiary levels with increasingly intensive strategies and programs being administered at each level. At the primary level, the focus is on the prevention of negative behaviors and the areas of emphasis are on routine and adherence to the developed rules. At the secondary level, the behavioral support is intense since these students are viewed as difficult. The tertiary level usually has few students of about 5%, yet these students require a lot of attention to exhibit the expected behavior. The elements of implementation of PBIS are team data analysis and decision-making, data-based decision making, increasing reinforcement of good behaviors, teaching behavior, clearly identified expectations, and a tiered system of interventions.

The application of the three levels in PBIS places a major focus in ensuring that the students adopt the expected behavior. At the first level, the expected behavior is communicated to students in a manner that is not only precise but also by use of a positive approach. Concerning the attendance, the issue of students not attending schools is currently increasing and it can be described as a serious problem. Several factors have been found to contribute to lack of attendance to school by the students. The major factor that contribute to lack of attendance among students is a school climate that is not welcoming. School attendance is a highly significant element in the academic success of an individual. A positive correlation exists between school attendance and academic performance. A lack of attendance to school increases the risk of a student engaging in social isolation, substance abuse, violence, and aggressive behaviors. Initially, the focus of correcting the behavior of students was on penalties which with time has been demonstrated not to be effective. Penalties for students such as punishment has

been proven to increase the problematic behavior. PBIS has been found effective in promoting the required behavior among students such as enhancing the school attendance.

PBIS has an influence on academic performance. Several researchers have reported a positive association between PBIS and academic performance. This means that if the PBIS is successfully implemented, the likelihood of improved academic performance is high. The effect of negative behavior on academic performance has a cumulative effect. Students who were recording failure in academics had a history of suspensions from school at the middle grade levels. For a performance of a student to improve, there is need for adequate instruction time as this provided adequate time between the teacher and the learner. The fact that PBIS help to correct the problematic behavior of a student, the instruction time will increase. It can thus be postulated that the existing variation in the effect of PBIS on academic performances of student could be due to chance or an influence of extraneous variables and thus the reason why this research was done.

CHAPTER 3: METHODOLOGY

This research study is highly significant in today's educational world because students in schools with high numbers of students with low socioeconomic status often score lower on high-stakes tests due to behavior distractions (Thomas et al., 2008). It is therefore essential to research ways to reduce incidents of classroom disruptions and violent behaviors. With Positive Behavior Interventions and Supports (PBIS) systems in place, the hope would be that discipline violations would decrease, and students would become more accountable and responsible citizens. Along with this decreased discipline, an increase in time-on-task and an improvement in the instructional environment should maximize students' abilities to be academically successful. The implementation of PBIS with fidelity would manifest itself through increased achievement and higher scores on high-stakes standardized tests, such as the California Assessment of Student Performance and Progress (CAASPP).

Research Design

This research adopted a quantitative research design. The aim of collecting the quantitative data was to provide a highlight on the existing trends emerging from and the relationships among the variables being investigated. A quantitative approach was used to emphasize the objectivity of the collected information and the findings and examine deductively, from students' perspectives, different aspects of PBIS implementation such as its correlation with a set of variables and how it varies by students' demographic characteristics.

In the collection of quantitative data, standardized assessment information as well as academic grades and student records were collected from the school of each student who had been identified to be at promise for academic and behavioral difficulty at Canyon View Middle School (Grades 6-8). The data collected was in numeric form and was analyzed to generate

existing trends regarding the PBIS program. The administrative data was retrieved under controlled situations; only the recorded information was taken to inform the research. Absence of a record was documented as missing data.

Setting

The study was conducted at Canyon View Middle School, a suburban southern California school with an enrollment of approximately 1,425 students (as of Spring 2019) in grades six through eight.

Table 1. 1

Canyon View Middle School Student Population (by ethnicity & grade)

Ethnicity	Grade 6	Grade 7	Grade 8	Total	%
African American	31	29	32	92	6.4
American Indian or Alaskan Native	0	1	2	3	0.4
Asian	21	25	23	69	4.8
Filipino	28	34	29	91	6.3
Hispanic or Latino	151	155	149	455	31.9
Pacific Islander	5	6	6	17	1.2
White	191	187	200	578	40.5
Two or More Races	43	32	41	116	8.1
Not Reported	1	1	2	4	0.4

TOTAL:	1,425	100.0
--------	-------	-------

PBIS was implemented during the 2016-2017 school year based on a pilot study, which took place during the 2015-2016 school year. Canyon View Middle School runs on an A/B block schedule, four days per week, with an early release schedule one day per week. Canyon View has the benefit that 88% of the teachers for the district have their master's degree. Canyon View Middle School has strong parental support and has strong team leaders at each grade level to guide the leadership for implementation of PBIS. The PBIS program has been in the development process at Canyon View Middle School for the last two school years.

Implementation of PBIS has had a strong buy-in from the staff and students, which has contributed to a culture of understanding for the processes needed to help the implementation be successful. The PBIS site leadership team has done a great job with helping the rest of the staff build the culture including keeping track of the progress of positive student behavior through the 5-Star system, signage throughout the buildings on campus, creating lessons for teachers to use in their classrooms, and working with students regarding 5-Star and any consequences that may occur due to recurring behaviors. As a result, students are introduced to a better use of school day and learning time.

Participants

The target population was students in grades 6-8 at Canyon View Middle School for the 2019-2020 school year, and middle school staff and PBIS leadership team members.

Table 2. 1

Canyon View Middle School-Staff Ethnography

Grade	#	Average # of Years in Service	Average # of Years in District	First- Year Staff	Second- Year Staff
-------	---	--	---	-------------------------	--------------------------

Teachers	57	12.0	10.0	1.0	4.0
Pupil Services	3	13.0	10.0	0	0
Administration	3	8.0	8.0	0	1.0
TOTAL:	63	12.0	10.0	1.0	5.0

The inclusion criterion for the recruitment of teachers was the grade levels taught. Teachers working with grade 6 to 8 students who were willing to participate in the study were recruited. The exclusion criterion was the unwillingness of teachers to be part of the research study. Therefore, the study involved Middle School teachers ($n = 57$). The rationale for including the teachers was that they are not only involved in ensuring that there is implementation of PBIS but also responsible for shaping students' perceptions, attendance, and academic achievements.

The inclusion criteria for the students were (a) poor academic performance; (b) number of office referrals for behavior during the school year; (c) number of times the student has been placed on the Response to Intervention list because of work not turned in; and (d) drop in performance on standardized assessments. The exclusion criteria were students who are well behaved, with good academic performance, and those not willing to participate in the research study. Therefore, the study involved sixth grade students ($n = 217$), seventh grade students ($n = 261$), and eighth grade students ($n = 280$) who were identified as being at promise during the 2018-2019 school year. Data was collected during the 2019-2020 school year to determine if changes occurred in academic performance and behavioral referrals. Students were educated in all the acronyms used through direct instruction provided on the components of PBIS. The terminology used such as PBIS, CIT, and RtI are all common terms used daily with all students

at Canyon View Middle School. The rationale for selecting students for the research is that the students are experiencing the direct effects of PBIS and can provide valuable insight into how those experiences are shaping their perceptions and other variables such as their attendance, and academic achievement.

Sampling Procedure

A purposive sampling technique was used to select the students that were included in the study. Purposive sampling involves the researcher using his own judgment to determine the people that should be included in the research. The rationale for selecting the purposive sampling technique is that it helps the researcher identify and pick only those students who meet the inclusion criteria for participation in the research. Being cautious in the selection of the study participants as in the case of purposive sampling help to reduce the chances of confounding variables since the selected sample has the variables of interests sought for by the researcher.

Students were thus selected for the research study based on three criteria:

1. Academics: Students who were failing more than one class in a core academic subject (i.e. Language Arts, math, science and/or social studies)
2. Behavior: Students who had accumulated greater than ten entries in assertive discipline based on the schools' AERIES student information system.
3. Attendance: Students who had attended class less than 92% of the time. The school-wide attendance average during the 2019-2020 school year was at approximately 97%.

Once students were identified based on the indicators, the researcher contacted each student individually to request their participation in the study. After the study was explained to each student, a packet was sent home with the student that included an Assent Letter for the

student to sign and an Informed Consent Letter for their parent or guardian to sign. Students were asked to return the consent forms within three days. An email was sent home the day students were provided with the packet to let parents know to expect the information and the reason for the research. Students were reminded after two days to return the packet and follow up emails were sent to parents after seven days. Informed consent and/or parental permission were obtained prior to the interview.

Instrumentation and Measures

Test Score Tools

The instruments used in this study for the measurement of the students' test scores were the California Assessment of Student Performance and Progress (CAASPP), Scholastic Reading Inventory (RI), and Think through Math (TTM). These tests are administered to all sixth, seventh, and eighth grade students within the research study's school district to regularly assess their level of knowledge and ability in the area of reading and math. The CAASPP is administered annually under guidelines from the California Department of Education to which every public school must adhere. RI and TTM are benchmark assessments that are administered several times per year at each middle school in the research study's school district. The guidelines are specific to the testing window and test conditions and require that each school report any testing irregularities that occur during the testing process.

The CAASPP Summative Assessments, which are delivered by computer, are composed of two sections: a computer-adaptive test and a Performance Task (PT) based on the Common Core State Standards for ELA and mathematics (California Department of Education, 2018). The computer-adaptive section includes a range of item types such as selected response, constructed response, table, fill-in, graphing, etc. The Performance Task consist of extended

activities that measure a student's ability to integrate knowledge and skills across multiple standards—a key component of college and career readiness (California Department of Education, 2018). Scale scores offer a more precise way to determine students' performance on the online assessments than achievement levels (which are described in the next subsection) because each level is based on a range of numbers, rather than an individual number like a scale score. Scale score ranges for the Smarter Balanced assessments, which vary from test to test and range from 2114–2795 in ELA and 2189–2862 in mathematics (California Department of Education, 2015).

Validity and Reliability

California Assessment of Student Performance and Progress (CAASPP), Scholastic Reading Inventory (RI) and Think through Math (TTM) tools came from the California department of Education. These three tools have been used for a prolonged period in different schools in California to analyze performance and have been proved to be valid and reliable. Validity means that the tools have been giving true results and only measures the academic performance. Reliability means that the findings from the tools have been consistent over time. In order to increase the rigor of the research, the test score tools were evaluated for the internal consistency reliability through a pilot study carried out by the researcher with a sample of 10% of the students in Canyon View Middle School. A split-half reliability measure was used to test for the internal consistency. This involved dividing the selected sample into two and administering the tests and thereafter the score of that were obtained were correlated and it was found to be more than 0.9 and it was declared that the test score tools were reliable. The test score tools were also evaluated for content validity where the teachers involved in the different subjects being tested critically analyzed the contents of the test score tools. The teachers

reported that the test score tools had adequate coverage of the content being assessed and it was therefore declared by the researcher that the test score tools were valid. Therefore, the adoption of the tools helped to increase the credibility of the research findings.

Questionnaires for Survey

Questionnaires were used to collect information from the students in the 2019-2020 school year. The survey questions were developed by the researcher based on the research questions and a review of the literature to ensure that the answers given help to inform the research. The questionnaires included both closed and open-ended questions. The open-ended questions gave the participants a chance to provide a detailed explanation on their views and perceptions regarding the issue of PBIS implementation. The questionnaires were administered using Google Forms. This meant that the participants were required to read the questions by themselves and provide the needed answers. One of the advantages of the web-based surveys was that the participants' responses were automatically stored in a database and easily transformed into numeric data through Google Docs and Excel formats.

Validity and Reliability.

The questionnaire was evaluated for validity and reliability through a pilot test. The pilot study involved a sample of 6th, 7th and 8th grade students. Since it was only the researcher who was involved in the pilot study, a test-retest reliability was conducted where the same questionnaires were given twice to the participants of the pilot study and evaluated for the constructs that were being measured. The evaluation revealed that there was no difference in the construct being measured in the two circumstances and thus the questionnaire was described as reliable. Face validity was established by comparison of the different information given by the participants and assessing for the existing similarities in the answers given. Since there were

some similarities in the provided answers and that different themes emerged, the questionnaire was declared valid. The survey questionnaire was found to be valid and reliable and as a result did not require further adjustment and was adopted for the data collection.

