THE PREDICTION OF TEACHERS' PERCEPTIONS OF SCHOOL CLIMATE FROM THEIR SCHOOL'S UTILIZATION OF POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS

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THE PREDICTION OF TEACHERS' PERCEPTIONS ON SCHOOL CLIMATE FROM THEIR SCHOOL'S UTILIZATION OF POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS

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ABSTRACT

School climate is an aspect of school life that has been examined closely in recent literature as it related to student interactions, behavior, and student achievement. Problem behaviors can affect students' academic learning as well as teachers' instructional time. Research has emphasized how a healthy school climate can yield positive effects on student outcomes. One school-wide program known as positive behavioral interventions and supports (PBIS) is a national framework designed to help schools establish and maintain effective behavioral supports for students. The effective implementation and sustainment of PBIS involves all the faculty, staff, and students in a school system. The purpose of this study as to extend the limited research that existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers and to investigate any predictive aspects of teachers' perceptions of school climate in comparison to the PBIS tier levels of implementation in their current school. Educators in two Southern Regional Professional Development Districts in Missouri were surveyed in order to determine the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers as well as any predictive aspects the tier level of implementation may have had on this perception. Results of this study could benefit administrators and other school personnel as they evaluate the initial need for and sustainment of PBIS within their school building or at a district wide level. Survey results indicated the overall implementation of PBIS as an indicator of teacher perceptions of overall positive school climate.

CHAPTER ONE

INTRODUCTION

In today's educational system, student behavioral needs are of high concern (Chitiyo, M., May, & Chitiyo, G., 2012; Hawken & Horner, 2003). Problem behaviors may adversely affect teachers' instructional time as well as students' academic learning (Skiba & Sprague, 2008). Separate data systems, treatment protocols, and interventions come with each scientifically based response to these needs. Due to these needs, a major deliberation for educators is to ensure that teams efficiently find ways to ensure students are successful behaviorally and academically in a positive school climate (Netzel & Eber, 2003; Chitiyo et al., 2012; Sagett, 2004).

Research has emphasized how a healthy school climate can yield positive effects on student outcomes (Sugai, & Horner, 2002; Van Maele & Van Houtte, 2011). Increased grade point averages, reading levels, standardized test scores, and overall school adjustment have been found to influence school climate (Esposito, 1999; Garrison, 2004). Reviews of more recent literature result in a consensus that educators should make developing a healthy school climate a priority for student and teacher success (Sterbinsky, Ross, Redfield, 2006). A positive school climate has also been linked with reduced reports of student misbehavior such as absences, suspensions, school violence, aggression, and student delinquency (Aveyard et al., 2004; Brand, Felner, Seitsinger, Burns, & Bolton, 2008). As educators make developing a healthy school climate a priority, positive effects on students and staff increase overall (Sterbinsky et al., 2006).

School climate, academic achievement, and teacher support are all associated with students' positive academic, social, and behavioral outcomes (Bryan et al., 2012).

Jennings and Greenberg (2009) suggested that the quality of students' relationships with their teachers is related to student motivation and academic and social skills. Teachers' perceptions of their students' abilities to meet their expectations (e.g., academic and behavioral performance) strongly predict teachers' trust in students (Van Maele & Van Houtte, 2011). In addition, teachers' perceptions of school contexts have been shown to be associated with students' reports of their psychosocial school environment, academic performance, and overall mental health (Jennings & Greenberg, 2009).

Programs and approaches are available to improve student behavior in schools. One school-wide program, known as Positive Behavioral Interventions and Supports (PBIS), is designed to help educators create and sustain effective behavioral supports for students. PBIS is a national framework that schools can use to help them design and implement behavioral practices for students (Horner, Sugai, & Anderson, 2010; Sugai & Horner, 2002). This program involves all the faculty, staff, and students in a school system. Teachers are important stakeholders in implementing PBIS. If teachers do not fully support or "buy in" to the program, its effectiveness will be significantly compromised (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010).

The use of PBIS has become increasingly prevalent in recent years (Chitiyo et al., 2012). School districts throughout the United States have adopted variations of these programs as a means to address the growing number of disciplinary referrals and problem behaviors within their schools. Positive behavior interventions and support programs are "proactive, systems-level approaches that enable schools to effectively and efficiently support student (and staff) behavior" (Simonsen, Sugai, & Negron, 2008, p. 33). Research has demonstrated that the implementation of a primary, systems-level

intervention program increases positive interactions (Safran & Oswald, 2003), decreases office discipline referrals (Turnbull et al., 2002), and increases consistency among staff with regard to response to problem behaviors (Netzel & Eber, 2003).

PBIS reinforces students for following behavioral expectations rather than waiting for misbehavior. The goal of PBIS is to establish a climate where appropriate behavior is expected and is the norm (Simonsen et al., 2008). The overall attention of PBIS is focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improve the overall lifestyle results for all youth by making targeted misbehavior less effective, efficient, and relevant. By focusing attention on the desired behaviors, these behaviors become more functional, yielding a more positive school environment (Caldarella, Shatzer, Gray, Young, & Young, 2011).

Educators who have implemented PBIS have reported a positive growth in their perceptions of academic emphasis and school climate as a result of enhanced behavior management. Creating a supportive school climate and decreasing punitive actions is imperative for success of students, academically, socially, emotionally, and behaviorally (Psanos, 2013; Welsh, Stokes, & Green, 2000). Further research on the correlation between discipline interventions and school climate is important to support the connection of the positive discipline approach implemented by some educators and schools.

This study not only examined the relationship between teacher perceptions of school climate and the levels of PBIS implementation, but also attempted to determine if teacher perceptions of school climate could be predicted from the level of commitment and utilization of PBIS in their school settings. By using a quantitative method, this study

attempted to identify predictive aspects of teachers' perceptions of school climate in comparison to the PBIS tier levels of implementation in their current school.

Problem Statement

In order to institute successful proactive programs, researchers must understand a school's climate and the social rules that govern student behavior. Understanding these variables provides researchers involved in implementing PBIS with valuable information on the frequency, rate, and types of behaviors that are problematic within a particular school, as well as the social consequences that serve to maintain such behaviors (Horner, et al., 2010).

Managing student behavior and improving school climate have been important topics for many years, and they continue to be significant issues today (Baer, Wolf, & Risley, 1968; Skinner, 1953; Sugai et al., 2000). Educators can seek ways to help students better perform academically, socially, and behaviorally. There are many different styles of individual and school-wide approaches and programs designed to improve student behavior. Choosing the approach or multiple approaches for an individual student, classroom, or school-wide intervention is crucial to the support students seek and need when displaying behaviors (Center for Effective Collaboration and Practice, 2000).

This study was an attempt to extend the research that existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. At the time of the study, there was limited research available on the correlation of teacher perceptions of school climate and the use of PBIS regarding the implementation of multiple tier levels. By looking specifically at data from elementary

schools implementing PBIS at that time, the levels at which a school was implementing PBIS, and schools not implementing PBIS, the researcher sought to add to the large-scale state studies underway at that time (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports [OSEP], 2013). In doing so, the researcher examined the relationship between PBIS implementation as it was sustained through the levels and years of implementation related to school climate. This study also sought to determine any predictive aspects of PBIS utilization and the tier level of implementation within a school to the perceptions teachers may have had of school climate.

To better understand these potential correlations, the researcher will first provide an overview of PBIS by examining the research linking PBIS to school climate outcomes. Second, the researcher will examine how individual student and teacher factors may impact implementation efforts of PBIS implementation, specifically regarding the perceptions teachers have on school climate in schools where PBIS is implemented as a framework at the various PBIS levels compared to those who do not implement PBIS as a framework, determining any correlation to the teachers' perceptions of school climate. Finally, this study will further the limited research of the perceptions teachers have on school climate to determine the predictive aspects of PBIS utilization and its tier levels of implementation to the school climate perceptions teachers may have.

Purpose of the Study

Climate represents the accumulation of individual perceptions about an educators' values, and in return, individuals' actions within the school community are shaped by its climate. The feedback that students are given regarding their behavior is rooted in the school's values, and this feedback can impact their subsequent behavior-related choices.

School climate serves as a measurement of organizational health and influences student behaviors by establishing which actions are desirable and which are not within the school community. "School climate sets the parameters of acceptable behavior among all school actors, and it assigns individual and institutional responsibility for school safety" (Welsh, 2000, p. 89).

A number of indicators can signify the health of school climate. Open communication and an individual's commitment to success are products of individuals' behavior (Welsh, 2000; Hoy, Hannum, & Tschannen-Moran, 1998). The root of school climate is the behavior individual students display in response to what they feel is appropriate within that setting. Student behavior is significant because of its relationship with school climate and its link to academic engagement and achievement (Welsh, 2000).

Teacher attitudes and perceptions of their students' behavior also impact the overall school climate and student performance (Irvin, Tobin, Sprague, Sugai, &Vincent, 2004). Because of this link, the importance of establishing a healthy climate by making positive behaviors habitual is imperative. The purpose is not simply to modify school climate. The framework of PBIS has the ability to modify school climate by increasing the consistency of positive behaviors if implemented with fidelity (Sugai & Horner, 2002).

The association between school climate and the capacity of PBIS to establish a systems change created the foundation for the research questions that guided this study. The study presents an overview of the PBIS process and provides an overview of the elements of the program, including levels of implementation with regard to school climate. The purpose of this study was an attempt to extend the limited research that

existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. The researcher also investigated any predictive aspects of teachers' perceptions of school climate in comparison to the PBIS tier levels of implementation in their current school.

Research Questions

The following research questions were used to guide this study:

1. Is there a difference in the perceptions of school climate in schools that implement PBIS compared to those schools that do not?
2. What are the perceptions of teachers regarding the climate at their current elementary school relative to the stage (tier level) of PBIS implementation?
3. What predictive indicators in a school's use of PBIS are tied to the teachers' perception of their school's climate?

Theoretical Framework

According to the No Child Left Behind (NCLB) Act (2001), educators are expected to increase students' performance and close the achievement gap on high-stakes standardized tests administered by the State for the purpose of keeping the United States of America competitive in the 21st century. School districts, administrators, teachers, and staff experience the pressure of those tests and continuously search for strategies that maximize students' performance. Marzano (2003) noted that classroom management had the largest impact on students achievement with a direct impact on overall school climate.

The theoretical framework of school climate began with Perry (1908), who discussed having pride in a school. Educators alike have recognized the importance of school climate for hundreds of years. Open organizations promote harmony among their

individual tiers and fluidity among their stakeholders, causing them to seek success in their endeavors. The notion of organizational climate has been the subject of academic study since the late 19th century through the work of such scholars as Weber and Taylor (Van Houtte, 2005). By the 1950s this focus became more comprehensive and began to include the role of the individual within the organization (Van Houtte, 2005). Schools are recognized as multifaceted organizations. Hoy, Tarter, and Bliss (1990) were among the first researchers to concentrate on school climate as a focus for research, noted that its value rests in its ability to affect other components. "Healthy schools are better schools. Relationships are more open, teachers are more productive, administrators are more reflective, and students achieve at higher levels" (Hoy & Tarter, 1992, p. 78). It was not until the 1950s that educators began to systematically study school climate. The development of scientifically sound school climate assessment tools spurred a research tradition that continues to grow (Hoy et al., 1990).

Multiple studies have suggested a connection between PBIS implementation and improvement of school climate and the overall organizational health of a school as well as the reductions in student misbehavior across multiple settings (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Psanos, 2013; Sugai, Horner, Dunlap, Hieneman, Neson, Scott, & Ruef, 2000). Research findings by Bradshaw et al. (2008) indicated the schools in their studies who implemented PBIS compared to their control schools who did not implement PBIS appeared to have a more positive, and more collaborative work environment for staff. Schools who did not implement PBIS may have implemented an alternative behavioral intervention for the school environment (Psanos, 2013; Welsh et al., 1999).

While the function of PBIS is geared towards behavioral interventions, which prompted more "in class" compliance, this additional effect on school climate has not received as much study (Sugai et al., 2000). Over 19,000 schools nationwide are currently implementing PBIS with positive outcomes demonstrated (OSEP, 2013). Schools nationwide have reported multiple successes in their school building following the implementation of PBIS. PBIS implementation has led to a variety of successes, including a 15-60% decrease in office discipline referrals, improvements in general problem behaviors, and appropriate staff recognition and response to problem behaviors (Weiss, Cunningham, Lewis, & Clark, 2005). A decrease in office discipline referrals yields more academic time in the classroom (Sugai et al., 2000).