Data Collection

Data was collected from students who were willing to participate through a researcher-constructed online survey in the 2019-2020 school year. The survey instrument was pilot tested with a randomly selected sample of participants representing current middle school students. There were 36 participants in the pilot study, with 50% of males and females ($n = 18$). The sample was composed of 39% of 6th and 8th ($n = 14$) grade students, and 22% of 7th grade students ($n = 8$). The goal of the pilot study was to validate the instrument and improve its reliability. Results of the pilot survey were used to help establish stability and internal consistency reliability, face and content validity of the survey. Based on the pilot test results, the survey items did not need to be revised.

Data Analysis

The quantitative data was analyzed by using both inferential and descriptive statistics. The descriptive statistics was used to provide an overview of the characteristics of the participants in the research sample. The descriptive statistics used involved percentages and frequencies. The percentages were used to describe the proportion of the different grades of students that participated in the research as well as their demographic characteristics. Descriptive statistics was also used to report the percentage of responses of students to a range of Likert scale questions pertaining to the research questions, particularly asking about their perceptions of their schools and perceptions of PBIS implementation in their schools.

The first type of inferential statistics used was the Pearson correlations which was used to find the relationship between the implementation of PBIS and other variables including student academic achievement (GPA), performance in Language Arts and math as well as student perception of their school. One-way ANOVAs were carried out to examine how the implementation of PBIS and student GPA varied by ethnicity, gender and grade level. The main reason for choosing the ANOVA as the data analysis process was that it is associated with a high statistical power. This is since the variation within the group is usually smaller in comparison to the other inferential tests.

Ethical Issues

Ethical issues were considered during each stage of the study. In compliance with the regulations of the Institutional Review Board (IRB), the permission for conducting the research was obtained on March 8, 2019 (see Appendix B). The Request for Review form was filed, providing information about the principal investigator, the project title and type, type of review requested, number and type of subjects. Application for research permission contained information describing the project and its significance, methods and procedures, participants, and research status. The ethical approval of the research was an indication that the study had adhered to the ethical principles underlining protection of human participants.

An informed consent and assent forms were developed. The forms provided information regarding the participants who were guaranteed certain rights, agreed to be involved in the study, and acknowledged their rights were protected (see Appendix E). The assent form was used to obtain permission from the minor participants to be part of the research. In addition, the parents of the minor participants were also required to provide a signed consent form to show that they had allowed the minors to participate in the research. A statement of informed consent was

included with the web survey and participants clicked on a checkbox in the survey to agree to participate. The signing of the consent and an assent form was an indication that the participants were aware of the purpose of the research as well as their roles in the research.

The participation in the research was voluntary and this means that the potential participants were not coerced to be part of the research. The participants were informed that an individual was free to withdraw from the study at any time without penalty. Besides, the participants could withhold any information and seek clarification in case of an issue that was not clear.

Confidentiality was maintained by ensuring that the participants did not provide their names when giving answers to the questionnaires. Participants were assigned based on their Local Student Identification Number. Confidentiality was used to ensure that the information given cannot be linked to the participant who provided the information. In addition, anonymity was also enhanced by coding the responses from the participants. Coding of the responses was important so that in case of an accidental access of the collected information by an unauthorized person, the respondent could not be identified. Confidentiality helped to protect the participant from the risk of harm such as victimization by the school staff and administration which is likely to occur when participants who give certain information are known. The assurance of anonymity helped the participants to provide the correct information with minimal to no fear.

The participant's confidentiality was protected by ensuring that the collected information was stored in a secure place. All study data, including electronic files, grades, academic performance, achievement data, and behavioral referrals were filed in a locked metal file cabinet in the researcher's office and will be destroyed after a reasonable amount of time when the study is concluded. In order to secure the electronic data, the computer used for the data collection as

well as storage was protected by use of a password. In addition, the online platform where surveys were conducted required verification process before an individual could access the electronic data. Participants were informed that the summary of the data would be disseminated to the professional community, but information would be presented in a way that responses are kept confidential.

Summary

It is expected that the implementation of PBIS would be reflected in increased achievement and higher scores on high-stakes standardized tests, such as the California Assessment of Student Performance and Progress (CAASPP). This research adopted a quantitative research design which involved collection of quantitative data. The study was conducted at Canyon View Middle School, a suburban southern California school with enrollment of approximately 1,425 students in grades six through eight. The target population was Canyon View school students from grades 6-8 at Canyon View Middle School for the 2018-2019 and 2019-2020 school year. A purposive sampling technique was used to select the middle school students that were included in the study.

The instruments used in this study for the measurement of the students test scores were the California Assessment of Student Performance and Progress (CAASPP), Scholastic Reading Inventory (RI), and Think through Math (TTM). Data from AERIES was used to: (a) Assist in internal decision making about improving school discipline practices; (b) Assist in support planning with individual students; (c) Report discipline data to the district, state, and/or federal levels; and (d) Aggregate and interpret AERIES data across schools within and/or across districts and states. Schools gain access to use AERIES for data collection and reporting through district training as well as from an AERIES facilitator. The AERIES facilitator initially conducts a

“readiness” review to determine if the data-collection system within the school will result in interpretable information that can be entered and is consistent and reliable across all staff (Irvin et al., 2006).

A split-half reliability measure was used to test for the internal consistency of the test score tools and the tools were found to be reliable. The test score tools were also evaluated for content validity where the teachers involved in the different subjects being tested critically analyzed the contents of the test score tools. The teachers reported that the test score tools had adequate coverage of the content being assessed and it was therefore declared by the researcher that the test score tools were valid. Questionnaires were used to collect information from the students. The survey questionnaires were developed from the research questions to ensure that the answers given help to inform the research. Since it is only the researcher who was involved in the pilot study, a test-retest reliability was conducted where the same questionnaires were given twice to the participants of the pilot study and evaluated for the constructs that were being measured. The evaluation revealed that there was no difference in the construct being measured in the two circumstances and thus the questionnaire was described as reliable. Regarding validity, a face validity was established by the comparison of the different information given by the participants and assessing for the existing similarities in the answers given. Since there were some similarities in the provided answers and that different themes emerged, the questionnaire was declared valid.

The primary technique for collecting the quantitative data consisted of collecting core subject area grades for the students during the 2019-2020 school year along with behavioral referrals. A researcher-designed survey was developed that was web-based and accessed

through Google Docs. The survey included both closed-ended and open-ended questions developed from a review of the literature.

The quantitative data was analyzed through the use of both inferential and descriptive statistics. Descriptive statistics were used to address Research Question 1 about students' perceptions of their schools and of PBIS implementation in their schools. Pearson correlations were used to address Research Question 2 about the correlations between variables such as student academic achievement and the implementation of PBIS. One-way ANOVAs were carried out to find how the implementation of PBIS and student GPA varied by student demographics.

In compliance with the regulations of the Institutional Review Board (IRB), the permission for conducting the research was obtained on March 8, 2019. An informed consent and assent forms were developed, and the participant agreed to be part of the research. The participation in the research was voluntary and this meant that the potential participants were not coerced to be part of the research. Confidentiality was maintained by ensuring that the participants do not provide their names when giving answers to the questionnaires. The participant's confidentiality was protected by ensuring that the collected information was stored in a secure place. Participants were informed that the summary of the data would be disseminated to the professional community, but information would be presented in a way that responses are kept confidential.

CHAPTER 4: DATA ANALYSIS AND RESULTS

This chapter describes and presents the analysis of the data, the study results and findings. The main aim of this study was to examine the effects of Positive Behavioral Interventions and Supports (PBIS) on the behavior, attendance and academic achievement of middle school students. The study also aimed to investigate how PBIS and student achievement differed based on the demographic characteristics of participants such as gender and ethnicity. Data were analyzed to identify and describe the relationship, if any, between the study variables. Quantitative data were obtained from structured questionnaires administered to survey participants. The data analyses were carried out using the Statistical Package for Social Sciences (SPSS).

Descriptive (frequencies, percentages, means, standard deviations) and inferential statistics (correlations and ANOVAs) were used in the analyses. Descriptive statistics were used in describing the characteristics of study participants and the frequencies of their responses, which were illustrated using tables, graphs and figures. Inferential statistics were used in examining associations between the variables and in comparing the means of variables to measure the absolute difference between them.

Description of Participants

The gender distribution, grade, and ethnicity of the student participants are described in this section. The administered questionnaires were completed by 758 participants. Table 3.1 provides a summary of their demographic characteristics. The sample of 758 participants was made up of 58% female ($n = 438$) and 42% male ($n = 320$). Of the participants, 40% were White ($n = 305$), 12% ($n = 93$) were African American, 17% Asian ($n = 129$), 23% Hispanics ($n = 175$), and 7% ($n = 59$) were classified as other.

Table 3. 1

Demographic Characteristics of Participants

Variable	Categories	Frequency	Percentage (%)
Gender	Female	438	57.8%
	Male	320	42.2%
Grade	6	217	28.6%
	7	261	34.4%
	8	280	36.9%
Ethnicity	African American	93	12.3%
	Asian	129	17.0%
	Hispanic	175	23.1%
	Other	56	7.4%
	White	305	40.2%

Analyses

Research Question 1 was: What are students' perceptions of their schools and of the implementation of PBIS in their school? Students' perception of the school was measured using specific PBIS elements including: the nature of the school, student relationship in and perceptions of school, language arts and math class attendance, language class and math attributes.

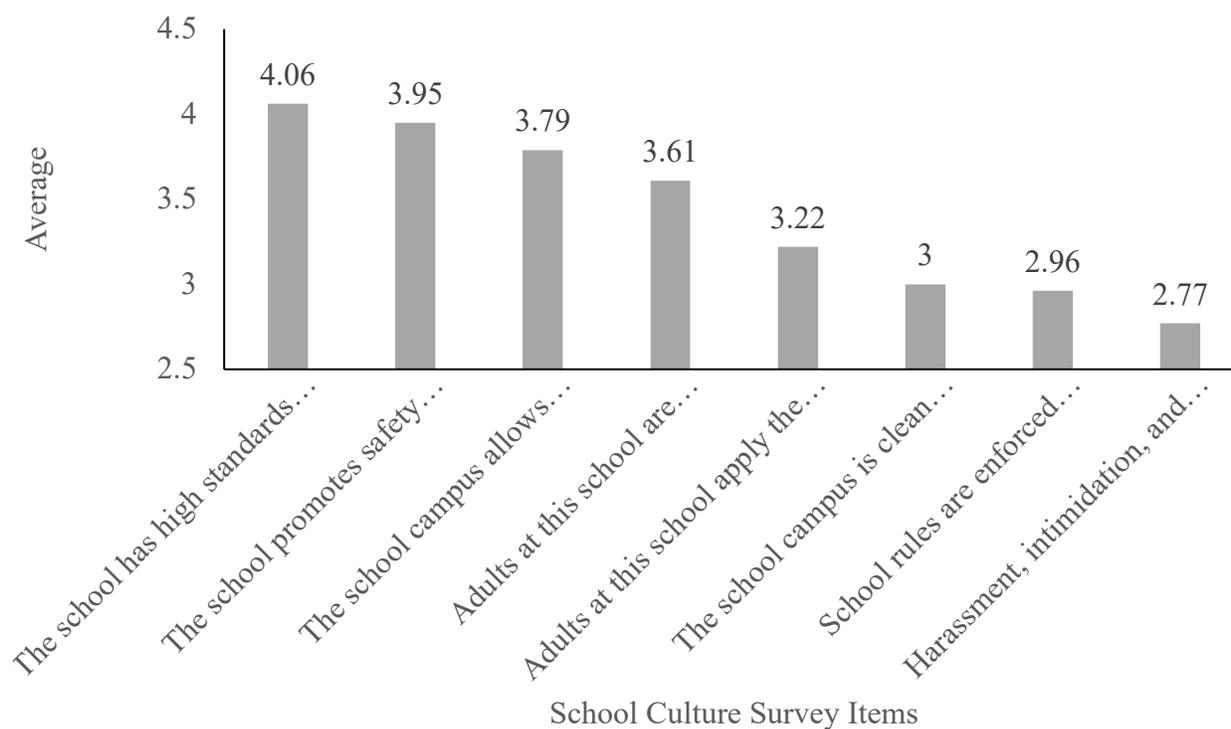
Nature of the School

The first aim of the study, in line with Research Question 1, was to explore students' perceptions of PBIS in their school. The variable nature of the school is an important element of Positive Behavioral Interventions and Supports (PBIS). The nature of the school was measured by examining the wellness of the school and the extent to which the school was fit to deliver academic programs through eight Likert scale statements ranging from *strongly agree* (5) to *strongly disagree* (1). Among the factors under consideration in measuring this variable were the standards of behaviors, school safety levels, cleanliness in the school, levels of harassment, bullying and/or intimidation, support and help from adults, extent to which adult gave students

support and helped others, and application of rules to all students equally (see Table 4). Most respondents *strongly agreed* with, *agreed* with or were *neutral* about all the statements. The highest percentage of respondents, 74% ($n = 561$) *strongly agreed* and *agreed* that the school was characterized by the highest standards of behavior.