Limitations/Delimitations

While it is the researcher's intent to provide the most accurate information and data available to add to the body of knowledge on teacher perceptions of school climate, educational research is a difficult field of study due to the many variables that play a part in school environment. Many factors influence teacher perceptions of school climate, making educational research focusing on school climate complex. This complexity creates limitations and delimitations within educational studies.

The following limitations were noted with this study:

1. Data were limited to the integrity of educators' feedback on the survey.
2. This study surveyed only K-6 elementary school teachers in the South Central (RPDC Region 6) and Southwest (RPDC Region 7) Missouri elementary schools. The data collected from these two regions may not be generalizable to other populations.

3. This study did not consider all variables that may influence teacher perceptions related to their school climate evaluations, such as their willingness to be candid related to this topic, past experiences, or present happenings in their lives outside of the school environment.

Delimitations. This study focused on the perceptions on school climate of elementary teachers of the South Central (RPDC Region 6) and Southwest (RPDC Region 7) Missouri schools who are implementing PBIS in their schools at differing levels, and elementary teachers of the South Central (RPDC Region 6) and Southwest (RPDC Region 7) Missouri who were not implementing PBIS in their schools.

Assumptions

This study assumed school climate variables were related to the implementation of PBIS in a school environment. However, the tier level of intervention may not have been uniform in the perception of school climate. The operational definitions for tier levels and school climate are found below in the definition of key terms.

Definition of Key Terms

Functional behavior assessment (FBA): a systematic process of identifying problem behaviors and the events that (a) reliably predict occurrences and nonoccurrence of those behaviors and (b) maintain the behaviors across time and across differing settings (Crone & Horner, 2003).

PBIS: An applied science that uses educational methods to expand an individual's behavior repertoire and systems change methods to redesign an individual's living

environment to first enhance the individual's quality of life and second, to minimize his or her problem behavior (Carr et al., 2002).

PBIS Tier 0: Defined by the researcher for this study as no level of PBIS implemented in the school. These schools are not affiliated with their regional PBIS consultants and do not report monthly and quarterly data to their regional consultants.

PBIS Tier 1: Primary level of prevention in PBIS. Key features of Tier 1 consist of school-wide expectations and routines, teaching of social skills and expectations, acknowledgment of students following expectations, and response to student misbehaviors (OSEP, 2013).

PBIS Tier 2: Secondary level of prevention in PBIS. Key features of Tier 2 consist of allowing for rapid access to intervention, consistency with school-wide expectations implementing similarly across students, training for all staff in implementation and referral process, utilization of ongoing data for decision-making as part of a team process, and the ability to be linked to academic support across various settings (OSEP, 2013).

PBIS Tier 3: Tertiary level of prevention in PBIS. This is an individual, intensive intervention level of prevention in PBIS. Key features of Tier 3 consist of individualized interventions matching the student's need(s) based on given data, individual counseling, functional behavior assessment (FBA) and Behavior Intervention Plan (BIP), and consultation with multiagency teams (OSEP, 2013).

Pre-correction: Planned, teacher-directed activities or directions that occur before the student enters a situation that is associated with occurrences of problem behavior (De Pry & Sugai, 2002).

School Climate: A quality of the entire school that is experienced by members, describes their collective perceptions of routine, and affects their attitudes and behavior in the school environment (Hoy et al., 1998).

Summary

Chapter 1 presented an overview of the study through a description of the background, statement of the problem, statement of purpose, limitations, delimitations, design controls, and definition of key terms. An important concern in today's educational system is student behavioral needs (Chitiyo et al., 2012; Hoy & Hannum, 1997). Research has emphasized how a healthy school climate can yield positive effects on student outcomes (Sugai, & Horner, 2002). School districts throughout the United States have adopted variations of behavioral intervention programs as a means to address the growing number of disciplinary referrals and problem behaviors within their schools (Bryan et al., 2012). The use of PBIS has become increasingly prevalent in recent years to address overall school climate and student behavioral interventions (Chitiyo et al., 2012). This study will explored the dimensions of teacher perceptions of school climate regarding their level of implementation of PBIS and attempted to find any predictive aspects of these perceptions of school climate in comparison to the PBIS implementation level. Chapter Two constructs the theoretical framework of the study through a review of literature related to the research questions. Chapter Three describes the research design employed to conduct the study, with particular attention to methodology, data collection, and analysis. Chapter Four describes the presentation of the findings. Chapter Five describes the summary of the study and implications.

CHAPTER TWO

REVIEW OF LITERATURE

School climate encompasses many facets of the school as an organization, including the actions and behaviors of the individuals who are part of the school community. An imbalance of any of these factors can be detrimental to the school and, ultimately, the achievement of its students. Historic and contemporary research notes suggest there is an interdependent relationship between student behavior and school climate (Sugai, & Horner, 2002; OSEP, 2013). This includes both the role of student behavior as an element of school climate and the ability of a school's climate to influence students' behaviors and decisions. Further, research suggests there is a potential of PBIS to enhance school climate by decreasing the prevalence of undesirable behaviors (Lewis, Jones, Horner, & Sugai, 2010). Several aspects of this issue are examined here, including the components of PBIS, process of implementation, effect of PBIS on the school as a system, notion of school climate, and relationship between student behavior and school climate. The literature review will address the key concepts of school climate, how teachers' perceptions are formed and evaluated, and the relationship PBIS has with school climate and such perceptions.

School Climate

Every school has a different "feel" and a different "personality." Halpin and Croft (1963) described this as the organizational climate of a school. School climate refers to the quality and character of school life as well as the consistency of interpersonal interactions within the school community that influence children's cognitive, social, and psychological development (Haynes, Emmons, & Ben-Avie, 1997). Researchers at the

National School Climate Council (2007) defined school climate as "norms, values and expectations that support people feeling socially, emotionally and physically safe" (para. 3). The terms "school climate," "school culture," and "learning environment" have been used in overlapping but sometimes quite different ways in the educational literature (Center for Social and Emotional Education, 2014; Cohen, J. 2001). Freiberg and Stein (1999) theorized that school climate is the heart and soul of a school as well as the components that motivate the principal, teachers, students, and parents to stay associated with the school. School climate is often evident through a first impression or the school's environment and the interactions with the people in the school (Freiberg & Stein, 1999).

Establishing a healthy school climate is an essential element for schools to foster academic success, positive youth development, risk prevention, and teacher retention. Research indicates that a positive school climate can have a direct impact on telling indicators for success of students and faculty. School climate refers to the quality and character of school life and is based on patterns of school life experiences. Norms are reflected in a school's climate, as well as goals, values, interpersonal relationships, teaching, learning, and leadership practices, and organizational structures (National School Climate Council, 2007). School climate affects students, teachers, administrators, parents, and the community. It is important that educators seek to improve the climate so that a safe and positive atmosphere is upheld. Students have more opportunities to succeed when they feel safe, respected, and comfortable in their surroundings (Weiss et al., 2005).

School climate is a "set of internal characteristics that distinguishes one school from another and influences the behavior of its members" (Hoy & Hannum, 1997, p.

291). School climate is also a combination of stakeholders' perceptions, physical aspects of the school facilities, and the programs and resources available to the students and staff. The perception of climate often includes the nature of instructional management, the relationships among staff, students, and the community, and the perceived support of teachers and parents (Taylor, West, & Smith, 2006). A positive school climate is important at all grade levels (Briggs, 2009).

School climate can be difficult to describe because it is not an attribute that is readily visible; it is felt, or experienced, and numerous definitions of the term exist. Most definitions converge on the notion that school climate is an intangible quality that permeates the school environment and affects the choices and behaviors of those within the school community (Hoy, Tarter, & Bliss, 1990). Researchers have noted the complex nature of school climate, recognizing its all-encompassing nature that impacts many aspects of the school environment. While all members of a school community may not be able to describe their school's climate, they all experience its influence. School climate includes factors such as communication patterns, norms about what is appropriate behavior and how things should be done, role relationships and role perception, patterns of influence and accommodation, and rewards and sanctions. School climate is the feel of the school as perceived by those who work there or attend class there (Welsh, 2000). Clearly, a school's climate affects the behaviors and actions of its stakeholders (Hoy et. al, 1990).

A sustainable, positive school climate includes norms, values, and expectations that support people feeling socially, emotionally, and physically safe. People are engaged and respected (Cohen, J., 2001). Students, families, and educators work together to

develop, live, and contribute to a shared school vision. Educators' model and nurture attitudes that emphasize the benefits and satisfaction gained from learning (Center for Social and Emotional Education, 2014; Cohen, 2001; Welsh, 2000).

Schools are a place for students to develop a source of identity and competencies. Schools also provide a refuge for students and a place to demonstrate those developed competencies. Educators who implement effective risk prevention and health promotion efforts are correlated with safe, caring, participatory, and responsive school climates (Cohen, 2001). Educators who do this for all students, as indicated by both attendance and student reports, also show this with their school climate measures. As an alternate, educators can also create stress, disconnection, and learned helplessness for some and perhaps many students (Jennings & Greenberg, 2009). Schools with an environment containing poor conditions for learning often create risks, despite all attempts the staff may try as good intentions (Esposito, 1999).

School climate has a profound influence on individual experience (Comer, 1980). Teachers are being asked to change their educational methods, the way their professional role is served, and their opinions and beliefs about educational purposes, and to contribute to the social and economic growth in line with changing conditions. Teachers can address the different needs and characteristics of students using new strategies, thus helping them to reveal their creativity in learning processes with innovative teaching (Sachs, 1997).

The socioeconomic status of students' families and the surrounding community affects climate because it can determine the resources and opportunities available to students and their schools. Limited resources can create limited opportunities. Poverty

can affect students' learning readiness and feelings of safety (Welsh et al., 2000). Poverty and other community characteristics may affect school climate by limiting the economic and social resources available to a school. The social characteristics of students, the faculty who are recruited and retained, and available resources for educational and recreational programs are all affected (Welsh, 2000). Scholars have also applied the construct to the business arena (Argyis, 1958; Tagiuri, 1968).

Business climate. The perspectives of early business and educational researchers were dissimilar. Business researchers found early climate research in the arena of business was focused on factors such as employee turnover, morale, and productivity (Tagiuri, 1968). While business scholars focused on situational events and their effects on employees, educational researchers explored personality attributes impacting groups within the school. When comparing studies, a common climate definition remained vague. Educational researchers continued to seek processes to more easily define and measure climate attributes regarding achievement in both arenas (Andrews, 1965; Moos, 1979; Stern, 1970).

Student achievement. Research indicates that emotional and behavioral difficulties among adolescents have increased substantially since the 1980s (Collishaw, Maughan, Goodman, & Pickles, 2004; Berk, 2003). Research has emphasized positive effects of a healthy school climate on student outcomes. School climate has been shown to influence grade point average (GPA), standardized test scores, reading levels, academic writing, and school adjustment (Garrison, 2004; Esposito, 1999).

School climate can also be influenced by overall student achievement. High achievement often contributes to a stronger, healthier climate. Teachers in healthy

schools typically set high standards for their students, and academic achievement is both recognized and celebrated (Hoy et al., 1990). “Students who are less successful academically tend to feel less of a connection to their school and the climate may suffer” (Welsh, 2000, p. 91). The challenge of assessing this school climate is crucial for school leaders to determine their schools health (DuFour, 2007).

School climate data. School climate has the ability to influence students, and students can also influence the climate in their schools. This influence can be positive or negative depending upon the health of the climate involved (DuFour, 2007). The overall influence on school climate of all stakeholders presents school leaders with the challenge of assessing their own climates in order to determine their health and of scaffolding school climates that are open and healthy. Evaluating the overall school climate is a necessity for the welfare of the students entrusted to them and a prerequisite to upholding school missions that seek to fully develop students' talents and capabilities (DuFour, 2007; Garrison, 2004).

School climate data can be used as a critical complementary form of assessment to academic assessments. By collecting a range of formative information about both the academic and the nonacademic aspects of school life, school climate data give school leaders scientifically sound information to identify school needs, set goals, and track progress toward school improvement (Garrison, 2004; Sugai, Horner, & Lewis, 2009). It is essential for educators to measure school climate in a variety of ways, through surveys, focus groups, and student, staff, and/or stakeholder interviews. One of the most critical elements when assessing school climate is the dimension that shapes the process of

teaching. It is important to hear the voices of both administrators and teachers, as well as other stakeholders (Cobb, 2014).

Anyone who spends time in schools quickly discovers how one school can feel very different from other schools. A school climate may be thought of as the character of a school. This concept of organizational climate has a rich history in the social science literature (Anderson, 1982).

Organizational Climate Theory

School climate research as a field of study grew out of the organizational theory research of the early to mid-1900s (Anderson, 1982; Perry, 1908). With school climate being a significant variable in the ways schools and teachers work to enhance student learning, there was a need to assess it. In 1908, Perry was the first educational leader to explicitly write about how school climate affects students and the process of learning. John Dewey (1916) and E. Durkheim (1961) recognized that the distinctive culture of a school affects the life and learning of its students. The rise of systematic, empirical study of school climate grew out of industrial/organizational research coupled with the observation that school-specific processes accounted for a great deal of variation in student achievement (Anderson, 1982).

The understanding of overall school climate was extended by Halpin and Croft (1963) as they continued a formal discussion on the topic. Halpin and Croft considered climate to be composed of a wide array of factors ranging from socioeconomic status, parental attitudes, district policies, and location. They also looked at responses from elementary teachers and identified eight dimension of study. Four of the areas focused on teachers while the other four dealt with administration. Halpin and Croft took the position

that how a group or principal behaves is less important than how its members perceive it. The overall perception of behavior is what motivates action.

Hoy and Clover (1986) added much research in the area of school climate. Hoy and Clover defined school climate as the teachers' perceptions of the work environment. The climate can be further defined as the set of measurable properties of the work environment of teachers and administrators. Organizational climate was summarized as a relatively enduring quality of the school environment with the following features: a is affected by the principal's leadership, b) is experienced by teachers, c) influences members' behaviors, and d) is based on collective perceptions (Hoy & Clover, 1986).

In the late 1950s, business and education researchers began developing instruments to measure and define organizational climate. Educational researchers worked to operationalize and measure climate (Halpin & Croft, 1963). As forerunners in the field of organizational climate in schools, Halpin and Croft (1963) designed the first Organizational Climate Descriptive Questionnaire (OCDQ), providing the educational field with a reliable instrument with which to gather data surrounding the concept of school climate.

Assessing school climate is important to the overall promotion of the necessary school components of a healthy school climate. Openness of school climate has been linked primarily to expressive characteristics in schools and school districts as a whole. For example, the more open the school climate, the less alienated students and teachers tend to be. Consistent discipline procedures and methods carried out by teachers and school administration can have a direct impact on the overall climate of schools (Welsh, 2000).

Discipline and Climate

School climate is a multifaceted concept and measuring it is a complex process. Student attendance, teacher efficacy, and the principal's leadership and discipline style all influence school climate. A positive school climate is critically related to school success. "The climate of a school includes the unwritten beliefs, values, and attitudes that become the style of interaction between students, teachers, and administrators" (Welsh, 2000, p. 89). Unwritten factors are particularly difficult to measure, and in order to establish a greater understanding of the subject it is necessary to focus on its individual components. Researchers have found that among the elements of school climate, discipline has a significant effect on student success; the converse of this statement holds that discipline problems can have a significant effect on student failure (Irvin et al., 2004).

Teacher-student relationships can directly affect school climate. Boynton and Boynton (2005) categorized relationship/climate strategies, academic strategies, and disciplinary strategies. Strategies are needed for challenging students, but these strategies can work well with all students. Marzano (2007) focused on recognizing and acknowledging adherence and lack of adherence to classroom rules and procedures when addressing classroom and school-wide discipline.

When addressing discipline and behaviors, teachers should remember the balanced approach, which involves verbal and nonverbal acknowledgment of positive behaviors, tangible recognition, and involving parents and all stakeholders. Action steps for acknowledging negative behaviors should also be addressed and established in the classroom and school-wide settings (Marzano, 2007). When setting these action steps, certain core features of an effective classroom and school-wide interventions and support

framework are also crucial. These core features include Foundations (settings, routines, and expectations), Prevention (supervision, opportunity, acknowledgement, prompts, and precorrections), Response (error corrections, other strategies, and additional tools), and Data Systems (Colvin, Sugai, Good III, & Lee, 1997).

Office discipline referrals tend to be the most standardized and readily available measure of student discipline problems. In addition, the cost of collecting and analyzing the data that they provide is low, making them a viable option for schools to use in determining student behavior needs and providing appropriate interventions. Administrators need a decision-making tool that enables efficient and cost-effective distinctions between discipline problems that are minor and transient and those that forecast dire future outcomes. Referral records provide information on the way a student interacts with other people and relates to school rules (Tobin, Sugai, & Colvin, 2000).

Disciplinary philosophies vary across states and individual school districts. Many schools across the country adopted a zero-tolerance policy in the early 1990s. This philosophy was designed to impose stricter sanctions on youth. This policy led to a dramatic increase in out-of-school suspensions and expulsions (Borgwald & Theixos, 2013). According to Skiba (2014), no evidence indicated that suspension or expulsion leads to changes in student behavior of a positive nature, safer schools, or improved school climate. Higher expulsion and suspension rates have been associated with lower academic achievement across grade levels and higher involvement in the juvenile justice system over time (Arcia, 2006; Brown, 2007). Attendance problems with students have also been linked to discipline and school climate (Henry, 2007).

Attendance. The attendance rate in schools is important because students are more likely to succeed in academics when they attend school consistently (Zalaznick, 2015). Studies have shown, in addition to falling behind in academics, students who are not in school on a regular basis are more likely to get into trouble with the law and cause problems in their communities (Kearney, 2008; Zalaznick, 2015). School policies have been found to typically punish students and families for poor attendance. This approach is often grounded in policy, yet it is found to be unproductive as the impacts of mental and physical health factors or lack of appropriate academic and social support in schools yield negative results (LaRusso, Romer, & Selman, 2008; Kearney, 2008).

Sanctioning attendance problems often punishes children and parents unfairly for what they cannot control. For example, the impacts of mental and physical health factors or a lack of appropriate academic and social support in school is often punished through this sanctioning (Epstein, 2001; Sundius & Farneth, 2008). Researchers have concluded that sanctioning is unproductive when addressing student attendance for at least two reasons (Epstein, 2001; Henry, 2007; Smink & Heilbrunn, 2005). One reason for the lack of productivity is noted to be due to limited or lack of engagement and motivation for the students and parents whose buy-in and insight is critical to implementing academic or behavioral interventions successfully. Second, the school-related factors are not addressed that contribute to the student truancy or misbehavior (Epstein, 2001; Sagget, 2004; Van Houtte, 2005). Schools who create engaging and supportive school environments that address student needs and the factors that contribute to each student's attendance or behavioral problems can positively contribute to each student's education and success in school (Hoy & Tarter, 1997; Esposito, 1999). How attendance issues and

discipline are addressed by school administration can affect overall school climate (Hoy & Woolfolk, 1993).

Principal's effect on climate. Schools with an unhealthy climate can lead to the breakdown of school activities and can leave the school looking and feeling dysfunctional. Therefore, school climate is crucially important for the school principal to maintain (Griffith, 1995). Tarter, Hoy, and Bliss (1989) studied the effects principals have on the school climate of their buildings. In their study, they found principals with upward influence earn the commitment of teachers to schools. The principals who initiated the structure, provided supportive social relations, and furnished resource support had more committed teachers. Hoy and Woolfolk (1993) used the Organizational Health Inventory to examine teacher efficacy and school climate. In the study, teachers' personal efficacy and general efficacy were calculated. Teachers' perceptions of the dimensions of organizational climate were moderately related to each other. The study showed that morale, job satisfaction, and the emotional support of coworkers were important to the psychological well being of teachers and the school environment (Hoy & Woolfolk, 1993).

Teacher efficacy. School climate can impact teacher performance, productivity, performance, communication, satisfaction, collaboration, and burnout (DuFour, 2007). Given the association between school climate and positive student outcomes, such as improved academic achievement and reduced discipline problems, school climate is often a target of school improvement initiatives and programs aiming to promote positive outcomes for students and staff (Mitchell, Bradshaw, & Leaf, 2010). A focus on teacher self-efficacy has been a large part of multiple studies to determine the motivation of

teachers (Tschannen-Moran, Hoy, & Hoy, 1998).

Teacher efficacy plays a role in shaping students' attitudes toward school, the subject matter being taught, and even the attitude (Tschannen-Moran et al., 1998). When looking at teacher efficacy, one must look at how self-efficacy plays a role in the establishment of the overall efficacy traits they display. Self-efficacy is a key trait when looking at the motivation and dynamics of an employee (Cakiroglu, 2008).

Self-efficacy is the self-confidence in one's ability to accomplish and succeed in organizational tasks (Cakiroglu, 2008). It plays a major role in how employees learn and interact. Employees who have high self-efficacy often set higher goals and are usually more motivated to achieve them. Self-efficacy can affect an employee's overall work ethic. When employees have high self-efficacy, they are most often more likely to attain the goals they have set, yielding better results for the company overall. Employees who have a lower sense of self-efficacy often struggle to attain their highest potential and yield a lower self-confidence and often do not believe that hard work and ability will pay off with success (Loftin, Gibb, & Skiba, 2005). An important factor in the determination of a teacher's sense of efficacy is, not surprisingly, experience, or what Bandura (1977), a leader in the development of self-efficacy theory, called performance accomplishments.

There are many personality characteristics of employees that occur within organization, which determine its level of success. Self-monitoring and self-assessment are two traits that can aid companies and schools in developing productive employees and students (Loftin et al., 2005). Companies must have a clear understanding of employee personality traits in order to motivate, train, and challenge them to be dynamic.

Understanding an employee's sense of self-efficacy can be evaluated in any setting or work environment (Cakiroglu, 2008).

Hoy (2000) noted, "some of the most powerful influences on the development of teacher efficacy are mastery experiences during student teaching and the induction year" (p. 491). According to Shaughnessy (2004), the first years of a teacher's career can be critical for that teacher's development of a sense of efficacy. In the school setting, researchers have found those teachers who set high goals, who persist, and who continue to try strategies when one approach is found wanting have a high sense of efficacy and act of it. In turn, their students learn and behaviors are changed (Shaughnessy, 2004).

Performance accomplishments are an important factor in the determination of a teacher's sense of self-efficacy (Bandura, 1977). Hoy (2000) reported that mastery experiences during student teaching and the induction year have some of the most powerful influences on the development of teacher efficacy. Teachers who set high goals, who are persistent, and who continue to try new strategies as needed have a high sense of self-efficacy. Teachers' sense of efficacy is related to a number of school-level variables, one being school climate. School climate is found to enhance or erode teacher's efficacy beliefs (Shaughnessy, 2004).

According to a study conducted by Wheelan and Kesselring (2005), there are several factors that can influence a teacher's satisfaction and sense of self-efficacy with his or her daily job. Some factors are obvious, but other factors can have a negative impact on a teacher's attitude in regards to their satisfaction. School climate can be impacted as a result of teacher attitudes and job satisfaction. In their study, Wheelan and Kesselring valuated teacher interactions and the effects of communications by teachers in

regard to the implementation of changes in a school environment. Their study took into consideration the implications including the differences in teacher attitudes and actions in lower performing rural schools and higher performing rural schools. Wheelan and Kesselring suggested that there is a strong link between teamwork and student success, especially in lower socioeconomic schools.

Circumstances such as student behavior can often cause a drop in levels of teacher efficacy (Guskey & Passaro, 1994). Teachers have the most impact on the behavioral and academic achievement of all students, especially students who fall within the "at-risk" category (Parsley & Corcoran, 2003). During the early 1980s, a significant need was identified for the selection, application, and documentation of behavioral strategies and interventions for students with behavioral disorders (Gresham, 1991; Sugai & Horner, 1999).

Positive Behavior Interventions and Supports History

During the 1980s, a need was identified for improved selection, operational strategies, induction, and documentation of effective behavioral interventions for students with emotional and behavioral disorders (Sugai & Horner, 1999; Walker & Bullis, 1996). In response, researchers from the University of Oregon began a series of applied demonstrations, research-based studies, and evaluation projects to investigate possible student behavioral intervention strategies. These studies and projects indicated that schools were lacking in ways to help students with behavioral disorders, and great attention was needed to focus on the "prevention, research-based practices, data-based decision-making, school-wide systems, explicit social skills instruction, and student outcomes" (Sugai & Horner, 2002, p. 3).

Following the reauthorization of the Individuals with Disabilities Act of 1997, a grant to establish the national Center on Positive Behavioral Interventions and Supports was legislated to "disseminate and provide technical assistance to schools on evidence based practices for improving supports for students with BD" (Sugai & Simonsen, 2012, p. 1). Following the dissemination of this grant, researchers at the University of Oregon successfully created The National Technical Assistance (TA) Center on PBIS. The center has provided assistance and training to over 16,000 schools nationwide (OSEP, 2013).