Table 4. 1

The Nature of the School



Descriptive statistics were run to compare the respondents' level of agreement across the eight items relating to the nature of the school. The top three statements that elicited the most agreement among participants were high standards behavior, safety, and service access (see Table 5.1).

Table 5. 1

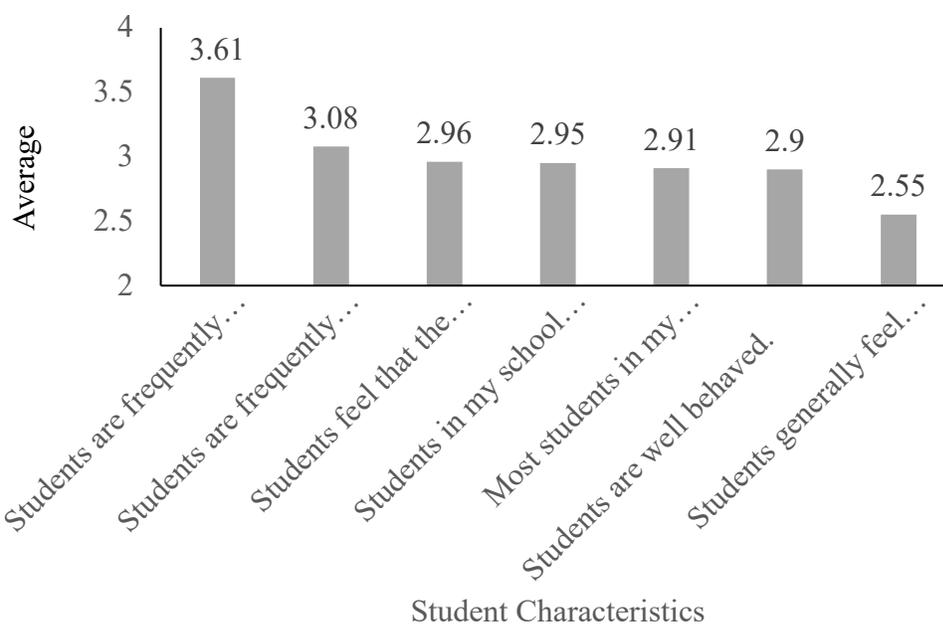
Descriptive Statistics about the Nature of the School

Survey Items	<i>M</i>	<i>SD</i>
The school has high standards for behavior.	4.06	1.039
The school promotes safety on its campus.	3.95	1.052
The school campus allows students easy access to classrooms and student services.	3.79	1.083
Adults at this school are usually willing to make the time to give students extra help.	3.61	1.113
The school campus is clean and well maintained.	3.39	0.901
Adults at this school apply the same rules to all students equally.	3.22	1.304
Harassment, intimidation, and bullying by other students are a problem at this school.	2.77	1.282

Student Perceptions of Behavioral Practices in School

The second set of questions in the survey focused on student perceptions about different practices related to behavior in the school. Students' perceptions play an important role in establishing and developing Positive Behavioral Interventions and Supports (PBIS). Perception and relationships are measured using survey items related to school rules (fairness and adequacy), respect for others, good behavior recognition by the institution (school), performance recognition, and the ability to resolve conflict (work out disagreements). As can be inferred from Table 6.1, a higher total percentage of respondents *agreed* at 27% ($n = 205$) and *strongly agreed* at 11% ($n = 83$) about good behavior recognition at school as compared to the total percentage of respondents who disagreed at 22% ($n = 167$).

Table 6. 1

Students' Perceptions about Behavioral Practices in the School

The means and standard deviations for the items related to student perceptions were computed to find the degree of agreement across the seven items relating to behavioral practices. The top three statements that elicited the most agreement among participants were performance recognition; good behavior recognition, school rules (see Table 7.1).

Table 7. 1

Students' Perceptions about Practices Related to Behavior

Survey Items ($N = 758$)	M	SD
Students are frequently recognized for good grades.	3.61	1.161
Students are frequently recognized for good behavior.	3.08	1.136
Students feel that the school rules are fair and adequate.	2.96	1.137
Students in my school treat each other with respect.	2.95	1.027
Most students in my school can work out disagreements with other students.	2.91	1.064
Students are well behaved.	2.90	0.909

Students generally feel the schoolwork assigned was meaningful and important.	2.55	1.204
---	------	-------

Language Arts Class Attendance

Class attendance and the type of English Language Arts class (Advanced class or not) across different grade levels are important to organizations as such behaviors can affect academic achievement (Caldas & Bankston, 1997). Attendance was highest in the Advanced Language Grade 8 class at 22.4% and Language Arts Grade 7 class at 26.3%. However, overall, attendance was below 30% across the three grade levels in the regular and advanced classes which are a concern (see Table 8.1).

Table 8. 1

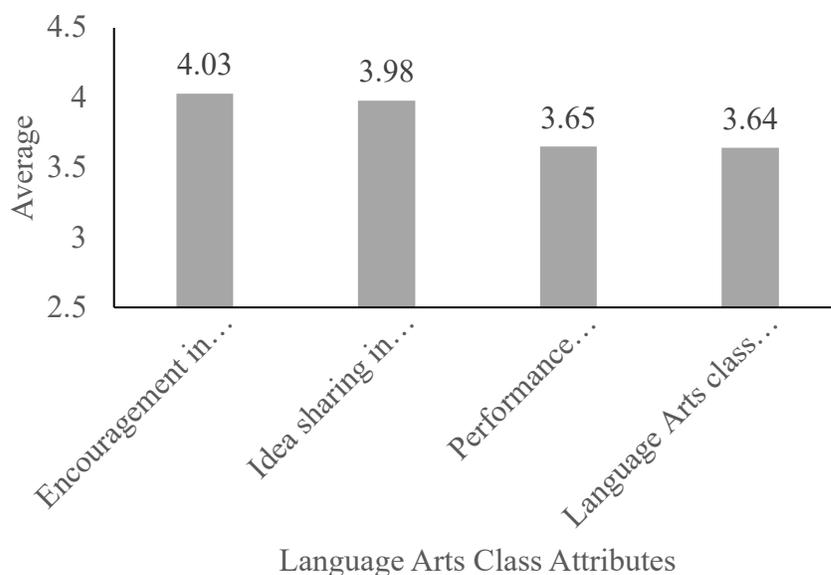
Language Arts Class Attendance for Grades 6, 7 and 8

Language Arts Class	Advanced Language Arts			Language Arts		
	6	7	8	6	7	8
Attendance	12.10%	7.90%	22.40%	16.80%	26.30%	14.50%

Language Art Class Attributes

Performance in Language Arts is related to various class attributes, which are critical drivers of PBIS, including performance recognition, encouragement, and sharing of ideas (see Table 9.1).

Table 9. 1

Language Art Class Attributes

Descriptive statistics were run to compare the respondents' level of agreement about class attributes. The top three statements that elicited the most agreement among participants were encouragement, idea sharing and performance recognition (see Table 10.1).

Table 10. 1

Perceptions about Class Attributes

Survey Items	<i>M</i>	<i>SD</i>
Encouragement in Language Arts class	4.03	1.018
Idea sharing in Language Arts class	3.98	1.025
Performance recognition in Language Arts class	3.65	1.179
Language Arts class interesting and enjoyable	3.64	1.224

Language Arts Class performance

Students in Language Arts class scored a range of grades from A to F. The grades were for the first semester of the 2019-2020 school year. Overall Language Arts grades were self-reported by the students. As seen below in Table 11.1, 37% of students ($n = 280$) who attended Canyon View Middle School (CVMS) had on average an A in their Language Arts class.

Table 11. 1

Language Art Class performance

Language Arts grades	A	A-	B	B-	B+	C	C-	C+	D	D-	D+	F
Percentage of Students	37%	17%	15%	6%	13%	3%	1%	4%	1%	0%	1%	1%

Math Class Attendance

Students at CVMS had the option of taking either a regular math course or advanced math. Table 12.1 shows that 27% ($n = 205$) of the students were enrolled in an advanced math course at CVMS for the 2018-2019 school year. Students enrolled in Math 1 (equivalent to high school Algebra 2) were limited to only Grade 8 students. Attendance in the advanced math class was very low, ranging from 3% in Grade 7 to 15%.

Table 12. 1

Math Class Attendance

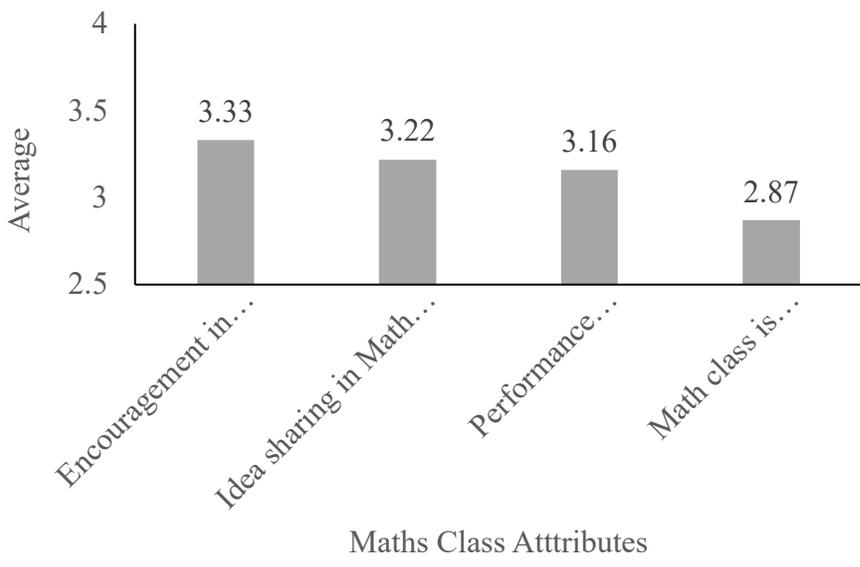
Grade Class Attendance	Advanced Math			Math (regular)		
	6	7	8	6	7	8
	9%	3%	15%	20%	30%	19%

Math Class Attributes

The math class attributes seemed excellent as can be inferred from Table 13.1. A greater percentage of respondents showed agreement (*strongly agree* and *agree*) than disagreement (*strongly disagree* and *disagree*) with three out of the four survey items including performance recognition, ideas sharing, and encouragement within the institution. However, more respondents disagreed than agreed that the math class was interesting.

Table 13. 1

Math Class Attributes



Math Class Performance

Math class performance which was self-reported by students is shown in Table 14.1. More than half of the students, specifically, 80% of the total number of students in the class, achieved A and B grades.

Table 14. 1

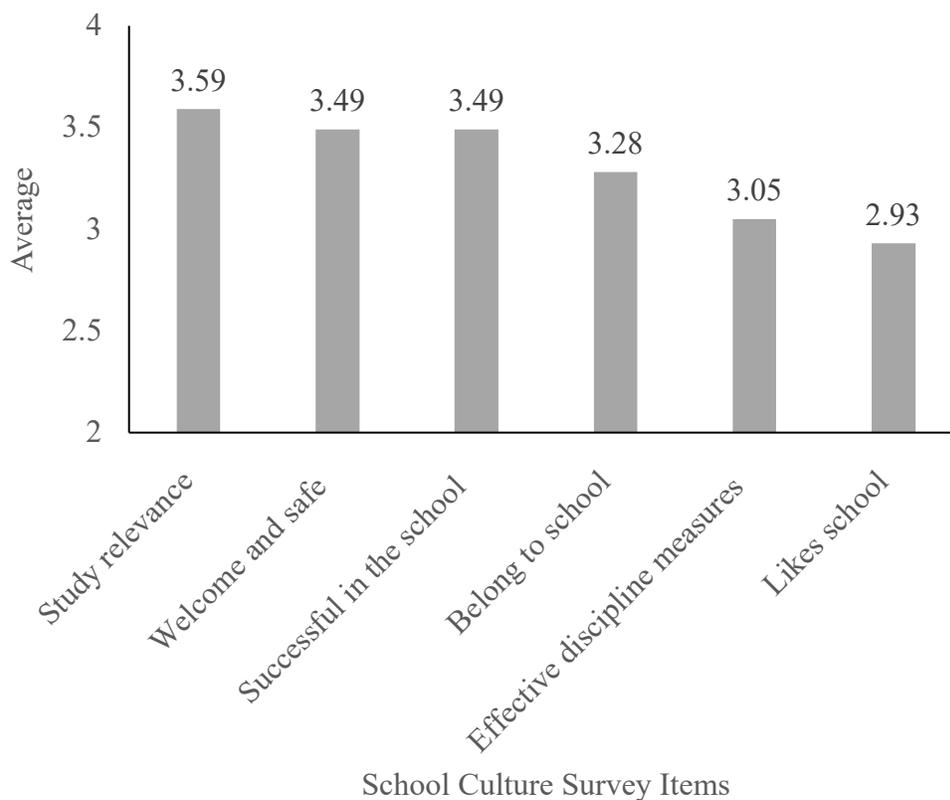
Math Class Performance

Math grades	A	A-	B	B-	B+	C	C-	C+	D	D-	D+	F
Percentage of students	33%	17%	11%	5%	14%	5%	3%	6%	2%	1%	2%	2%

Student Perception of the School Climate

Most of the students showed more agreement than disagreement with most of the survey items including belong to school, welcome and safe, successful in the school, and study relevance (see Table 15.1).