Although originally established to disseminate evidence-based behavioral interventions for students with behavioral disorders, over time, the National TA Center on PBIS shifted focus to the school-wide behavioral supports of all students, with an emphasis on implementation practices and systems (Sugai et al., 2000). As a "framework," the emphasis is on a process or approach, rather than a curriculum, intervention, or practice. While PBIS was originally designed to address behavioral needs of students with behavioral disorders (BD), the important relationship between positive school-wide and classroom-wide culture and individual student success is important and should be further investigated (Boulden, 2010).

The tenets of PBIS are the same as those represented in the multi-tiered models of Universal Design for Learning (UDL) and Response to Intervention (RtI). These multitiered models include universal screening, continuous progress monitoring, data-based decision making, implementation fidelity, and evidenced-based-interventions (Sugai et al., 2000). PBIS is not a curriculum or "program." The focus of PBIS is to establish a school-wide system that, when functioning effectively, reaches each

individual child and helps him/her develop and exhibit positive behaviors. As students adopt these behaviors, the effect of their collective actions should gradually modify the school's climate (Carr et al., 2002).

PBIS was originally developed in the special education setting, focusing on the behaviors of students with significant special needs, and was based upon the concept of functional behavior analysis. The move towards mainstreaming these students opened the door for the use of PBIS in the general education setting as well. Consistent with educational trends, PBIS focuses on school-wide practices that are geared towards remediating and preventing problematic behaviors among all students (Horner et al., 2004).

PBIS is alternately known as Positive Behavior Supports (PBS) and School-Wide Positive Behavior Supports (SWPBS). PBIS is not a program but rather a framework that enables schools to create an environment that encourages students to make positive choices about their behaviors. “As a result, the school climate should undergo alterations in order to support these choices to the point that they become the norm” (R. Cohen, Kincaid, & Childs, 2007, p. 203). PBIS is an overall approach with sufficient experimental documentation to be classified as evidence based and to warrant large-scale implementation (Horner et al., 2010). PBIS utilizes direct instruction to explicitly teach expected behaviors that have been agreed upon by school staff to students and then provides a structure that encourages students to apply those behaviors. In order to maintain the validity of its positive foundation, it is recommended that staff members maintain a ratio of six to eight positive interactions with students for each negative

interaction that they initiate (Sugai & Horner, 2002). To sustain this ratio, precorrections are encouraged to prevent inappropriate behaviors before they occur.

Research indicates the implementation of PBIS in a school is an effective alternative to reactive, punitive policies and result in safer schools, thus increasing academic achievement of students (Skiba & Sprague, 2008;Warren et al., 2006). Teachers and students should be in a safe, supportive school environment that is conducive to teaching and learning each day (Psanos, 2013; Welsh et al., 2000).

The most basic theme of PBIS is teaching behavioral expectations in the same way that core instruction is taught (Horner, Sugai, & Todd (2001). Schools that implement PBIS identify three to five behavioral expectations that the school community believes are important. The behavioral expectations are used throughout the school setting (e.g., posted throughout the school, monitored by all school staff, and rewarded). The same expectations are expressed directly and repeatedly in multiple settings (McKevitt & Braaksma, 2008).

A key component of PBIS implementation is data, and the leadership team must remain mindful of this when developing its action plan for the current school year of implementation. “Processes should be designed to collect and analyze student behavioral data on a regular basis so that PBIS goals can be modified when warranted by student needs, particularly in terms of interventions” (Sugai & Horner, 2002, p. 44). The implementation of PBIS with fidelity is measured through data collection throughout these tiers (Sugai & Horner, 1999).

Effective Implementation of PBIS Programs

The format of PBIS is a three-tiered model for instruction and intervention. These

three tiers are based on the principle that academic and behavioral supports are first provided at a core or universal level to effectively address the needs of all students in a school. This level is noted as the system-wide (Tier 1-Primary) level of intervention. However, not all students will respond to the same curricula and teaching strategies. As a result, some students with identified needs receive supplemental or targeted instruction and intervention at the secondary (Tier Two) level of intervention. Finally, at the tertiary level (Tier Three), a few students with the most severe needs receive intensive and individualized behavioral and/or academic support (Sugai et al., 2000).

Establishing needs and goals. When a school or district recognizes the need for a positive approach to discipline and behavior, it becomes important to ensure maximum impact of the PBIS programs. A key to ensuring that the most effective practices are being implemented with a PBIS program is to provide staff with the proper training and professional development opportunities to become familiar with the program (OSEP, 2004). Staff members need to be instructed by using a research-based program that exhibits all the components of best practices in implementing a universal program within school settings. Additionally, school staff needs the time and administrative support to develop a common language that will be used within the school, and also a set of uniform consequences for the display of problematic behaviors (Sugai & Horner, 1999).

Successful implementation of a PBIS program involves developing the use of this common language throughout a school regarding expected behaviors, common practices for handling problem situations and handing out discipline, and consistent application of positive reinforcement (Sugai & Horner, 1999). The crux of the PBIS philosophy is that all children and adolescents are capable of displaying appropriate and expected behaviors

across settings (OSEP, 2004). Because of this, one of the driving forces of PBIS programs focuses on providing a safe, supportive, and respectful school community that fosters and praises positive behaviors. This may include changing the climate of schools from one of reactive measures to discipline infractions and behavioral problems to one of proactive approaches to change behavioral patterns (McIntosh et al., 2010). A line of research has revealed that teacher perceptions do influence their support for newly adopted programs or plans, including the overall implementation of PBIS (Horner, Freeman, Nelson, & Sugai, 2007; Palovlich, 2008; Sugai & Horner, 2006).

Teacher buy-in. Teachers are key stakeholders in implementing PBIS. If they do not fully support or "buy in" to the program, its effectiveness will be significantly compromised. Research has shown that PBIS can be an effective behavioral intervention program; however, there is limited research on how teachers perceive this program and how it impacts teacher motivation and satisfaction (Horner et al., 2007; Pavlovich, 2008).

Originally, school-based, behavior leadership teams reported the level of staff support for PBIS was a major facilitating and inhibiting factor to the overall success of the implementation. Reports of misunderstandings and limited knowledge of behavioral principles were affected by the overall implementation of PBIS in schools (R. Cohen, et al., 2007). Barriers of implementation at the universal (Tier 1) level include teacher perceptions. These perceptions include teacher skepticism that PBIS was needed, philosophical differences, and a belief that PBIS principles were ineffective (Lohrmann, Forman, Martin, & Palmieri, 2008). R. Cohen, et al. (2007) found those teachers who possessed sufficient knowledge and favorable perspectives of positive behavioral supports would, without prompting, include the key components of PBIS into their

everyday curriculum, yielding a more positive and productive overall school climate.

Effective development and implementation of PBIS within schools requires varying levels of support (Sugai & Horner, 1999). These levels begin with the most universal, school-wide application of the program, in which the entire student population within a school district or building is targeted (Horner et al., 2010).

Tier I: Universal level of implementation and support. At this universal level, school teams establish universal strategies and develop a common language for all members of the school community. As an example, the common language being used within in the school being studied used the terms "expected" and "unexpected" behaviors when describing actions and attitudes for which the students were responsible (Sugai & Horner, 1999).

Universal interventions in this first stage of PBIS implementation are intended for all students and are applied to develop and reinforce the school's behavioral expectations. Although teachers may choose to supplement the PBIS interventions with additional management techniques within their own classrooms, the universal interventions are intended to introduce all students to a consistent set of expectations, recognitions, and consequences throughout the school. Consequences may include time-outs for minor infractions and office referrals for major infractions, while recognitions can range from verbal recognition to nominal tokens (e.g., stickers, certificates, etc.) or school-wide celebrations (Safran & Oswald, 2003). Nonclassroom areas, such as hallways, lunchrooms, and playgrounds, are a central point for universal interventions.

After the target behaviors and the six essential elements are outlined and clearly defined by the school PBIS committee, it becomes the job of the school-wide team, as

well as all school staff, to develop strategies and lessons for teaching and setting specific expected behaviors at the universal level (Lock & Hendley, 2007). Studies have found that this is most effective when behavioral expectations are introduced uniformly by way of a common series of social skills lessons (Algozzine & Algozzine, 2007; Lewis, Jones, Horner, & Sugai, 2010; Sugai & Horner, 1999).

After skills are taught for specific settings and with certain scripts, they must be reinforced and rehearsed using multimodal methods of teaching, including teacher demonstration, role-playing by students, social skills reviews, and writing activities (Sugai & Horner, 1999). Frequent repetition is a crucial element to ensure that these skills are maintained and sharpened by the students is frequent repetition (Scott, Park, Swain-Bradway, & Landers, 2007). This may be done by incorporating elements of the social skills lessons into other areas of the curriculum. One approach to doing this would be to have students create posters illustrating school rules in art class (Lewis et al., 2010).

The school team is responsible for developing a consistent plan for handling behavior referrals or disciplinary actions in collaboration with the school's administrative team. This also includes adapting and extending the school-wide system to include nonclassroom settings, such as the cafeteria, playground, bus, and hallways. In a typical school, this universal level of support is sufficient, and studies have shown that, on average almost 85% of the school population responds to these basic support strategies (Lane, Kalberg, Bruhn, Mahoney, & Driscoll, (2008).

Tier II: Secondary level of implementation and support. In certain cases, this universal implementation may not reach all students effectively. The tier 2 level of PBIS is designed for those students who need a more specifically targeted approach and direct

instruction to fully reap the benefits of PBIS. It is estimated that approximately 15-20% of students will fall into these Tier II and Tier III categories. This typically occurs when a student has a history of behavioral issues, especially if those behaviors are physically aggressive in nature (Warren et al., 2006). Although the majority of current research on PBIS programs focuses on interventions at the universal level, there ultimately will be students who require supplemental support to reap the benefits of positive social interactions (Sugai & Horner, 1999).

The tier two (secondary) process is a professional learning community approach involving the classroom teacher, administrator, counselor, school psychologist, special educator, and an intervention coordinator. Schools should only consider undertaking targeted intervention programs once they have successfully implemented universal interventions. Prior to employing targeted interventions behavioral data must be acquired and analyzed, indicating which students have not responded to the school's universal activities. This support system is designed to utilize teacher-to-teacher support (Lewis et al., 2010).

At this secondary level, supplemental interventions are utilized to provide more intensive support to those students who do not fully respond to the universal program. Typically, this group may consist of those students who present with significant risk factors; these may include poor academic achievement, limited family or community support, or poor peer relational skills. These students are identified for possible needs of tier two interventions by utilizing a systematic process involving all relevant teachers, administrators, and parents of the student (Lewis et al., 2010).

One of the most widely used small group secondary interventions is the Check-in

Check-out system, also known as the Behavioral Education Program (BEP). "The system enables students to set goals and monitor their own behavior, using tally cards, under the close supervision of an adult mentor with whom they confer twice each day" (Hawken & Horner, 2003, p. 226). Studies about the effectiveness of BEP reveal positive changes among the students who participated, particularly in the areas of consistent class participation without problem behavior and increased academic engagement (Hawken & Horner, 2003).

At this secondary level, collaborative problem solving becomes essential in developing an intervention that meets the needs of the child. These students typically require repeated practice of specific social skills and potential environmental modifications (e.g., change of seat, change of classroom) to increase the likelihood of academic and social success. Social skills groups are developed at this level as appropriate to meet the needs of the students at their level of need (Sugai & Horner, 1999).

Cheney, Stage, Hawken, Lynass, Christine, & Waugh (2009) performed a study that examined the effectiveness of a Tier II program entitled Check, Connect, and Expect (CCE) program. This program, which is geared towards students who have been identified as being at risk for developing more problematic behaviors, is based on over 15 years of research-supported evidence conducted by Check & Connect (Sinclair, Christenson, Evelo, & Hurley (1998). The program, based on studies conducted in recent decades, concluded that the quality of students' relationships with school staff is related to student outcomes (Carr et al., 2002).

Tier III: Tertiary level of implementation and support. At this third and most intensive level, the group consists typically of 1-4% of the school population (Lewis et al., 2010). This small group of students requires intensive, individualized behavior support in order to achieve success within the school setting. Tier II programs are typically conducted in a small-group format, but Tier III interventions are tailored to an individual (Warren et al., 2006). The difference between Tier II and Tier III is the level of intensity and individuation that goes into planning the specific interventions. As with the secondary level support group, this group of students requires more than simply the basic, universal PBIS program. Students identified as needing tertiary supports typically have multiple disciplinary infractions, perform poorly or below average in the classroom, and are viewed as lacking in social skills. This group of students needs targeted and highly specific strategies to address their chronic maladaptive behaviors. Support at this highly intensive level must focus on behavior modification and an individualized approach to the problem (Scott, Alter, Rosenberg, & Borgmeier, 2010).