Table 15. 1

Student Perception of the School

Research Question 2

Research Question 2 was: How does the implementation of PBIS correlate with student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school?

Pearson correlation analysis was undertaken to measure the strength of the relationship between the various study variables including implementation of PBIS, student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school (see Table 16.1). A high correlation implied a strong positive or inverse relationship (if the correlation coefficient was negative) between the variables under investigation. A weak correlation implied that the variables hardly had an association or relationship. All the correlations were statistically significant at an alpha level of .05, with r values ranging from .087 between GPA and school average to .774 between student average and PBIS implementation average

Table 16. 1

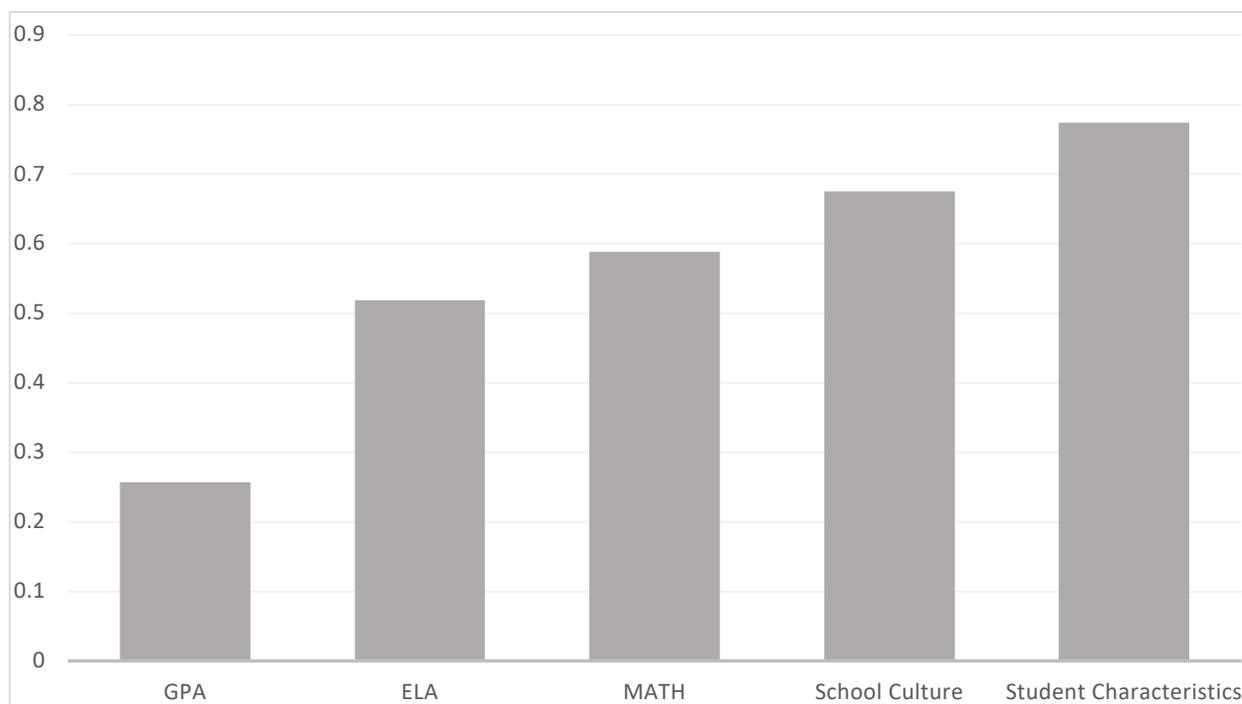
Pearson Correlations Between Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1.GPA (1)	3.51	0.58	1	.087*	.129**	.106**	.135**	.257**
2. School Average (2)	3.54	0.68		1	.713**	.533**	.471**	.675**
3. Student Average (3)	2.99	0.80			1	.510**	.580**	.774**
4. Language Arts Average (4)	3.83	0.97				1	.363**	.519**
5. Math Average (5)	3.15	1.13					1	.588**

6. PBIS	3.30	1.00	1
implementation			
Average (6)			

Table 17. 1

PBIS Impact on Variables (Correlation Coefficients r value at $p < .05$)



Research Question 3

Research Question 3 was: How does the implementation of PBIS and Student GPA vary by ethnicity, gender, and grade level?

Analyses of Variance (ANOVAs) was carried out on StatPlus to determine variability among study variables by gender, ethnicity, and grade by comparing their means. There was no statistically significant difference in perceptions of PBIS implementation by gender, $F(1,756) = 0.758, p > .05$. An ANOVA was also run to examine the difference in perceptions by grade yielding a statistically significant result, $F(2,755) = 22.00, p < .0001$. There was a statistically significant difference in perceptions of PBIS implementation by ethnicity as well, $F(4,753) = 3.83, p < .05$. An ANOVA was also carried out to examine whether students' GPA differed by students' demographic characteristics. According to the ANOVA, students' overall

performance, as reflected by their GPA, did not yield a statistically significant difference by gender, $F(1,756) = .154, p > .05$. The ANOVA carried out for student GPA by grade yielded a statistically significant result, $F(2,755) = 6.06, p < .05$. The ANOVA carried out for student GPA by ethnicity also yielded a statistically significant difference, $F(4,753) = 13.27, p < .05$.

Summary of the Results

Analyses, one-way ANOVAs (Analysis of Variance), and correlation analyses were conducted to answer the research questions. Inferential statistics, through one-way ANOVAs, confirm that there were statistically significant differences between the two variables of interest, GPA and perception of PBIS implementation, and student demographic characteristics and perceptions of PBIS implementation except for gender. In summary, there were significant differences between grades and PBIS, ethnicity and PBIS, grade and GPA, and ethnicity and GPA (p values $< .05$). More importantly, the correlation coefficient depicts that the correlation between the implementation of PBIS and student averages ($r = .7745$) and students and school ($r = .7131$) was positive and strong.

Descriptive statistics was used to examine the different elements of PBIS through the lens of students. There was a high level of agreement among participating students about specific survey items related to math learning and encouragement, while 75.09% of language learning was explained by teacher encouragement of students in the classroom. More important, 73.99% of school belongingness was explained by school safety, particularly in influencing 68.34% of students' behaviors. Besides, 63.19% of discipline within the school is explained by school rules with the majority of students favoring equal rules (60%) with respect to discipline. Importantly, solving disagreement among students (61.61%) was explained by students' respect. Bullying had a negative impact on student discipline (30.19%), behaviors (25.53%), school safety (23.43%),

and resulted in more disagreements (22.11%). Bullying, discrimination, and intimidation had a further negative impact on discipline measures (13%), equal rules (13%), success in school (13%), liking the school (11%), math learning and sharing ideas (10%), and promoting safety (9%).

The application of PBIS has practical implications in shaping students' behaviors and promoting academic achievements. The implementation of PBIS was expected to be reflected in significant improvements in various aspects of the school including discipline, performance, and behaviors. The strong correlations between perceptions of PBIS and other variables such as academic achievement suggest that as PBIS increases, academic achievement also increases. The adoption of PBIS has made the students more positive, participative, and collaborative across the institution. This is indicated by the strong positive correlation between GPA and PBIS. The research suggests the importance of PBIS in enhancing students' performance and behaviors. However, the observation does not specifically and formally identify the actual areas which are influenced by PBIS to improve student performance and discipline. It also does not establish a cause-and effect relationship between PBIS and other variables.

Students from different ethnicities have varied approaches to school regulations, which may have caused the significant differences in perceptions of PBIS and performance by ethnicity which was reported in this study. These attributes have a significant impact on perception about school and relationships, hence are expected to be correlated with PBIS. However, the relationship between gender and GPA was not statistically significant. As an intervention to student performance and behaviors, PBIS implementation and training did not specifically target one gender but all students in the institution. PBIS may have affected both genders differently but the difference may not have been large enough to be statistically significant.

CHAPTER 5: DISCUSSION

The primary objective of this study was to examine students' perceptions of the implementation of the PBIS model in their schools, and the correlations of these perceptions with their academic success as measured by their GPA. Research focused on three specific questions. The first research question focused on student perceptions of their school and the implementation of positive behavior interventions in their classrooms, as measured through a student survey. Additionally, a secondary question was addressed on how the implementation of PBIS correlates with students' academic achievement (GPA), academic performance in core classes (ELA and Math) and the student's perception of their school. The final research question focused on how the implementation of positive behavior interventions and student GPA varied by ethnicity, gender, and grade level.

Summary of the Study

This study focused on student in Grades 6, 7 and 8 from a suburban middle school in California. Students' performance is a key metric in assessing how well the schools are doing. However, attaining high performance is no easy feat since there are many factors influencing students' performance such as the learning environment and students' behaviors among others. Therefore, there is a need for schools to identify various methods and strategies through which they can improve the students' performance. The effectiveness of PBIS interventions reported by scholars and practitioners, particularly, about their positive impacts on student performance provided the driving force for the current research. From the critical literature review conducted, a gap was identified in the relationships between PBIS implementation and students' academic performance, hence the current study sought to bridge this gap.

Purposive Sampling was used to select at-risk students for the current study based on their behavior, attendance and academic performance. Data was collected from the students through an online researcher-constructed survey administered through Google Forms. Student test scores were gathered from the California Assessment of Student Performance and Progress (CAASPP), Scholastic Reading Inventory (RI), and Think through Math (TTM) tests.

Due to the complexity of the research question, the study used a quantitative approach. In this case, numerical data was collected that was useful in addressing the research questions for the study. The quantitative data allowed the researcher to examine the relationship between various variables such as the correlation between students' academic performance and the implementation of PBIS.

Discussions

Research Question 1

The first research question that guided the study was: what are students' perceptions of their schools and of the implementation of PBIS in their school?"

Students' perceptions of the implementation of PBIS were examined through their views derived from witnessing specific PBIS elements such as the nature of the school, student relationships in school, language class attendance, and language class attributes. The majority of student participants strongly agreed and agreed that their school was characterized by the highest standards of behavior. In the same line, previous research had documented that positive behavior interventions and supports (PBIS) establish a positive school climate and student behaviors (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Simonsen et al., 2012).

Although the percentage of students perceiving positive behaviors (74%) was high, the portion of the student sample that agreed or strongly agreed that this positive behavior was being

recognized was lower. Altogether, 27% and 11% agreed and strongly agreed about good behavior recognition, compared to 22% who disagreed. Recognition, may it be in the form of praise or tangible rewards are central to the implementation of PBIS. This begs the question of whether the types of recognition used in the school are the types that students prefer (Coffey & Horner, 2012). Although the level of agreement of students was satisfactory, more effort may need to be put in by PBIS implementers to ensure that students feel recognized for good behavior. Above all, school administration and teachers need to work together to ensure students are reaping the benefits that PBIS can bring to the school community.

Research Question 2

The second question was “How does the implementation of PBIS correlate with student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school”?

Pearson correlation analysis was carried out to examine the relationship between the various study variables including the implementation of PBIS, student academic achievement (GPA), academic performance in math and ELA, and student perceptions of their school. The correlations yielded statistically significant results with positive correlation coefficients values ranging from .087 to .774. The strongest positive correlation was thus between average student perceptions about their school and perceptions of PBIS implementation. This positive correlation shows that as students’ perceptions of PBIS implementation increases, so does the average student perceptions about their schools.

Research Question 3

The third research question was: How does the implementation of PBIS and student GPA vary by ethnicity, gender, and grade level?

ANOVAs were carried out to address this research question. There was no statistically significant difference in the perception of PBIS implementation by males and females in the study sample. The main components of PBIS examined were those related to student behavior and discipline. Traditionally, discipline practices used in schools yielded greater and more regular disciplinary consequences such as more suspensions for males than females (Bradshaw et al., 2010; Butler et al., 2012). However, a previous study by Simonsen and Sugai (2009) showed that the PBIS model offers more consistency in the management of student behaviors in schools. The current finding, the lack of gendered significant difference in perception of PBIS implementation suggests that the implementation of the PBIS system has promoted consistent application of strategies for managing discipline, which has been observed by both male and female learners in the school.

There was a statistically significant difference in perceptions of PBIS implementation by ethnicity. History is rife with examples of students from minority populations being victim to more stringent disciplinary measures compared to other student groups. This disproportionality has been widely documented by previous researchers, who found that African Americans, in particular, suffered from more severe behavior correction measures (Bradshaw et al., 2010; Bryan et al., 2012). Although PBIS is based on a systematic level by level approach which promotes consistent implementation of disciplinary supports, the ramifications of historically problematic behavior management systems may not have been appropriately addressed yet. Although the PBIS system has brought about some consistency, this study suggests that there may be a need for additional support for students from minority populations which may mitigate the perceptions of discrimination which have been shaped over the years. This finding also

suggests that teachers may need to be trained further in culturally responsive strategies to be equipped to support minority students better.

According to the ANOVA, students' overall performance, as reflected by their GPA by gender, did not yield a statistically significant difference.

Implications for Practice

This section identifies various implications arising from the current study. The findings from the study have largely supported the use of PBIS in changing students' behavior which is likely to improve school attendance and academic performance. Therefore, the results of this study can be used to develop improved professional training. The study showed the difference in perceptions of students from various ethnic backgrounds about PBIS implementation. It is important for teachers to be able to implement various elements of PBIS but also to shape student perceptions about their school; all students should feel that disciplinary practices and supports are being applied. Teachers would benefit from professional training on culturally responsive practices and appropriate implementation of PBIS to ensure students feel that their differences are being respected. There is a need for further training among the stakeholders involved in the implementation of PBIS, especially the teachers who play a critical role in its planning, implementation, and evaluation. The training should be based on elaborate training models that make it easy for the teachers to understand the impacts of PBIS and the critical role it plays in improving learners' behaviors hence improved academic performance.

Secondly, there is a need for stakeholders to consider creating an environment and a culture that favors the utilization of PBIS. The utilization of PBIS requires an environment characterized by fairness and mutual trust where the learners feel comfortable in approaching their teachers for different reasons. This positive interaction starts in the classroom with the

teacher but is expected to translate into a broader school culture which is based on understanding and support rather than punishment. As teachers are trained in the appropriate implementation of PBIS and students are coached on how to change to desirable behavior based on the tenets of PBIS, the school is expected to reap the academic, social and behavioral benefits that this approach is purported to bring. Culture change is important in learning institutions as a means of creating a fair environment for the successful utilization of PBIS.

This study has implications for all teachers, particularly those who aim at improving the behavior of their students. Those teachers who work in high-poverty schools where there are typically more student behavioral issues may also find this study particularly appealing as it can guide them in understanding the role played by PBIS in improving student behavior and academic performance. Therefore, this study suggests that teachers would benefit from embracing the implementation of PBIS whose success relies on data-based decision-making in support of student accountability and school culture (Sugai et al., 2000). This study also has implications for school administrators. The findings from this study provide the school administration with support for PBIS implementation which can improve students' behavior and academic performance. The school administration plays a critical role in the success of PBIS implementation. They can support the teachers and other stakeholders in planning and implementation PBIS in their respective schools by providing adequate resources.

The school district is also a critical stakeholder in education. It is the hope that this study informs the district practices and activities. The school district should support schools financially and provide professional and technical support where necessary in the utilization of PBIS since the intervention is likely to bring rampant benefits to the whole community by

reducing problematic behaviors among students, hence reducing aggression and violence in the society at large.

Limitations and Delimitations

Like other studies, this research was not perfect. Despite some limitations, the researcher put in place certain practices to mitigate the impacts. The limitations encountered in the study included:

1. Canyon View Middle School did not have a uniform data tracking system in place during the first year of PBIS implementation which gave rise to some missing raw data. The missed data was, however, replaced by the series means in the analyses used in the current study.
2. Data was collected but the structure of AERIES Student Information System's discipline dashboard was not implemented until the start of the current study. AERIES provided a platform for entering, organizing, managing, and reporting discipline referral data for use by teachers, administrators, and other staff in decision-making.
3. The sample of students and staff was drawn from a single middle school site; therefore, results may not reflect all middle schools within the school district or surrounding districts. The participants were selected based on convenience and availability, so the research findings cannot be generalized to other populations. There is need for future research in this area which would involve a bigger sample and a range of different schools.
3. Many variables outside the control of the researcher could impact the relationship between school wide positive behavior interventions and student achievement. These variables may include the quality of instructional programs, parental involvement in the

school, D/F rates, course completion rates, and the diversity of course offerings at the school site. These extraneous variables could have interfered with the findings and compromised the rigor of the research. There is a need for empirical research which would incorporate these variables as control variables and use more robust statistical analyses to find their contribution to student achievement.

4. The data used in the current study was collected through the self-report of the participants. It was thus difficult for the researcher to establish the authenticity of the information collected. Future research can address this limitation by using more reliable research designs such as randomized control trials.

Recommendations for Further Research

Despite the current study providing rich information regarding the utilization of PBIS and its effects on improving students' behavior and their academic performance, there are related topics that warrant further exploration. One of the primary areas for further research would be the equitable implementation of positive behavior interventions among all student subgroups. For example, future research concerning PBIS and equity may focus on disproportionality in behaviors among specific student subgroups (i.e. African American, Hispanic, Students with Disabilities) and the effects of this disproportionality on academic performance. Discussions can also cover any specific attendance gaps among specific subgroups. It would also be interesting for the current study to be expanded into a longitudinal study which would allow the researcher or others to monitor progress in PBIS implementation and make further data-driven changes to achieve equity in school discipline. No single solution has been shown to be completely effective to achieve disciplinary equity for students of color or those with disabilities, but using data to identify challenges, select interventions, and monitor effectiveness appears to be a

promising component of a comprehensive approach. The utilization of the PBIS program is based on different models as noted in the study. However, it is not clear which model elements are most suitable in supporting behavioral improvements among specific student subgroups. Therefore, there is a need for continued studies comparing the use of different learning models in the implementation of PBIS to determine which one leads to the full utilization of PBIS and increased benefits for underrepresented student populations.

Another research area that requires further investigation is the effects of positive behavior interventions among middle school students over the course of a two to three-year period. It is possible that the effects of PBIS on students' behaviors, attendance and academic performance may take longer to have an effect. Full implementation of SW-PBIS is known to take several years. This period of implementation is commonly three to four years in elementary and middle schools (Sugai, 2008), but it has been estimated to be between five to eight years in high schools (Bohanon et al., 2006; Flannery et al., 2009). In addition, future studies can look into the effects of PBIS on other specific student outcomes in high school, such as earned credits and graduation rates.

The current study has suggested various benefits of the PBIS program on academic performance and students' behaviors. In this case, the study has focused on the students' behaviors that are exhibited at school. However, the students are not only expected to change their behavior at school but also beyond. There is a need for further studies that can evaluate the impact of PBIS on students' behaviors outside schools, for example, in a home environment.

Conclusion

This study has presented the results of correlations between positive behavior intervention systems and behaviors, attendance, and academic achievement of middle school

students. It has also examined how perceptions of PBIS and student GPA varied by student demographic factors such as gender and ethnicity. The significant difference in the perceptions of students of various ethnicities about the behavioral intervention draws attention to equity issues that need to be addressed. Equity should form an integral part in PBIS implementation to promote better academic achievement among all students irrespective of their background. Sugai and Horner (2009) concluded that the U.S. educational system's ability to address the needs of all students has led to students feeling disenfranchised, which is often exhibited through poor behaviors and lower academic achievement. The benefits of PBIS are numerous, however, should be harnessed to support all students. The current study provides a foundation upon which other researchers can build to promote increased understanding of the factors that motivate and encourage all learners and the reasons for which some learners may not perceive behavioral interventions such as the PBIS as positively as others.

REFERENCES

- Algozzine, B., Wang, C., & Violette, A. S. (2011). Reexamining the relationship between academic achievement and social behavior. *Journal of Positive Behavior Interventions, 13*(1). <https://doi.org/10.1177/1098300709359084>
- American Psychological Association Zero Tolerance Task Force. (2008). Are zero tolerance policies effective in the schools? An evidentiary review and recommendations. *American Psychologist, 63*(9). <https://psycnet.apa.org/doi/10.1037/0003-066X.63.9.852>
- Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Camilla, A. (2004). Check & connect: The importance of relationships for promoting school engagement. *Journal of School Psychology, 42*(2). <https://eric.ed.gov/?id=EJ731928>
- Baker, C. K. (2005). The PBIS triangle: Does it fit as a heuristic? A reflection on the First International Conference on Positive Behavior Support. *Journal of Positive Behavior Interventions, 7*(2). <https://doi.org/10.1177/10983007050070020601>.
- Bambara, L. M., Gomez, O., Koger, F., Lohrmann-O'Rourke, S., & Xin, Y. P. (2001). More than techniques: Team members' perspectives on implementing positive supports for adults with severe challenging behaviors. *Journal of the Association for Persons with Severe Handicaps, 26*(4). <https://doi.org/10.2511/rpsd.26.4.213>
- Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effect of school wide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions, 12*(3), 133-148.

- Bradshaw, C. P., Mitchell, M. M., O'Brennan, L. M., & Leaf, P. J. (2010). Multilevel exploration of factors contributing to the overrepresentation of black students in office disciplinary referrals. *Journal of Educational Psychology, 102*(2).
<https://psycnet.apa.org/doi/10.1037/a0018450>
- Boulden, W. T. (2010). The behavior intervention support team (BIST) program: Underlying theories. *Reclaiming Children & Youth, 19*(1). <https://eric.ed.gov/?id=EJ895291>
- Butler, B. R., Joubert, M. D., & Lewis, C. W. (2009). Who's really disrupting the classroom? An examination of African American male students and their disciplinary roles. *The National Journal of Urban Education & Practice, 3*(1). <https://eric.ed.gov/?id=ED511847>
- Bryan, J., Day-Vines, N. L., Griffin, D., & Moore-Thomas, C. (2012). The disproportionality dilemma: Patterns of teacher referrals to school counselors for disruptive behavior. *Journal of Counseling & Development, 90*(2). <https://doi.org/10.1111/j.1556-6676.2012.00023.x>
- Caldas, S.J. & Bankston, C. (1997). Effect of school population socioeconomic status on individual academic achievement, *The Journal of Educational Research, 90*(5).
<https://doi.org/10.1080/00220671.1997.10544583>
- California Department of Education (2018). CAASPP description: Caledfacts.
<https://www.cde.ca.gov/ta/tg/ai/cefcaaspp.asp>

- Chafouleas, S. M., Volpe, R. J., Gresham, F. M., & Cook, C. R. (2010). School-based behavioral assessment within problem-solving models: Current status and future directions. *School Psychology Review, 34*(3).
<https://doi.org/10.1080/02796015.2010.12087756>
- Cheney, D., Flower, A. L., & Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional or behavioral disorders. *Journal of Special Education, 42*(42).
<https://doi.org/10.1177%2F0022466907313349>
- Clarke, S., Worcester, J., Dunlap, G., Murray, M., & Bradley-Klug, K. (2002). Using multiple measures to evaluate positive behavior support: A case example. *Journal of Positive Behavior Interventions, 4*, 131–145.
- Clarke, S., & Dunlap, G. (2008). A descriptive analysis of intervention research published in the Journal of Positive Behavior Interventions: 1999 through 2005. *Journal of Positive Behavior Interventions, 10*(1). <https://doi.org/10.1177/1098300707311810>
- Coffey, J., & Horner, R. (2012). The sustainability of schoolwide positive behavior interventions and supports. *Exceptional Children, 78*(4). <https://eric.ed.gov/?id=EJ970688>
- Colvin, G., & Fernandez, E. (2000). Sustaining effective behavior support systems in an elementary school. *Journal of Positive Behavioral Interventions, 2*(4).
<https://doi.org/10.1177%2F109830070000200414>
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Crews, S. D., Bender, H., Cook, C. R., Gresham, F. M., Kern, L., & Vanderwood, M. (2007). Risk and protective factors of emotional and/or behavioral disorders in