In PBIS terms, the students who fall into tertiary level, or Tier 3 zone, require specialized, individual interventions in order to control their proclivity towards negative behaviors and employ more positive behaviors. For these students applied behavior analysis (ABA) is often more effective. PBIS finds its roots in ABA, which was developed in the special education setting and typically involves specialists such as the special education teachers, school counselor, and psychologist. Students who may not benefit from ABA interventions may require a more in-depth functional behavior analysis to help the intervention team to analyze the system changes potentially controlling the factors to a student's behavior (Dunlap, 2006; Alberto & Troutman, 2008).

At this highest level of intervention, the use of FBAs and Behavior Support Plans (BSPs) is considered the most appropriate practice for establishing an individualized intervention and support program (Baker, 2005; Sugai et al., 2000). Tier III services begin with an FBA. The FBA serves as a data-gathering tool to compile the information for the development of an effective intervention plan. The FBA also identifies target behaviors for intervention and determines antecedent situations or settings to the behaviors. From the FBA, the school team develops an intervention plan to decrease the maladaptive target behaviors, or a BSP (Scott et al., 2010).

To examine the use of FBAs and BSPs at the Tier III level, Sugai and Horner (2002) performed a study focusing on three students in a suburban middle school. These students were selected based on a lack of response to Tier I and II interventions, on having five or more disciplinary infractions within the first 4 months of school, and on having been nominated by the school's intervention team (March & Horner, 2002). FBAs were conducted for each of these three students, and baseline levels were established from which individualized interventions were designed and implemented. The results of this study determined that the FBAs were useful in two areas: (a) decreasing problem behaviors, and (b) increasing academic engagement. The authors concluded that success of a PBS program at the Tier III level requires specific, individualized teaching of skills to increase pro social behaviors and to decrease negative interactions (March & Horner, 2002; Sugai & Horner, 2006).

In summary, research points to PBIS as being an effective means to increase positive behaviors in students (Liaupsin, Scott, & Nelson, 2000). Interventions implemented at the universal level to all students have been proven to improve student

interactions and to create a more positive and pro social environment. These universal interventions generally reach approximately 80% of the student population. However, more intensive and directed approaches are necessary for the remaining 20% of students, depending on their level of need. The PBIS structure and philosophy have helped shape the direction of schools by providing all students with a system of reinforcement and reward for exhibiting positive behavior (Baker, 2005; Sugai & Horner, 2006).

PBIS and School Discipline

In order to explore the effect of PBIS on school discipline, it is necessary to understand the nature of school discipline issues as well as the structure of the PBIS framework. In order to fully understand the potential of PBIS to alter student behavior, it is necessary to consider the role of discipline in the school setting (Horner et al., 2010). Evidence suggests that the social behavior of students and the related social climate of schools can benefit from data-based decision making. Analysis of school-wide and individual student behavior data and related decision making about student behavior in schools can be of direct and immediate value in the design of effective, individualized interventions (Irvin, Horner, & Ingram, 2006).

Schools were constructed to be institutions that are capable of developing and fostering a hunger for knowledge within citizens and socializing them to society's norms and values in the process of imparting wisdom. Schools are meant to be safe havens for learning and exploration. Although discipline may not have always been a primary concept associated with our schools, recent history serves as a correction of that perception (Dwyer, Osher, & Hoffman, 2000; Irvin et al., 2006).

The U.S. Department of Education's 1998 report, *Early Warning, Timely Response: A Guide to Safe Schools*, served as a plea for local school districts to utilize research-based practices for recognizing the early warning signs of violence and proactively intervene before problems were exacerbated (Dwyer et al., 2000). The U.S. Department of Education's 2014 report, *Guiding Principles: A Resource Guide for Improving School Climate and Discipline*, was released to further this plea for local school districts to utilize research-based practices to take deliberate steps to create the positive school climates that can help prevent and change inappropriate behaviors

Schools throughout the country have been challenged to document that students are safe, are learning the social skills that will make them contributing members of our culture, and are in environments with sufficient social order to allow and encourage academic achievement (Horner et al., 2004). Each school's purpose remains the same over time even as they grow to complex organizations. It is imperative for schools to find ways to help students develop into overall functioning and achieving members of society (Sugai & Horner, 2006).

Mandates have increased expectations that schools will provide for the educational needs of all students and create safe learning and teaching environments (e.g., Safe Schools, Reading First, No Child Left Behind, and Individuals With Disabilities Education Act). It is difficult to achieve these expectations with fewer adequate resources over time, ever-changing initiatives, less time, and fewer qualified personnel (Sugai & Horner, 2006). Such legislation has made religious, ethnic, academic, linguistic, and socioeconomic diversity a fixture in our nation's classrooms. Schools must

now find ways to build healthy, effective climates within this framework (Carr et al., 2002).

Many components must be present in order to implement the framework of PBIS, although individual schools can customize PBIS to fit their own needs. These elements include the identification of a small number of school-wide behavior expectations, a system to teach those expectations explicitly, clear consequences when those expectations are not met, the collection and use of data to make necessary program revisions, and the formation of a leadership team with an administrator within the school to guide the PBIS activities. PBIS utilizes a continuum in order to proactively address student needs and potential difficulties. The approach is focused on school-wide (primary), classroom (secondary), and individual (tertiary) behavior norms and codes of conduct (Sugai & Horner, 2002).

Student needs are represented by a three-tiered triangle, recognizing that the majority of students (80%) tend to act appropriately when they are aware of what is expected of them (Sugai & Horner, 2006). In terms of PBIS, these students occupy the bottom of the triangle and are responsive to universal (school-wide) behavioral interventions. These students are reinforced by universal "rewards" determined by the school. All students have access to the universal rewards throughout a school day (Hawken & Horner, 2003).

The middle tier of the triangle acknowledges that approximately 15% of students are at risk for developing negative behaviors and require a greater level of support. Targeted skills are addressed for students in a small group setting and target those behaviors students are struggling with. Students who fall within the middle tier (tier 2)

have access to the universal rewards within the school building and also receive more direct interventions based on their behavioral needs (Irvin, et al., 2006).

The top tier of the triangle represents the few students (5% or less) who are considered high risk due to their chronic behavior problems and lack of response to previous universal and small group interventions (Horner et al., 2001). These students usually require individualized interventions and typically account for 40-50% of total behavior infractions (Hawken & Horner, 2003). Functional behavioral assessments are conducted at this level, as well as the development of individualized behavior plans. It is extremely important at this level to have parent involvement (Clonan, McDougal, Clark, & Davison, 2007).

Students who fail to respond to universal procedures require more intensive interventions and no longer fall into the universal level of interventions, but will fall into the secondary (small group) or tertiary (individual) levels. Students who fall within Tier 3, continue to receive the universal rewards as all other students, but also receive more direct behavioral interventions to support them with their individual behavioral needs (Hawken & Horner, 2003).

> "Regardless of the exact nature of the intervention that is to provide for these students, its type and presence should be based upon concrete data and it should proactively address the type of behavior that students repeatedly have difficulties controlling" (Carr et al., 2002, p. 9).

Regular data monitoring can strengthen PBIS implementation efforts by ensuring that students who are not responsive to school-wide (universal) interventions are identified early and receive the more precise, targeted interventions that they need to be

successful (Hawken & Horner, 2003). Data collected can help further determine the progress and avenue educators could take to ensure the success of students in the classroom setting, further enabling the success of all students (Carr et al., 2002).

PBIS and School Climate

PBIS is a systems approach to establishing the social culture and behavioral supports needed for all children in a school to achieve both social and academic success. PBIS is not a packaged curriculum, but an approach that defines core elements that can be achieved through a variety of strategies. The primary goal of PBIS implementation is to establish a climate where appropriate behavior is expected and is the norm (OSEP, 2013).

When implemented with fidelity, PBIS has the potential to modify school climate by transforming student behavior. Given the complex nature of school climate, this effect can be significant, although indirect. Understanding the potential for PBIS to affect school climate requires a closer look at the concept of climate, including the formation of a clear definition, examination of its significance in the school setting, and differentiation from similar concepts, such as school culture (Hoy & Tarter, 1997; Aarons & Sawitzky, 2006). Caldarella et al. (2011) showed statistically significant improvements in student behavioral data with decreases in student behavior in the schools in which PBIS was implemented compared to control schools not implementing PBIS. Although other programs or models are designed for behavioral interventions within a school, PBIS is a system for improving school climate and preventing and reducing disciplinary incidents (Sugai & Horner, 2006).

The U.S. Department of Education's Office of Special Education Programs (OSEP) has provided funding and support for the National Technical Assistance Center on PBIS after recognizing the necessity for an alternate approach. PBIS focuses on modifying the climate of the school organization as a whole. Support for the PBIS framework has been strong, including legislative language to provide clarification, setting the stage for PBIS to become a promising and viable tool for individual schools to utilize. By implementing the framework, schools are able to help students develop positive behavior traits while improving their climates in the process (OSEP, 2013).

The prevalence of PBIS across our nation's schools continues to increase. As of 2013, nearly 19,000 schools had employed PBIS and that number was expected to continue to increase (OSEP, 2013). PBIS seeks to create change by modifying school climates, and this methodology appears to be well received by schools based upon the number of schools that are implementing the program. The components of PBIS and steps to implementation are clear, and the evaluation instruments have been carefully tested for their reliability and validity, making PBIS a well-structured framework. The relationship of PBIS to school climate, however, has received less attention. In light of the fact that PBIS seeks to modify school climate in a constructive manner by positively influencing student behavior, the effect of PBIS on school climate warrants a closer look (Caldarella et al., 2011; OSEP, 2013; Sugai & Horner, 2006).

In light of the desired shift in climate that is expected to result from PBIS, the systems-based focus is critical. School settings require a significant level of interdependence among those stakeholders who comprise the school community, causing any significant change that occurs as a result of PBIS to transpire within the system rather

than merely the individual. The importance of all stakeholders' involvement in the PBIS process schoolwide is critical for the overall successful implementation with fidelity (Carr et al., 2002).

Alternate Behavior Programs

There are many programs or philosophies that have been developed to help improve student behavior. Two programs that were designed to help improve student behavior school wide include the Responsive Classroom and the Behavior Intervention Support Team (BIST). These programs offer varied techniques based on the needs of a school and the desired affect on behaviors of students (Kramer, Caldarella, Young, Fischer, & Warren, 2014).

PBIS and the Responsive Classroom approach are similar in nature, but have many differences between the two. The Responsive Classroom approach does not offer tertiary prevention strategies or individualized interventions for at-risk students. Another difference between PBIS and the Responsive Classroom approach is how positive reinforcement is presented to students (Rimm-Kaufman & Sawyer, 2004; Sugai & Horner, 2006). The Responsive Classroom approach uses teacher language, structured reflections, behavioral self-assessments by students, class celebrations for accomplishments, and individual student progress celebrations. No further reinforcement of expected behaviors is recommended with this approach if none is found needed. Guidelines for the effective use of behavior charts and more reinforcements for those students who may need them are offered for the Responsive Classroom approach (Rimm-Kaufman, Fan, Chiu, & You, 2007). In comparison, PBIS leaves it up to individual schools to specify which reinforcing methods should be used for their students, rather

than the use of specific teacher language for only a portion of students (Rimm-Kaufman & Sawyer, 2004; Sugai & Horner, 2006).

The BIST program is a proactive, school-wide system of behavior management that uses the overall idea of removing the student from the situation in order to defuse the current issue, then using reflection to alleviate the problem. The BIST program is well grounded in behavioral theory through the combination of strength-based and resiliency principles within the context of the model. The BIST model's theoretical basis includes evaluations that have demonstrated a reduction in disruptive behaviors in the classroom environment (Boulden, 2010; Osterhaus & Lowe, 1997).

The BIST program can work together with PBIS to support students with structured environments, common language, and consistency in expectations. Both PBIS and BIST offer a building-wide consistency when addressing expected and unexpected behaviors as well as the responses to misbehaviors (Boulden, 2010; Sugai & Horner, 2006). The BIST model establishes four steps that a teacher can use in order to help change behavior. The steps are used as a consistent structure within a classroom. The four steps are early intervention, caring confrontation, protective planning, and outlasting. The BIST model offers this structured support to help create consistent, supervised, and safe environments in order to each and protect all students (Boulden, 2010; Sugai & Horner, 2006).

Determining which framework or program will work for a school building in order to affect school climate is crucial for school administrators and personnel. Ensuring that the framework or program is implemented with fidelity brings forth the subject of program and school climate evaluations. In order to evaluate the effectiveness of a given

program or framework, many different tools are available to utilize as part of the evaluation. When addressing teacher perceptions of school climate, one tool available to measure this is the Organizational Climate Description Questionnaire for Elementary Schools.