- children and adolescents: A mega-analytic synthesis. *Behavioral Disorders*, 32(2),
<https://doi.org/10.1177/019874290703200201>
- Deal, T. E., (1987). The culture of schools. In *Leadership: Examining the elusive*. In L. T. Sheive (author) and M. B. Schoenheit (Ed., 1st ed.). ASCD Yearbook. Alexandria, VA: Association for Supervision and Curriculum Development. www.ascd.org
- DiPerna, J. C., Volpe, R. J., & Elliott, S. N. (2002). A model of academic enablers and elementary reading/language arts achievement. *School Psychology Review*, 31(3).
<https://www.tandfonline.com/toc/uspr20/current>
- Dunlop, T. (2013). Why it works: You just can't 'PBIS' someone. *The Education Digest; Ann Arbor* 79(4). <http://search.proquest.com/docview/1464619030>
- Dunlap, G. & Fox, L. (2012). Function-based interventions for children with challenging behavior. *Journal of Early Intervention*, 33(4).
<https://doi.org/10.1177%2F1053815111429971>
- DuPaul, G. J., Ervin, R., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom performance. *Journal of Applied Behavior Analysis*, 31(4).
<https://dx.doi.org/10.1901%2Fjaba.1998.31-579>
- Durand, V. M., & Carr, E. G. (1992). An analysis of maintenance following functional communication training. *Journal of Applied Behavior Analysis*, 25(4).
<https://dx.doi.org/10.1901%2Fjaba.1992.25-777>
- Eber, L., Sugai, G., Smith, C., & Scott, T. (2002). Wraparound and positive behavior supports and interventions in the schools. *Journal of Emotional and Behavior Disorders*, 10(3).
<https://doi.org/10.1177%2F10634266020100030501>

- Elias, M. J. (1998). Resolving conflict and preventing violence, school failure and dropout, and related behavior problems. *NASSP Bulletin*, 82(596).
<https://doi.org/10.1177%2F019263659808259602>
- Fantuzzo, J. W., & Polite, K. (1990). School-based, behavioral self-management: A review and analysis. *School Psychology Quarterly*, 5(3).
<https://doi.org/10.1037/h0090612>
- Flannery, K. B., Sugai, G., & Anderson, C. M. (2009). School-wide positive behavior support in high school: Early lessons learned. *Journal of Positive Behavior Interventions*, 11(3).
<https://doi.org/10.1177/1098300708316257>
- Fleming, C. B., Haggerty, K. P., Catalano, R. F., Harachi, T. W., Mazza, J. J., & Gruman, D. H. (2005). Do social and behavioral characteristics targeted by preventive interventions predict standardized test scores and grades? *Journal of School Health*, 75(9). <https://doi.org/10.1111/j.1746-1561.2005.00048.x>
- Freeman, R., Eber, L., Anderson, C., Irvin, L., Horner, R., Bounds, M., & Dunlap, G. (2006). Building inclusive school cultures using school-wide positive behavior support: Designing effective individual support systems for students with significant disabilities. *Research and Practice for Persons with Severe Disabilities*, 31(1).
<https://doi.org/10.2511%2Frpds.31.1.4>

- Gottfredson, D. C., & Gottfredson, G. D. (2002). Quality of school-based prevention programs: Results from a national survey. *Journal of Research in Crime and Delinquency*, 39(1). <https://doi.org/10.1177%2F002242780203900101>
- Guardino, C. A., & Fullerton, E. (2010). Changing behaviors by changing the classroom environment. *TEACHING Exceptional Children*, 42(6).
<https://doi.org/10.1177%2F004005991004200601>
- Hawken, L. S., MacLeod, S. K., & Rawlings, L. (2007). Effects of the behavior education program (BEP) on office discipline referrals of elementary school students. *Journal of Positive Behavior Interventions*, 9(2).
<https://doi.org/10.1177%2F10983007070090020601>
- Hawken, L. S., Vincent, C. G., & Schumann, J. (2008). Response to intervention for social behavior: Challenges and opportunities *Journal of Emotional and Behavioral Disorders*, 16(4). <https://doi.org/10.1177/1063426608316018>
- Hawkins, J. D., Guo, J., Hill, K., Battin-Pearson, S., & Abbott, R. (2001). Long-term effects of the Seattle Social Development Interventions on school bonding trajectories. *Applied Developmental Science*, 5(4).
https://dx.doi.org/10.1207%2FS1532480XADS0504_04
- Hollins, E., (1996). *Culture in school learning: Revealing the deep meaning*. New jersey: Lawrence Erlbaum Associates. <https://eric.ed.gov/?id=ED394964>

- Hood-Smith, N. E., & Leffingwell, R. J. (1983). The impact of physical space alteration on disruptive classroom behavior: A case study. *Education, 104*(2).
<https://eric.ed.gov/?id=EJ297153>
- Horner, R. (2009, March 26). *Extending the science, values and vision of positive behavior support*. Presented at the Sixth International Conference on Positive Behavior Support, Jacksonville, FL.
- Horner, R. H., Albin, R. A., Sprague, J. R., & Todd, A. W. (2000). Designing and implementing individualized positive behavior support. In M. E. Snell & F. Brown (Eds.), *Instruction of students with severe disabilities* (5th ed., pp. 207-243). Prentice Hall.
- Horner, R. H., & Sugai, G. (2000). School-wide behavior support: An emerging initiative (special issue). *Journal of Positive Behavioral Interventions, 2*(4).
<https://doi.org/10.1177/109830070000200407>.
- Horner, R. H., Sugai, G., Todd, A. W., & Lewis-Palmer, T. (2005). School-wide positive behavior support: An alternative approach to discipline in schools. In L. Bambara & L. Kern (Eds.), *Individualized supports for students with problem behaviors: Designing positive behavior plans* (pp. 359–390). New York: Guilford.
- Horner, R., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for school-wide positive behavior support. *Focus on Exceptional Children, 42*(8).
<https://doi.org/10.17161/fec.v42i8.6906>.
- Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3). <https://doi.org/10.1177%2F1098300709332067>

- Irvin, L. K., Horner, R. H., Ingram, K., Todd, A. W., Sugai, G., Sampson, N. K., & Boland, J. B. (2006). Using office discipline referral data for decision making about student behavior in elementary and middle schools: An empirical evaluation of validity. *Journal of Positive Behavior Interventions*, 8(1).
<https://doi.org/10.1177/10983007060080010301>
- Knoff, H. M. (2000). Organizational development and strategic planning for the millennium: A blueprint toward effective school discipline, school safety, and crisis prevention [Special issue]. *Psychology in the Schools*, 37(1).
<https://eric.ed.gov/?id=EJ606206>
- Langland, S., Lewis-Palmer, T., & Sugai, G. (1998). Teaching respect in the classroom: An instructional approach. *Journal of Behavioral Education*, 8(2).
<https://doi.org/10.1023/A:1022839708894>
- Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of school-wide positive behavior support to academic achievement in an urban middle school. *Psychology in the Schools*, 43(6). <https://doi.org/10.1002/pits.20177>

- Lewis, T., Barrett, S., Sugai, G., & Horner, R. H. (2010). *Blueprint for schoolwide positive behavior support training and professional development*. Eugene, OR: National Technical Assistance Center on Positive Behavior Interventions and Support.
<http://www.pbis.org>
- Lewis, T. J., Colvin, G., & Sugai, G. (2000). The effects of precorrection and active supervision on the recess behavior of elementary students. *Education and Treatment of Children, 23*(2). <https://eric.ed.gov/?id=EJ611299>
- Lewis, T. J., Sugai, G., & Colvin, G. (1998). Reducing problem behavior through a school-wide system of effective behavior support: Investigation of a school-wide social skills training program and contextual interventions. *School Psychology Review, 27*(3). <https://eric.ed.gov/?id=EJ606150>
- Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive school-wide management. *Focus on Exceptional Children, 31*(6).
<https://eric.ed.gov/?id=EJ604910>
- Luiselli, J. K., Putnam, R. F., & Handler, M. W. (2001). Improving discipline practices in public schools: Description of a whole-school and district-wide model of behavior analysis consultation. *The Behavior Analyst Today, 2*(1).
<https://doi.org/10.1037/h0099907>
- Luiselli, J. K., Putnam, R. F., & Sunderland, M. (2002). Longitudinal evaluation of behavior support intervention in a public middle school. *Journal of Positive Behavior Interventions, 4*(3). <https://doi.org/10.1177/10983007020040030701>
- Mackenzie, D. E. (1983). Research for school improvement: An appraisal of some recent trends. *Educational Researcher 12*(4). <https://doi.org/10.3102%2F0013189X012004005>

- Marr, M. B., Audette, B., White, R., Ellis, E. & Algozzine, B. (2002). School-wide discipline and classroom ecology. *Special Services in the Schools*, 18(1-2).
<https://eric.ed.gov/?id=EJ640555>
- Mayer, G. R. (1995). Preventing antisocial behavior in schools. *Journal of Applied Behavior Analysis*, 28(4). <https://dx.doi.org/10.1901%2Fjaba.1995.28-467>
- McIntosh, K., Chard, D. J., Boland, J. B., & Horner, R. H. (2006). Demonstration of combined efforts in school-wide academic and behavioral systems and incidence of reading and behavior challenges in early elementary grades. *Journal of Positive Behavioral Interventions*, 8(3). <https://doi.org/10.1177/10983007060080030301>
- McIntosh, K., Horner, R. H., Chard, D. J., Boland, J. B., & Good, R. H. (2006). The use of reading and behavior screening measures to predict non-response to school-wide positive behavior support: A longitudinal analysis. *School Psychology Review*, 35(2). <https://doi.org/10.1080/02796015.2006.12087992>
- McKevitt, B., & Braaksma, A. (2004). Best practices in developing a Positive Behavior Support system at the school level. *Best Practices in School Psychology V*, 3.
<https://pdf.semanticscholar.org>
- McPartland, J. M. (1994). Dropout prevention in theory and practice. In R. J. Rossi (Ed.), *Schools and students at risk: Context and Framework for Positive Change*. (pp.255–276). New York: Teachers College Press.
- Means, B., Padilla, C., DeBarger, A., & Bakia, M. (2009). *Implementing data-informed decision making in schools-- teacher access, supports and use*. U. S. Department of Education, Office of Planning, Evaluation and Policy Development.
<http://files.eric.ed.gov/fulltext/ED504191.pdf>.

- Miles, S. B., & Stipek, D. (2006). Contemporaneous and longitudinal associations between social behavior and literacy achievement in a sample of low-income elementary school children. *Child Development, 77*(1).
<https://doi.org/10.1111/j.1467-8624.2006.00859.x>
- Moore, J. (2011). Behaviorism. *The Psychological Record, 61*(3).
<https://doi.org/10.1007/BF03395771>
- Nakasato, J. (2000). Data-based decision making in Hawaii's behavior support effort. *Journal of Positive Behavior Interventions, 2*(4).
<https://doi.org/10.1177%2F109830070000200413>
- Nelson, J. R. (1996). Designing schools to meet the needs of students who exhibit disruptive behavior. *Journal of Emotional and Behavioral Disorders, 4*(3).
<https://eric.ed.gov/?id=EJ530684>
- Nelson, J. R., Colvin, G., & Smith, D. J. (1996). The effects of setting clear standards on students' social behavior in common areas of the school. *The Journal of At-Risk Issues, 3*(1). <https://eric.ed.gov/?id=EJ565874>
- Nelson, J. R., Martella, R. M., Ronald, M., & Marchand-Martella, N. E. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders, 10*(3).
<https://eric.ed.gov/?id=EJ652148>
- Ota, K. R., & DuPaul, G. J. (2002). Task engagement and mathematics performance in children with attention deficit hyperactivity disorder: Effects of supplemental computer instruction. *School Psychology Quarterly, 17*(3).
<https://doi.org/10.1521/scpq.17.3.242.20881>

- Peterson, K., & Deal, T. (1998). How leaders influence the culture of schools. *Educational Leadership*, 56(1). <https://eric.ed.gov/?id=EJ570149>
- Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher–child relationships and deflections in children’s classroom adjustment. *Development and Psychopathology*, 7. <http://dx.doi.org/10.1017/S0954579400006519>
- Pont, B., Nusche, D., & Moorman, H. (2008). Improving school leadership, volume 1: Policy and practice. Organization for Economic Cooperation and Development. <http://www.oecd.org/education/school/44374889.pdf>
- Reinke, W. M., Herman, K. C., & Stormont, M. (2012). Classroom-level positive behavior supports in schools implementing SW-PBIS: Identifying areas for enhancement. *Journal of Positive Behavior Interventions*, 15(1). <https://doi.org/10.1177%2F1098300712459079>
- Romer, D., & McIntosh, M. (2005). The roles and perspectives of school mental health professionals in promoting adolescent mental health. In D. Evans, E. Foa, R. Gur, H. Hendin, C. O’Brien, M. Seligman, & B. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: What we know and what we don’t know* (pp. 598-615). New York: Oxford University Press. <https://doi.org/10.1093/9780195173642.003.0032>
- Rose, L. C., & Gallup, A. M. (2005, September). The 37th annual Phi Delta Kappa/Gallup poll of the public’s attitudes toward the public schools. *Phi Delta Kappan*, 7(2). <http://dx.doi.org/10.1177/003172170508700110>
- Ruef, M. B., Higgins, G., Glaeser, B. J. C., & Patnode, M. (1998). Positive behavior support: Strategies for teachers. *Intervention in School and Clinic*, 34(1). <https://doi.org/10.1177%2F105345129803400103>

- Sadler, C. (2000a). Effective behavior support implementation at the district level: Tigard-Tualatin school district. *Journal of Positive Behavior Interventions*, 2(4).
<https://rpdc.mst.edu/>
- Schaughency, E., & Goodman, S. (2003). *Schools link assessment to behavior intervention.: Focus on Results*. Office of Special Education and Early Intervention Services, Michigan Department of Education.
<https://www.bridges4kids.org/PBS/articles/AchBeh2-04.pdf>
- Scheffler, M. L., & Aksamit, D. A. (2006). *Every child succeeds* [Executive report]: Nebraska State Improvement Grant: 1999-2006. Nebraska Department of Education. Lincoln, NE. <http://govdocs.nebraska.gov/epubs/E2000/B090-2006.pdf>
- Simonsen, B., Sugai, G., & Negron, M. (2008). School-wide positive behavior interventions and supports: Primary systems and practices. *TEACHING Exceptional Children*, 40(6). <https://doi.org/10.1177%2F004005990804000604>

- Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for high-risk youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children, 65*(1).
<https://doi.org/10.1177%2F001440299806500101>
- Stronach, I., & Piper, H. (2008). Can liberal education make a comeback? The case of “relational touch” at Summerhill School. *American Educational Research Journal, 45*(1). <https://doi.org/10.3102%2F0002831207311585>
- Sugai, G. (2003). Commentary: Establishing efficient and durable systems of school-based support. *School Psychology Review, 32*(4).
<https://doi.org/10.1080/02796015.2003.12086218>
- Sugai, G., & Horner, R. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School Psychology Review, 35*(2).
<https://doi.org/10.1080/02796015.2006.12087989>
- Sugai, G., & Horner, R. H. (1994). Including students with severe behavior problems in general education settings: Assumptions, challenges, and solutions. In J. Marr, G. Sugai, & G. Tindal (Eds.), *The Oregon conference monograph* (pp. 102–120). Eugene: University of Oregon.
- Sugai, G., Horner, R., & Gresham, F. (2002). Behaviorally effective school environments. In M. Shinn, H. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Prevention and remedial approaches* (pp. 315-350). Bethesda, MD: National Association of School Psychologists.
<https://eric.ed.gov/?id=ED462655>

- Sugai, G., Horner, R. H., & McIntosh, K. (2008). Best practices in developing a broad-scale system of support for school-wide positive behavior support. In A. Thomas & J. P. Grimes (Eds.), *Best practices in school psychology* (Vol. 3, pp. 765– 780). Bethesda, MD: National Association of School Psychologists. Researching this, cannot find the McIntosh reference in the collection?
- Sugai, G., Sprague, J. R., Horner, R. H., & Walker, H. M. (2000). Preventing school violence: The use of office discipline referrals to assess and monitor school-wide discipline interventions. *Journal of Emotional and Behavioral Disorders, 8*(2).
<https://doi.org/10.1177/106342660000800205>
- Sullivan, A.L., Long, L., & Kucera, M. (2011). A survey of school psychologists' preparation, participation, and perceptions related to positive behavior interventions and supports. *Psychology in the Schools, 48*(10). <https://doi.org/10.1002/pits.20605>
- Sutherland, K. S., Lewis-Palmer, T., Stichter, J., & Morgan, P. L. (2008). Examining the influence of teacher behavior and classroom context on the behavioral and academic outcomes for students with emotional or behavioral disorders. *Journal of Special Education, 41*(4). <https://doi.org/10.1177/0022466907310372>
- Teddlie, C., & Tashakkori A. (2009). *Foundations of mixed methods research*. Thousand Oaks, CA: Sage.
- Thomas, D., Bierman, K., Thompson, C., & Powers, C. (2008). Double jeopardy: Child and school characteristics that predict aggressive-disruptive behavior in first grade. *School Psychology Review, 37*(4).
<https://www.tandfonline.com/doi/abs/10.1080/02796015.2008.12087865>

- Vaughn, S., Wanzek, J., Murray, C. S., Sammacca, N., Linan-Thompson, S., & Woodruff, A. L. (2009). Response to early reading intervention: Examining higher and lower responders. *Exceptional Children, 75*(2). <https://doi.org/10.1177/001440290907500203>
- Vanderstaay, S. L. (2006). Learning from longitudinal research in criminology and the health sciences. *Reading Research Quarterly, 41*(3). <https://doi.org/10.1598/RRQ.41.3.2>
- Visser, J. (2001). Aspects of physical provision for pupils with emotional and behavioural difficulties. *Support for Learning, 16*(2). <https://doi.org/10.1111/1467-9604.00190>
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Behavioral and Emotional Disorders, 4*(4). <https://doi.org/10.1177/106342669600400401>
- Walker, H. M., Ramsey, E., & Gresham, F. M. (2003). Heading off disruptive behavior: How early intervention can reduce defiant behavior and win back teaching time. *American Educator, 26*(4). <https://www.aft.org>
- Wehby, J. H., Falk, K. B., Barton-Arwood, S., Lane, K. L., & Cooley, C. (2003). The impact of comprehensive reading instruction on the academic and social behavior of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 11*(4). <https://doi.org/10.1177/10634266030110040401>
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*(2). <https://doi.org/10.1037/0022-0663.85.2.357>

APPENDICES

Appendix A: Site Authorization to Conduct the Study

Appendix J



APPENDIX J: SITE AUTHORIZATION

Title of Study	An Evaluation of the Effects of Positive Behavior Intervention Systems on Behavior, Attendance and Academic Achievement in Middle School
Researcher's	Jared Rogers
Researcher's Affiliation with Site	Employee
Researcher's Phone Numbers	(951) 265-2513
Researcher's CUJ Email (official from CUJ)	jared.rogers@eagles.cui.edu
Researcher's University Supervisor	Dr. Cheryl Lampe
Univ. Supervisor's Phone & Email	(949) 606-6988 cheryl.lampe@cui.edu
Location's where Study will Occur	Murrieta, Riverside County, California

Purpose of Study (1-2 paragraphs)

The purpose of this study is to examine the effects of Positive Behavior Intervention Systems on behavior, attendance rates and academic achievement in students grades six to eight. This study examined the relationships of PBIS among a broad sets of variables: 1) Student behavior is connected to student academic performance. 2) Student attendance is a key factor in the increase of academic performance among middle school students. 3) Students who have good connections with others have better behavior and academic performance. 4) School culture is directly related to positive behaviors, increased attendance rates and improved academic performance.

Procedures to be Followed

Students will be selected for the research study based on the following criteria:

1. Academics-Students who were failing more than one class in a core academic subject (i.e. Language Arts, Math, Science and/or Social Studies)
2. Behavior-Students who had accumulated greater than ten entries in assertive discipline within AERIES
3. Attendance-Students who had attended class less than 92% of the time. The school-wide attendance average for the 2016-2017 school year was at approximately 97%.

Once students are identified based on the indicators, the researcher will contact each student individually to request their participation in the study. After the study is explained to each student, a packet will be sent home with the student that includes an Assent Letter for the student to sign and an Informed Consent Letter for their parent or guardian to sign. Students will be asked to return the consent forms within three business days. An email will be sent home the day students will be provided with the packet to let parents know to expect the information and the reason for the research. Students will be reminded after two days to return the packet and follow up emails will be sent to parents after seven days. Informed consent and/or parental permission will be obtained prior to the interview.

Staff members and leadership team members will be sent an email notification from the researcher a week before the survey is available on the web. Participants will be informed about the importance of their input for the study. To those subjects who did not respond by the set date (a) five days after distributing the survey URL, an email reminder will be sent out; (b) ten days later, the second e-mail reminder will be sent; and (c) two weeks later, the third e-mail reminder will be sent stating the importance of the participant's input for the study. An informed consent form will be posted on the web as an opening page of the survey. Participants will click on the button on the site, "I agree to complete this survey," thus expressing their agreement to participate in the study and complete the survey.

Research Permission and Ethical Considerations

Page 1 of 2

Appendix J



Ethical issues will be considered during each stage of the study. In compliance with the regulations of the Institutional Review Board (IRB), the permission for conducting the research will be obtained. The Request for Review form was filed, providing information about the principal investigator, the project title and type, type of review requested, number and type of subjects. Application for research permission will contain information describing the project and its significance, methods and procedures, participants, and research status. An informed consent and consent form was developed. The forms provided information regarding the participants who were guaranteed certain rights, agreed to be involved in the study, and acknowledged their rights will be protected. The consent form contains a statement providing permission for the minor subjects to participate in the study. A statement of informed consent will be included with the web survey and participants will click on the survey to agree to participate.

The participant's confidentiality will be protected by ensuring their anonymity, while keeping all responses confidential through a coding process. All study data, including electronic files, grades, academic performance, achievement data, and behavioral referrals will be filed in a locked metal file cabinet in the researcher's office and will be destroyed after a reasonable amount of time when the study is concluded. Participants will be informed that the summary of the data would be disseminated to the professional community, but information would be presented in a way that responses are kept anonymous.

Time and Duration of Study

The study will commence on or around November 1, 2018 and be completed no later than May 31, 2019.

Benefits of Study

The primary benefit to the study will be to consider future programs that could be implemented at the site (and possibly) the district level in regards to improving academic achievement through a greater emphasis on positive behavior interventions.

Persons who will have access to the records, data, tapes, or other documentation (see Appendix A, Section C.3 of Handbook)
Jared Rogers-Researcher

Date when the records, data, tapes, or other documentation will be destroyed: 12/31/19

Researcher's Signature Jared Rogers Date 10/06/18

Authorization

I understand that participation in this study is confidential. Only the researcher, collaborators, and supervising professor will have access to participants' identities and to information that can be associated with their identities. Please check the appropriate box below and sign the form:

I give permission for my organization to participate in this project. I understand that I will receive a signed copy of this consent form. I have read this form and understand it.

I do not give permission for my organization to participate in this project.

Authorized Signature [Signature] Date 10-15-2018

Printed Name & Title Darren Daniel, Asst. Superintendent

Appendix B

IRB Authorization



INSTITUTIONAL REVIEW BOARD DECISION

Review Date	03/08/19
IRB#	4887
Review Category	<input type="checkbox"/> Exempt 45 CFR 46.101 <input checked="" type="checkbox"/> Expedited 45 CFR 46.110 <input type="checkbox"/> Full Board 45 CFR 46.102
Title of Project	An evaluation of the Effects of Positive Behavior Intervention Systems of Behavior, Attendance and Academic Achievement in Middle School
Name Principal Investigator's (PI)	Jared Rogers
PI's Email (use CUI email, if applicable)	Jared.rogers@eagles.cui.edu

 Approval as submitted

Effective duration of the IRB Approval: 03 /08 /2019 to 03 /08 /2020

Comments:

Please note the following requirements in the CUI IRB Handbook.

- a. The IRB's approval is only for the project protocol named above. Any changes are subject to review and approval by the IRB.
- b. An annual report or report upon completion is required for each project. If the project is to continue beyond a twelve month period, a request for continuation of approval should be made in writing. Any deviations from the approved protocol should be noted.

 Approval with revision

Comments: Please removed your promise to destroy the data on the year 2020. By law you must keep your data for at least 3 years after you collect it.