Organizational Climate Description Questionnaire for Elementary Schools

As early pioneers in the field of organizational climate in schools, Halpin and Croft (1963) designed the first Organizational Climate Descriptive Questionnaire (OCDQ). This questionnaire provided the educational field with a reliable instrument with which to gather data surrounding the concept of school climate (Halpin & Croft, 1963). The OCDQ allowed schools to quickly assess their climate in a manner that allowed for prompt feedback. It was not necessary to have an in-depth knowledge of the instrument or the topic. The OCDQ examines the ability of school discipline to serve as a barometer of its culture, as well the variations of school climate that researchers have identified by focusing on various aspects of the concept of climate (Halpin & Croft, 1963).

The OCDQ consisted of 64 items that convey the interactions of teachers and principals in the school. The instrument was comprised of brief descriptive statements, and teachers were asked to respond to items along a 4-point Likert-type scale ranging from rarely occurs (*RO*) to very frequently occurs (*VFO*). A few examples of the items follow:

1. The principal is in the building before teachers arrive.
2. Most of the teachers here accept the faults of their colleagues.
3. The rules set by the principal are never questioned.

4. Teachers talk about leaving the school. (Hoy, Tarter, Kottkamp, 1991, p. 10)

The responses to the questions in these eight dimensions were used to identify how open or closed the climate. Halpin and Croft (1963) came up with six profiles based on a continuum from open climate to closed climate. The continuum profiles were open, autonomous, controlled, familiar paternal, and closed (Hoy et al., 1991).

The OCDQ has been replicated, revised, and subjected to scholarly scrutiny since its inception. The OCDQ has since seen revised into multiple instruments for both elementary, middle, and secondary schools. Due to the parameters of this study, the elementary revision is being utilized. The revision of the OCDQ for elementary schools (OCDQ-RE) began with an overhaul of the original instrument (Hoy et al., 1991).

The OCDQ-RE (Hoy et al., 1991) is a 42-item organizational climate instrument based on a 5-point Likert scale (*0 = No Response, 1 = Rarely Occurs, 2 = Sometimes Occurs, 3 = Often Occurs, 4 = Very Frequently Occurs*). The OCDQ-RE is divided into six dimensions or subscales of school climate: supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior, and disengaged teacher behavior. Each of these dimensions includes between four and nine questions. Appendix A provides sample items of the OCDQ-RE. Appendix B provides demographic questions utilized. Appendix C provides the letter sent to teachers via e-mail introducing the questionnaire. Appendix D provides the instrument permission use email, while Appendix E provides the email letter from Wayne K. Hoy giving permission to use the OCDQ-RE for this study. The OCDQ-RE survey has been the most widely used elementary school climate assessment tool in the literature for a generation of researchers (Hoy & Tarter, 1997).

The OCDQ-RE was designed to comply with 10 different kinds of socioeconomic categories applicable to both rural and urban areas (Hoy et al., 1991). The first part of the OCDQ-RE focuses on the school principal. The influence of the principal's management actions help to determine how an educator perceives the overall organizational climate of the school (Hoy & Tarter, 1997). In this part of the OCDQ-RE, the behavior of the principal can be divided into supportive, directive, and restrictive behavior (Hoy et al., 1991). The second part of the OCDQ-RE is directed at the behavior of the educator, as not only the principal's behavior affects the organizational climate of the school. Educators' actions or behaviors are subdivided into collegial behavior, intimate behavior, and disengaged behavior (Hoy & Tarter, 1997).

Alternate Climate Measures

Multiple measurement tools are available to measure climate in schools. Choosing a research-based assessment that helps schools measure, evaluate, and improve school climate is crucial when collecting data to consider the school climate needs within a school (Cobb, 2014). Two programs that were designed to measure organizational or school climate include the Organizational Climate Index (OCI) (Hoy, 2002) and the Organizational Health Inventory-Elementary (OHI-E; Hoy & Tarter, 1997).

The OCI is used to measure school climate. It is a short descriptive measure for schools (Hoy, 2002). The OCI is a combination of the OCDQ and the Organizational Health Inventory (OHI). It is a 27-item Likert-type scale that assesses critical aspects of the school workplace. The OCI has four dimensions on one level with an overall score: collegial leadership, teacher professionalism, academic press, and institutional vulnerability to the community (Hoy, 2002).

The OHI-E measures five health dimensions on three levels and provides an overall health score. The questionnaire is a 37-item, Likert-style assessment. Teachers answer questions regarding specific behavior patterns that occur in the school. Inventory responses vary along a 4-point scale defined as *rarely occurs, sometimes occurs, often occurs, and very frequently occurs* (Hoy & Tarter, 1997).

Summary

Behavioral problems and disorder in schools is a well-documented problem. Lower levels of misconduct detract from the classroom and school climate. These behavioral problems and disorder can lead to a reduction in instructional time for all students. It can also lead to higher rates of absenteeism or a general lack of academic focus and success for students who are disrupted by these acts.

School climate is the way that staff, students, and stakeholders feel about their school. Research has revealed how a positive school climate is associated with fewer behavioral problems and disorders in schools as well as improved attendance and overall achievement. Measuring teacher perceptions of school climate can provide data for school officials to improve student and staff outcomes related to school climate.

A promising practice for improving school climate is PBIS. PBIS is a three-tiered model for improving student behavior and addresses the entire school by teaching clear positive expectations for all students. Small groups of students and individual students who do not respond to the school-wide interventions are also addressed with interventions. PBIS addresses many factors considered to be part of the establishment of school climate. Although it is promising, little research has been done to provide insight

of teacher perceptions of school climate based on the implementation level of PBIS in their school.

The study of organizational climate offers educators a means of better understanding the operation of schools. In combination with the demographic questions, the OCDQ-RE examines the ability of school discipline to serve as a barometer of its culture, as well the variations of school climate in relation to the implementation level of PBIS in the school environment.

In Chapter One, the researcher presented the review of relevant literature. The researcher included literature related to the school climate, business climate, discipline related to climate, teacher efficacy, and principal's effect on climate. The researcher also included literature related to PBIS history, tenets and components, effective implementation of PBIS at multiple tiers, and the structure and implementation of each tier. Literature was also included regarding PBIS and school discipline and climate. Chapter III details the methodology utilized in the study. Chapter IV presents the research results. Chapter V states the conclusions, recommendations, and implications for school districts and teachers to utilize when considering PBIS and school climate.

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CHAPTER THREE

METHODOLOGY

The purpose of this study was to extend the limited research that existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. The research was conducted in such a way so as to find any predictive aspects of the schools that chose to implement PBIS and the educators' perceptions. This study was a quasi-experimentally designed dissertation studying the perceptions of teachers based on their tier level of implementation of PBIS on school climate. A multivariate technique was implemented to account for PBIS tier levels, teacher experience, and demographic variables. Once significant variables were identified through multiple regression, Analysis of Variance (ANOVA) was utilized as appropriate to further analyze the results of the study.

Participants

The participants used for this study were practicing elementary teachers in the South Central and Southwest Missouri Regional Professional Development Center (RPDC) regions. School districts in Missouri are divided into nine different RPDC regions. For collection purposes, the Southwest and South Central regions were chosen to participate. Each of these schools included at least one of the Grades K-6, deemed in the elementary range for this study, but had grades configured in a variety of ways (i.e., K-2, K-4, K-8, 3-4, or 5-6). Grades within building levels were used when determining demographic relations between educators' grade level and implementation level of PBIS.

All certified teachers at elementary schools in the South Central and Southwest Missouri RPDC Regions Six and Seven, who were implementing PBIS school-wide

(Tiers One-Three) and who were under contract at the beginning of the 2015-2016 school year were included to participate in the online survey. This included teachers of all subjects and disciplines at any grade level or content area who were employed by a Missouri school district in the South Central or Southwest Missouri RPDC Regions Six or Seven. All certified teachers at elementary schools in the South Central and Southwest Missouri RPDC Regions Six and Seven who were not currently implementing PBIS school-wide (Tier Zero) who were under contract at the beginning of the 2015-2016 school year were also invited to participate in the online survey.

Participants must have met the minimum requirements for certification in Missouri including the completion of a bachelor's degree, a prescribed amount of undergraduate coursework with specified teacher education courses, internships, and passing standardized tests. All teachers who met the aforementioned standards for public school educators were candidates for working in schools who did or did not implement PBIS.

One hundred fifty-six teachers participated in the given survey. The South Central Missouri Regional Professional Development Center Region Six had 73 schools currently implementing PBIS. The Southwest Missouri Regional Professional Development Center Region seven had 64 elementary schools implementing PBIS at the time of the study. The schools were located in school districts of various sizes, including both rural and urban settings.

Instrument

Participants were given the OCDQ-RE (Appendix B) to complete followed by a demographic information sheet including ten questions given through electronic survey

(). The OCDQ-RE was a 42-item organizational climate instrument based on a 5-point Likert scale (*0 = No Response, 1 = Rarely Occurs, 2 = Sometimes Occurs, 3 = Often Occurs, 4 = Very Frequently Occurs*). The OCDQ-RE was divided into six dimensions or subscales of school climate: supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior, and disengaged teacher behavior. Each of these dimensions included between four and nine questions.

Reliability and validity. Hoy et al. (1991) reported relatively high reliability for the six climate dimensions of the OCDQ-RE. They reported that a subtest found the reliability for Supportive was .94, Directive .88, Restrictive .81, Collegial .87, Intimate .83, and Disengaged .78. Hoy et al. (1991) established construct validity by correlating results with the original general school openness index ($r = .67$, $p < .01$) and the index of principal openness ($r = .52$, $p < .01$; Hoy et al., 1991, p. 35).

Demographic data instrument. The demographic survey was included as part of the study to gather information on teacher-level variables such as gender, years of experience as a teacher, years of experience at current school, school category, school size, years of experience with PBIS and PBIS tier level. The demographic questions were obtained in the teacher responses to determine the difference in years of teaching experience, number of years in current school, size of school building (1-250 students, 250-500 students, or 500+ students), grades served (i.e., K-2, 3-4, K-4, and 5-6 ranges), years PBIS had been implemented in building, level of PBIS implementation (Tier 0, Tier 1, Tier 2, or Tier 3), and current role (). These demographic variables served as possible predictor variables for the multiple regression analysis.

Survey process. The survey tool QuestionPro was utilized to organize and conduct the survey instruments for this study. Survey links were e-mailed to principals of schools in the Southwest and South Central Missouri RPDC public school districts. E-mail addresses were obtained from the Missouri Department of Elementary and Secondary Education directory. A cover letter (Appendix C) was included with the e-mail and identified the purpose and significance of the project; it also included a request to forward the survey to the teachers in their building requesting their participation. The letter also addressed the amount of time required for survey completion, the timeline for return of the surveys, voluntary participation clause, and assurances of confidentiality. Instructions for completing the OCDQ-RE and demographic questions were straightforward and given at the beginning of the survey. The participants were instructed to read each statement and use the 4-point scale to select the scale point that best reflected their personal degree of agreement with the statement. Results of the survey were analyzed only if the survey was submitted. Participants had the ability to stop the survey at any time. At the end of the survey, participants were given the option to voluntarily submit their e-mail address to be entered into a randomized drawing for a $25 gift card for participating. A randomized selection was conducted at the conclusion of the survey window.

The directed research, survey, informed e-mail consent, ethics certificate, and Research Review Board (RRB) application were sent to the RRB electronically and as a paper copy with the appropriate signatures for approval. The RRB board granted approval on May 16, 2016. Participants gave consent to be involved in the study by completing the online survey. Participation in this study was completely voluntary. The

submitted forms outlined participant confidentiality, the ability to withdraw at any time without penalty, lack of any foreseen harm to respondents, and a brief overview of the study's aim to provide a synopsis of the teacher perception regarding school climate and their PBIS tier level of implementation in South Central and Southwest Missouri Regions.

The following research questions were used to guide this study:

1. Is there a difference in the perceptions of school climate in schools that implement PBIS compared to those schools that do not?
2. What are the perceptions of teachers regarding the climate at their current elementary school relative to the stage (tier level) of PBIS implementation?
3. What predictive indicators in a school's use of PBIS are tied to the teachers' perception of their school's climate?

Research Design and Data Analysis

This study was an attempt to extend the limited research that existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. The research design was guided and driven by Research Question 3, seeking predictive indicators in a school's use of PBIS tied to teachers' perceptions of their school's climate. The researcher also examined any predictive aspects of teachers' perceptions of school climate in comparison to the PBIS tier levels of implementation in their current school that may have been in play to see if PBIS contributed to these perceptions of teachers. Determining the perceptions of teachers regarding school climate and the tier level of implementation of PBIS shed light on schools individually and in South Central and Southwest Missouri as to the impact

differing levels of PBIS implementation may have on their school climate.

This study involved a quasi-experimental design due to the accessibility of a valid and reliable quantitative instrument capable of measuring school climate and qualitative data gathered through the demographic form. Utilizing the OCDQ-RE as an assessment instrument provided a balanced and impartial view of the insights of each school's educators on the topic of school climate. These data were analyzed using the descriptive statistic of factor analysis and the statistic of multiple regression to examine the relationships between the subareas of PBIS implementation levels and school climate. The demographic questions were obtained in the teacher responses at the conclusion of the OCDQ-RE survey instrument.

Results of the surveys fully relied upon the participants' self-report. The individualized responses through the OCDQ-RE were summarized and analyzed. The survey of teacher perceptions of school climate was analyzed according to the information from the OCDQ-RE. Analysis of the three research questions and an examination of the intercorrelations of the six climate variables in the OCDQ-RE were conducted. The items were analyzed using descriptive statistics such as percentages, means, and standard deviation. This was done using the computer program, Statistical Package for the Social Sciences (SPSS). This computer program allowed the researcher the capability to determine the perceptions that teachers held toward school climate.

The first research question examined if a difference existed in the perceptions of school climate between schools where PBIS was implemented and in schools where it was not. An independent samples test and correlational analyses were conducted for this research question. The second research question attempted to determine if any

correlations existed between the perceptions of teachers regarding the climate at their current school and the PBIS tier level of implementation. A Pearson's *r* correlation was conducted in an attempt to determine if any correlations existed between the perceptions of teachers regarding the climate at their current school and the PBIS tier level of implementation for Research Question 2. The third research question attempted to determine what predictive indicators, including PBIS tier level and demographic variables, were tied to the teachers' perception of their school's climate. A multiple regression as well as multiple post hoc analyses were conducted to make these predictions.

Summary

Determining the perceptions of teachers regarding school climate and the tier level of implementation of PBIS shed light on schools individually and in South Central and Southwest Missouri as to the impact differing levels of PBIS implementation may have had on their school climate.

This quasi-experimentally designed study sought to determine if a connection existed between the perceptions of teachers regarding school climate and the implementation of PBIS. The researcher utilized the OCDQ-RE survey tool and demographic questions to determine any differences in teacher perceptions of school climate in schools that implemented PBIS and schools that did not. The researcher also utilized the above survey tools in an attempt to determine the perceptions of teachers regarding the climate at their current elementary school relative to the stage (tier level) of PBIS implementation. An independent samples test and correlational analyses were conducted for the first research question in an attempt to determine if a difference existed

in the perceptions of school climate between schools where PBIS was implemented and in schools where it was not. A Pearson's *r* correlation was conducted in an attempt to determine if any correlations existed between the perceptions of teachers regarding the climate at their current school and the PBIS tier level of implementation for Research Question 2. The third research question, which was the basis for this study, attempted to determine what predictive indicators, including PBIS tier level and demographic variables, were tied to the teachers' perception of their school's climate. A multiple regression as well as multiple post hoc analyses were conducted to make these predictions. Once significant variables were identified through multiple regression, an ANOVA was utilized as appropriate to further analyze the results of the study. Utilizing the program SPSS, the analysis of the OCDQ-RE responses were used to determine if there was a theme, which is addressed in Chapter Four.

CHAPTER FOUR

RESULTS

This study represents an effort to extend the limited research that existed on the impact of the varying levels of PBIS implementation on school climate as seen in the perception of teachers in such a way as to find any predictive aspects of the schools that chose to implement PBIS and the teachers' perceptions. The results of this study are presented in two main sections. The sample statistics section how the data collected from the surveys presented, including means, standard deviations, and percentages. Correlational statistics as well as predictive aspects are addressed in the second section, titled Research Question Findings. Within this section, multivariate statistics determined variables having meaningful relationships with those schools utilizing PBIS and teachers' perceptions addressing three research questions. With the final research question, the researcher tested the predictive aspects of not only the PBIS usage but also those demographic variables to determine the outcome of the research questions. This chapter provides details of the participating educators from which data were collected, as well as the results of the data analyses conducted to answer each of the research questions.

Based on collected data, the following research questions were addressed through this survey:

1. Is there a difference in the perceptions of school climate in schools that implement PBIS compared to those schools that do not?
2. What are the perceptions of teachers regarding the climate at their current elementary school relative to the stage (tier level) of PBIS implementation?
3. What predictive indicators in a school's use of PBIS are tied to the teachers'

perception of their school's climate?

A multiple regression was used to analyze the data. The following section reflects the descriptive and statistical interpretations of the study.

Sample Statistics

Results of the survey were analyzed to provide insight to the research questions. Data on school climate from administering the OCDQ-RE (Hoy & Tarter, 1997) instrument to participating teachers were utilized. The final survey responses were exported to SPSS for analysis. Descriptive statistics were utilized to present quantitative data in a simple and manageable way. Any missing values were replaced with the series average.

This study sample included 156 Missouri elementary teachers in the Southwest and South Central RPDC regions. Initially, 242 participants submitted a survey. Of those, 86 were excluded due to participants not answering every question on the survey or not indicating they were certified staff members. Every participant was guaranteed complete anonymity. The sample represents a return rate of 6.2% of the 2,010 teachers originally meeting the study criteria. The return rate was also dependent upon teachers receiving the survey from their building principal via e-mail and subsequent approval. A direct impact on the return of surveys could be accounted for by the lack of involvement by two large school districts in the Southwest RPDC region that declined involvement in the survey according to their school district policies regarding research surveys at the time the survey was disseminated. The small return rate of surveys may have produced some of the results the researcher was anticipating

The OCDQ-RE was utilized for this study. Educator responses were received and have been summarized in Table 1. The OCDQ-RE is divided into six dimensions or subscales of school climate: supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior, and disengaged teacher behavior. Each of these dimensions included between four and nine questions. The sum score of all dimensions, stated as the overall score of the OCDQ-RE, was utilized as the dependent variable. The independent variables were as follows: gender, grade levels of current school building, student population, level of PBIS implementation, years of PBIS implementation, RPDC region (Southwest MO or South Central MO), and role within the school building.

The demographic survey was included as part of the study to gather information on gender, grade levels within the school, student population, PBIS implementation, PBIS implementation level per Southwest or South Central Missouri Regional Professional Development Center region, and primary role within the school building variables. Data generated from the demographic items and the 36 OCDQ-RE survey items were analyzed to determine the differences and relationships in varying demographics based on the responses from the participants. Seven questions were used to gather demographic information from the sample, and they are as follows:

Gender?

Is your school a K-2, K-4, K-6, 3-4, 3-6, or 5-6 building?

How many students are in your school building?

Is your school currently implementing PBIS?

If your school is currently implementing PBIS, at what level?

Is your school located in the Missouri RPDC Southwest or South Central Region?

What is your primary role in the school building?

Table 1 provides a summary of percentages for each of the questions' categories.

Table 1

Demographic Survey Questions with Results

	N	Percent of *N*
Gender		
Male	16	10.3%
Female	140	89.7%
Grade Level		
K-2	14	9.13%
K-4	14	9.13%
K-6	25	16.2%
3-4	0	0%
3-6	1	0.8%
5-6	2	1.2%
Other	100	64%
School Pop.		
< 300	40	25.73%
301-500	69	43.57%
> 500	47	30.71%
Implement PBIS		
Yes	115	73.97%
No	41	26.03%
PBIS Tier Level		
Tier 1	34	22.02%
Tier 2	64	41.07%
Tier 3	58	36.9%
MO RPDC SW or SC Region		
Southwest	99	62.73%
South Central	57	37.27%
Primary Role		
Teacher	130	83.4%
Counselor	4	2.49%
Other	22	14.11%

Most of the participating teachers were female, 89.7%, while 10.3% were male. Most participants (63.49%) taught at an elementary within the K-6 range, with the lowest amount of participants (.8%) teaching in Grades 3-6. No responses were received from

educators in a third- to fourth-grade building. Educators reported the student population of their school buildings: less than 300 – small (25.7%), 301-500 students – medium (43.5%), and large 501 or more (30.7%). Most participants for this study were currently implementing PBIS within their school building (73.9%), with those not currently participating at 26.1%. Educators who worked in schools that currently implemented PBIS reported the tier level of implementation. Most educators worked in schools implementing at the Tier 2 (41.1%) and Tier three (36.9%) levels. Participants implementing at the Tier 1 level were represented by 22% of respondents. A large portion of the participants was located within the Missouri Regional Professional Development Center (MO RPDC) Southwest Region (62.7%), with educators from the South Central region representing 37.3% of the study participants. The majority of participants served roles as teachers (83.4%), with counselors serving 2.4%. Participants who selected Other (14.11%) were not included in the study because this study sampled certified teachers' perceptions. Any other person or group would not fit the sample of this study.

Descriptive statistics for the overall scores of the OCDQ-RE were calculated using ranges based on question result number values, means, and SD. The descriptive statistics, including the mean and SD for the sum of the overall scores of the OCDQ-RE, yielded a mean of 97.29 and SD of 9.81. The range of overall scores for the OCDQ-RE was written as 1-100. With a normal distribution of scores, the smaller SD indicated a score that clustered closer to the average.

Research Question Findings

Results of the survey were analyzed to provide insight to the research questions. To examine each research question, each of the 42 questions on the OCDQ-RE was

averaged for each test item and calculated using the formula provided by Hoy, Tarter, and Kottkamp (1991). Data on school climate from administering the OCDQ-RE (Hoy & Tarter, 1997) instrument to participating teachers were utilized. The final OCDQ-RE survey responses were exported to SPSS for analysis. These scores were calculated with a national database of means and standard deviations providing a standardized score outlined by Hoy and Tarter (1991). The score can then be compared to a national normative sample to determine how the educators in this study compared to other educators in the nation. Inferential statistics were applied to infer what that data revealed about the thinking and practices of a given population. Any missing values were replaced with the series average. The first portion of the survey included questions from the OCDQ-RE, which used a 5-point Likert scale: *0-No Response, 1-Rarely Occurs, 2-Sometimes Occurs, 3-Often Occurs, and 4-Very Frequently Occurs*. The survey also utilized seven demographic survey items answered at the end of each survey by participants.

After the final survey data were compiled, all 36 items from the OCDQ-RE survey were utilized and calculated to find the overall scores. The overall scores of the OCDQ-RE data were utilized as the dependent variable. The demographic survey data were utilized as the independent variables. Analysis of the three research questions and an examination of the intercorrelations of the six climate variables in the OCDQ-RE were conducted. Inferential statistics were calculated using the overall scores of the OCDQ-RE questions. The mean value of the survey was calculated, and then data were analyzed to determine the statistical differences found between the demographic differences as marked by the survey participants.

Research Question 1. The first research question attempted to determine if a difference existed in the perceptions of school climate between schools where PBIS was implemented and in schools where it was not. An independent samples *t* test including Levene's Equality of Variances and t-test for Equality of Means as well as correlational analyses were conducted.

An independent samples *t* test was conducted to compare overall scores of the OCDQ-RE for educators who at the time of the study worked in schools where PBIS was implemented and overall scores of the OCDQ-RE of educators who worked in schools where PBIS was not implemented. The dependent variable for this comparison is the overall scores of the OCDQ-RE, with the independent variables of "yes" representing educators who worked in schools where PBIS was implemented, and a response of "no" representing educators who worked in schools where PBIS was not currently being implemented. Out of the 156 respondents, 133 educators currently worked in a school where PBIS was implemented, with 23 educators currently working in a school where PBIS was not being fully implemented.

Based on the overall scores of the OCDQ-RE, the mean scores and standard deviations were determined. These data are represented in Table 2 yielding mean score and standard deviation results. There was a slight difference in the overall scores for educators who currently worked in schools where PBIS was implemented ($M = 97.111$, $SD = 9.642$) and educators who worked in schools where PBIS was not implemented ($M = 95.403$, $SD = 9.636$).

Table 2

Group Comparisons Regarding PBIS Usage

	YES – Do Use			NO –Don't Use		
	n	*M*	*SD*	*N*	*M*	*SD*
Overall OCDQ-RE Scores	133	97.111	9.642	23	95.403	9.636

Inspection of the dependent variable revealed that the overall scores of the OCDQ-RE were normally distributed for both groups of educators, including those who worked in schools where PBIS was implemented and those who did not, and that there was homogeneity of variance as assessed by Levene's Test for Equality of Variances. Therefore, an independent *t* test was run on the data with a 95% confidence interval (CI) for the mean difference. It was found that between the two groups, there was no statistical difference, $t(156) = .935$, $p = .239$.