 Referral for revision and resubmission

Comments:

 Disapproval

Comments:

Signature of IRB Member: _____

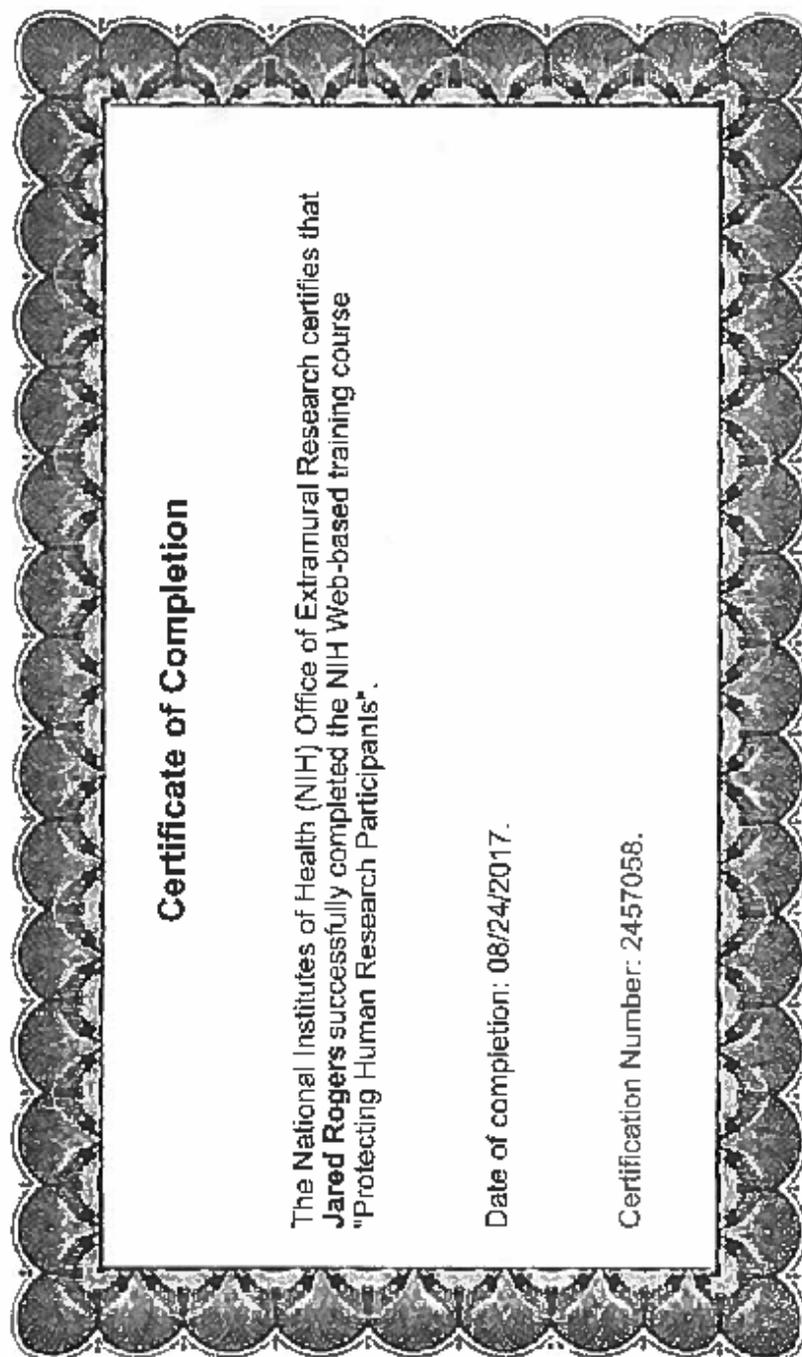
 Digitally signed by Blanca Quiroz
Date: 2019.03.08 17:25:49 -08'00'

Date: 03/08/19

Printed Name of IRB Member: Blanca Quiroz

Appendix C

Training Certificate on Human Subjects



A certificate of completion with a decorative blue border. The text inside the border reads: "Certificate of Completion", "The National Institutes of Health (NIH) Office of Extramural Research certifies that Cheryl Lampe successfully completed the NIH Web-based training course 'Protecting Human Research Participants'.", "Date of completion: 12/04/2015", and "Certification Number: 1931644".

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Cheryl Lampe** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 12/04/2015

Certification Number: 1931644

Appendix D

Student/Parent Consent Letter (English/Spanish)

February 4, 2018

Dear Parents/Students,

I will be conducting a research study in our classrooms to determine how schoolwide positive behavior interventions systems (PBIS) influence behavior, attendance and academic success with our middle school students. This study will take place throughout the 2018-2019 school year, with the study being completed no later than May 31, 2019. This is part of my final research for my doctoral degree at Concordia University-Irvine.

I am writing to ask permission to use the data that I will be collecting from your child during this research process. Participation in this study involves surveys (to be administered online), and one-on-one interviews. This study has been approved by the Murrieta Valley Unified School District.

The significance of the study is to examine the effects of Positive Behavior Intervention Systems (PBIS) on student behavior, attendance and academic achievement in middle school students. The benefits to your child participating in this research study include:

1. A better understanding of how positive interactions in the classroom can improve grades
2. A greater appreciation for their teachers in their classrooms.
3. The opportunity to spend some time outside of class to reflect on how positive interactions in the classroom will help future middle school students achieve the same success.

Only Dr. Cheryl Lampe (my doctoral Chair), and I will have access to your child's identity and to information that can be associated to your child's identity. The data and documentation will be destroyed by May 31, 2020. Use of data from your child is voluntary. You may contact me at any time regarding your child's participation. My phone number is (951) 304-1885, ext. 3698 and my email is jrogers@murrieta.k12.ca.us

Sincerely,

Jared Rogers
Assistant
Principal

Please check the appropriate box below and sign the form:

- I give permission for my child's data to be used in this study. I understand that I will receive a signed copy of this consent form. I have read this form and understand it.
- I do not give permission for my child's data to be included in this project.

Student's Name: _____

Student ID #: _____

Student Signature: _____

Printed Name of Parent(s)/Guardian: _____

Signature of Parent(s)/Guardian: _____

Appendix E

4 de febrero de 2018

Estimados Padres / Estudiantes,

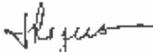
Estaré realizando un estudio de investigación en nuestras aulas para determinar cómo los sistemas de intervención de comportamiento positivo (PBIS) en toda la escuela tienen un efecto en el comportamiento, la asistencia y el éxito académico con nuestros estudiantes de escuela intermedia. Este estudio se llevará a cabo durante el año escolar 2018-2019, y el estudio se completará a más tardar el 31 de mayo de 2019. Esto es parte de mi investigación final para mi doctorado en la Universidad de Concordia-Irvine.

Estoy escribiendo para pedir permiso para usar los datos que voy a recopilar de su hijo durante este proceso de investigación. La participación en este estudio incluye encuestas (que se administrarán en línea) y entrevistas personales. Este estudio ha sido aprobado por el Distrito Escolar Unificado de Murrieta Valley. La importancia del estudio es examinar los efectos de los Sistemas de Intervención de Comportamiento Positivo (PBIS, por sus siglas en inglés) sobre el comportamiento, la asistencia y el rendimiento académico de los estudiantes en los estudios de secundaria. Los beneficios para su hijo que participa en este estudio de investigación incluyen:

1. Una mejor comprensión de cómo las interacciones positivas en el aula pueden mejorar las calificaciones.
2. Un mayor aprecio por sus profesores en sus aulas.
3. La oportunidad de pasar un tiempo fuera de clase para reflexionar sobre cómo las interacciones positivas en el aula ayudarán a los futuros estudiantes de escuela intermedia a lograr el mismo éxito.

Solo la Dra. Cheryl Lampe (mi catedra de doctorado) y yo tendremos acceso a la identidad de su hijo y a la información que puede estar asociada a la identidad de su hijo. Los datos y la documentación se destruirán el 31 de mayo de 2020. El uso de los datos de su hijo es voluntario. Puede comunicarse conmigo en cualquier momento con respecto a la participación de su hijo. Mi número de teléfono es (951) 304-1885, ext. 1698 y mi correo electrónico es jrogers@murrieta.k12.ca.us

Sinceramente,



Jared Rogers
Asistente Director

Por favor, marque la casilla correspondiente a continuación y firme el formulario:

- Doy permiso para que los datos de mi hijo se usen en este estudio. Entiendo que recibiré una copia firmada de este formulario de consentimiento. He leído este formulario y lo entiendo.
- No doy permiso para que los datos de mi hijo se incluyan en este proyecto.

El nombre del estudiante: _____

Identificación del Estudiante # _____

Firma del alumno: _____

Nombre impreso del (de los) padre (s) / tutor: _____

Firma del padre / madre / tutor: _____

Appendix F
Student Survey



Survey-Student Behavior & Academics

Please complete the following survey regarding student behavior and academics at CVMS

* Required

Consent & Waiver *

I Agree

Gender *

Male

Female

Grade *

6th

7th

8th

Ethnicity (Race) *

- African American
- Asian
- Hispanic
- White
- Other

S1: Please indicate how much you agree or disagree with the following statements about your school: *

	1	2	3	4	5
The school campus is clean and well maintained.	<input type="radio"/>				
The school campus allows students easy access to classrooms and student services.	<input type="radio"/>				
The school promotes safety on its campus.	<input type="radio"/>				
The school has high standards for behavior	<input type="radio"/>				
Harassment, intimidation, and bullying by other students are a problem	<input type="radio"/>				

S2: Please indicate how much you agree or disagree with the following statements about your students: *

	1	2	3	4	5
Students feel that the school rules are fair and adequate.	<input type="radio"/>				
Students are well behaved	<input type="radio"/>				
Students in my school treat each other with respect.	<input type="radio"/>				
Most students in my school are able to work out disagreements with other students.	<input type="radio"/>				
Students are frequently recognized for good behavior.	<input type="radio"/>				
Students generally feel the schoolwork assigned was meaningful and important.	<input type="radio"/>				
Students are frequently recognized for good grades.	<input type="radio"/>				

S3 Please indicate how much you agree or disagree with the following statements about your Language Arts teachers (current and past):

	1	2	3	4	5
Language Arts teachers provide students with encouragement.	<input type="radio"/>				
Language Arts teachers make learning interesting..	<input type="radio"/>				
Language Arts teachers encourage students to share ideas about things that are being studied in class.	<input type="radio"/>				
Language Arts teachers notice when students are doing a good job and recognize us..	<input type="radio"/>				

S3.1: What is your current Language Arts class?

- Language Arts 6
- Advanced Language Arts 6
- Language Arts 7

S3.1: What is your current Language Arts class?

- Language Arts 6
 - Advanced Language Arts 6
 - Language Arts 7
 - Advanced Language Art 7
 - Language Arts 8
 - Advanced Language Arts 8
-

S3.2: What was your Language Arts grade last semester? (Be honest!)

- A
 - A-
 - B+
 - B
 - B-
 - C+
 - C
 - C-
 - D+
 - D
 - D-
 - F
-

S3.3: Please indicate how much you agree or disagree with the following statements about your Math teachers (current and past): *

	1	2	3	4	5
Math teachers provide students with encouragement.	<input type="radio"/>				
Math teachers make learning interesting..	<input type="radio"/>				
Math teachers encourage students to share ideas about things that are being studied in class.	<input type="radio"/>				
Math teachers notice when students are doing a good job and recognize us..	<input type="radio"/>				

S3.4: What is your current Math class? *

- Math 6
- Advanced Math 6
- Math 7
- Advanced Math 7
- Math 8
- Advanced Math 8

S3.5: What grade did you get in Math last semester? (Be honest!) *

- A
- A-
- B+
- B
- B-
- C+
- C
- C-
- D+
- D
- D-
- F

S3.6: What is your current GPA (Grade point Average). Choose the one the you are closest to. Be honest! *

- 4.0 (A)
- 3.5 (B+)
- 3.0 (B)
- 2.5 (C+)
- 2.0 (C)
- 1.5 (D+)
- 1.0 (D)

S4: Please indicate how much you agree or disagree with the following statements: *

	1	2	3	4	5
I like school.	<input type="radio"/>				
I feel like I belong at this school.	<input type="radio"/>				
I feel welcome and safe at school.	<input type="radio"/>				
I feel that the school has effective disciplinary consequences that are fair to all.	<input type="radio"/>				
I feel successful at school.	<input type="radio"/>				
I feel that this school prepares us for when we go into high school.	<input type="radio"/>				