Correlational analyses were used to further examine the relationship between the overall scores of the OCDQ-RE for educators who worked in schools where PBIS was implemented and overall scores of the OCDQ-RE of educators who worked in schools where PBIS was not implemented. The sample as a whole reported that they as educators worked in a school where PBIS was implemented (Yes = 73.97%, No = 26.03%).

A Pearson's *r* was computed to assess the relationship between educators implementing PBIS and educators who were not implementing PBIS. There was a correlation between the two variables ($r = .177$, n = 156, $p = .013$). The correlation between educator perceptions of school climate in schools where PBIS was implemented and overall scores of the OCDQ-RE (school climate) was found to be statistically significant (p = .013). Overall, there was a strong, positive correlation between the

overall OCDQ-RE scores and PBIS implementation. This significance reflected the connection between the assessment of an educator's perception of overall positive school climate and the use of PBIS in their school building.

Research Question 2. The second research question attempted to determine if any correlations existed between the perceptions of teachers regarding the climate at their current school and the PBIS tier level of implementation. Teacher perceptions of school climate were analyzed according to the information from the OCDQ-RE and demographic data. A Pearson's correlation was utilized to determine if the school's use of different PBIS tiers was correlated to any teacher's perception of positive school climate scores. This correlation was tested using a one-tailed test of significance at a .05 probability level. The results of these correlational methods showed that the school's use of any tier level was not significantly related to the teachers' perceptions of school climate (r = -.045, n = 156, p = .290).

Research Question 3. The association between school climate and the capacity of PBIS to produce a systems change created the foundation for the research questions that guided this study. Therefore, the third research question attempted to determine what predictive indicators, including PBIS tier level and demographic variables, were tied to the teachers' perception of their school's climate.

By using multiple regression, the researcher not only investigated the relationship between the level of PBIS implementation in a school and teachers' perception of school climate, but also determined if and what predictive indicators existed. Multiple post hoc tests were conducted to determine any predictive aspects of not only the PBIS implementation per teacher, but also those demographic variables to determine the

outcome of the hypothesis. One of the seven demographic variables was found to have a significant impact on school climate: implementation of PBIS within the school building. Gender of the educator was found to have a weak slight positive impact on climate.

A multiple regression was calculated to predict teacher perception of school climate based on the independent variables: (a) gender, (b) building grade levels, (c) student population, (d) PBIS implementation within the school building, (e) PBIS tier level, (f) MO RPDC Southwest or South-Central Region, and (g) primary role within the school building. The multiple regression results found that only one variable contributed to the prediction of positive teacher perceptions and that was the very use of any level of PBIS (Variable 4). The significant regression equation found when generating the data for educators who taught in schools where PBIS was implemented yielded $F(1, 154) = 4.998$, $p < .027$ with R squared of .031.

A regression found in Table 3 examined the relationships between the subareas of demographics and the dependent variable of the overall scores of the OCDQ-RE representing overall positive school climate. Participants predicted school climate was equal to 81.678 + 15.411 when PBIS implementation was measured by a "yes" or "no" response. School climate increased 15.411 when PBIS was implemented and represented on the survey with a "yes" response. PBIS implementation was found to be a predictor of teacher perceptions of a positive school climate with the overall scores of the OCDQ-RE as the dependent variable. Table 3 is specific to the use of the regression analysis, but excluded the factors that did not contribute significantly to any prediction. Thus the implementation of PBIS at any tier level itself was the best predictor of positive teacher perceptions of school climate. With the limited amount of data collected for this study,

with a larger return rate of survey data, the researcher believes that some of the variables could possibly have been found significant.

Table 3

Simple Regression: Predictors of Perception of School Climate

	Unstandardized Coefficient		Standardized Coefficient		
Model	B	Std. Error	Beta	*t*	Sig.
1 (Constant)	81.678	7.025		11.627	.000
PBIS Implementation	15.411	6.894	.177	2.236	.027

Note. Dependent Variable: Overall Scores of OCDQ-RE

Post hoc analysis. To determine whether educator perceptions of school climate differed based on tier level of PBIS implementation, multiple comparisons were conducted. Post hoc analyses using the Tukey HSD tests were conducted to determine all possible pairwise contrasts between the PBIS tier levels noted in the demographic survey with overall scores of the OCDQ-RE as the dependent variable. Tukey's HSD post-hoc revealed there was not a significant difference (.454) found between educators' perceptions of school climate based on the tier level of implementation of PBIS within their school current school building.

The Tukey HSD tests were conducted through multiple comparisons. These data are found in Table 4. The results of this test were not found to be significantly different ($p < .05$) between PBIS tier levels of implementation. Schools implementing at the Tier 1, Tier 2, or Tier 3 level were not found to be significantly different. The Tukey HSD yielded results finding a relatively normal distribution.

Table 4

Tukey HSD Multiple Comparisons PBIS Tier Level

If your school is currently implementing PBIS, at what level?	If your school is currently implementing PBIS, at what level?	Mean Difference (I-J)	Std. Error	Sig.
Tier One	Tier Two	-1.70753	2.04768	.683
	Tier Three	.44776	2.08511	.975
Tier Two	Tier One	1.70753	2.04768	.683
	Tier Three	2.15529	1.78792	.452
Tier Three	Tier One	-.44776	2.08511	.975
	Tier Two	-2.15529	1.78792	.452

Note. Dependent Variable: Overall Scores

Summary

The results of this study were presented in two main sections. The descriptive statistics included the instrument utilized, how results were obtained, and procedures given to complete the survey. The sample statistics also yielded the data collected from the surveys presented, including means, standard deviations, and percentages. Inferential and correlational statistics as well as multiple regression aspects were addressed in the second section, titled research inferential statistics. Correlational statistics determined variables having meaningful relationships with those schools utilizing PBIS and teachers' perceptions of overall school climate. With the final research question, the researcher tested the predictive aspects of not only the PBIS usage but also those demographic variables to determine the outcome of the hypotheses.

Descriptive statistics were utilized to present the survey results in a simple and

manageable way. This data included overall scores and demographic data. Analysis determined the only predictive indicator regarding tier level of implementation of PBIS and teacher perceptions of school climate was the overall implementation of PBIS. Inferential statistics were applied to indicate what that data revealed about the thinking and practices of the given population. Inferential data were presented in tables to show ANOVA as well as Pearson's *r* and correlational results for the demographic data as they related to the overall scores of the OCDQ-RE for the study. A multiple regression analysis examined the relationships between the subareas of demographics to include PBIS implementation levels and the dependent variable of the overall scores of the OCDQ-RE representing school climate. Tukey's HSD post-hoc revealed there was not a significant difference found between educators who were implementing PBIS at different tier levels. The study yielded results finding a relatively normal distribution.

Regardless of the PBIS tier level of implementation, gender of educator, student population, grade levels, RPDC region, or role within the school building, the perception of a positive school climate by educators in their current school building was the only independent variable found to be significant based on overall PBIS implementation.

Chapter Five includes the summary and implications of the study, including the findings of the study and how they add to the body of research regarding teacher perceptions on school climate regarding the implementation level of PBIS. Finally, further research recommendations are explained.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to attempt to extend the limited research that existed on the impact of varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. This study attempted to investigate any predictive aspects of teachers' perceptions of school climate in comparison to the PBIS tier levels of implementation in their current school. A quasi-experimental design was employed to look for possible predictors of the perceptions of teachers based on their tier level of implementation of PBIS on school climate. Data were collected through the use of a school climate survey, the OCDQ-RE, and a demographic survey. The (Revised) OCDQ-RE by Hoy et al. (1991) was used to assess teacher perceptions of school climate. Demographic data were gathered in conjunction with the OCDQ-RE survey. The population of this study included 167 teachers from public schools in Southwest and South Central RPDC Regions in Missouri.

Findings and Interpretations

By using a quantitative method, both descriptive and inferential statistics were calculated from the data of the OCDQ-RE and demographic survey and then analyzed and used to answer the three research questions.

Research Question 1. The first research question was attempted to determine if a difference existed in the perceptions of school climate between schools where PBIS was implemented and those where it was not.

An independent samples *t* test was conducted to compare overall scores of the OCDQ-RE for educators who at the time of the study worded in schools where PBIS was

implemented and overall scores of the OCDQ-RE of educators who worked in schools where PBIS was not implemented. Group statistics were analyzed. Out of the 156 respondents, 133 educators currently worked in a school where PBIS was implemented, with 23 educators currently working in a school where PBIS was not being fully implemented. There was a slight difference in the overall scores for educators who worked in schools where PBIS was implemented (M = 97.111) and educators who worked in schools where PBIS was not implemented (M = 95.403).

Correlational analyses were used to further examine the relationship between the overall scores of the OCDQ-RE for educators who currently worked in schools where PBIS was implemented and overall scores of the OCDQ-RE of educators who worked in schools where PBIS was not implemented. The sample as a whole reported that they worked in a school where PBIS was implemented with (a) implementing PBIS (73.97%) and (b) not implementing PBIS (26.03%). A Pearson's r correlation was conducted. Results of the data indicated there was a significant difference in the perceptions of school climate in educators who taught in schools where PBIS was currently being implemented (p= .013).

Research Question 2. The second research question attempted to determine if any correlations existed between the perceptions of teachers regarding the climate at their current school and the PBIS tier level of implementation, gender, grade levels within the school building, student population, or the MO RPDC region of their school.

The difference between educator perceptions was shown using the OCDQ-RE overall scores and demographic survey data regarding PBIS tier level of implementation. Teacher perceptions of school climate were analyzed according to the information from

the OCDQ-RE and demographic data. A Pearson's *r* correlation revealed there was no correlation. Overall, there was not a strong correlation between PBIS tier level of implementation and educator perceptions of school climate. The correlation between educator perceptions of school climate and tier level of PBIS implementation where PBIS was implemented (school climate) was found not to be statistically significant.

Based on the research regarding the correlation between teachers' perceptions of school climate and the tier level of implementation of PBIS, it was reasonable to conclude that the results of this study supported what the research suggested regarding overall PBIS implementation, although it did not show a significance regarding tier level of implementation. Research points to PBIS as being an effective means to increase positive behaviors in students (Liaupsin et al., 2000). Interventions implemented at the universal level to all students were proven to improve student interactions and to create a more positive and pro social environment, with more intensive and directed approaches necessary for the remaining 20% of students (Baker, 2005; Sugai & Horner, 2006). Research also pointed to those educators who implemented PBIS reporting a positive growth in their perceptions of academic emphasis and school climate as a result of enhanced behavior management. Creating a supportive school climate and decreasing punitive actions increases the likelihood of student success, academically, socially, emotionally and behaviorally (Psanos, 2013; Welsh et al., 2000). This decrease in negative student behaviors in turn can affect teacher perceptions of school climate (Psanos, 2013).

Most participants for this study were currently implementing PBIS within their school building (73.9%,) with those not currently participating at 26.1%. According to

the data for this study, the tier level of implementation ranged from zero (no implementation) to Tier 3. Participants in schools participating at the Tier 1 level were 22%, with 41.1% at Tier 2, and 36.9% at Tier 3. The results of these correlational methods indicated that the school's use of any tier level was not significantly related to the teachers' perceptions of school climate.

Research Question 3. The third research question attempted to determine what predictive indicators, including PBIS tier level and demographic variables, were tied to the teachers' perception of their school's climate. A multiple regression as well as multiple post hoc analyses were conducted to make these predictions.

By using multiple regression, the researcher investigated the relationship between the level of PBIS implementation in a school and teachers' perception of school climate, and determined if and what predictive indicators existed. A multiple linear regression was calculated to predict teacher perception of school climate based on the independent variables (a) Gender, (b) Building Grade Levels, (c) Student Population, (d) PBIS Implementation within the school building, (e) PBIS Tier Level, (f) MO RPDC SW or S-Central Region, and (g) Primary Role within the school building. Based on the results, the variable Implementation of PBIS was found to be significant. The remaining demographic variables were excluded from the regression with no significance reported. A significant regression equation was found with *R* squared of .031. One of the seven demographic variables was found to have a significant impact on school climate, Implementation of PBIS within the school building, with a .027 significance. Gender of the educator was found to have a weak slight positive significant impact on school climate. The gender element may have been a function of sample size, with females being

majorly represented in the survey sample.

This research question was the basis of the study testing the predictive aspects of not only the PBIS usage but also the demographic variables to determine the outcome of the hypothesis. With the overall scores of the OCDQ-RE survey results as the dependent variable, only one predictive demographic indicator was found to be significant and tied to the teachers' perception of their school's climate. The overall implementation of PBIS within the current school building was found to be this predictor. The third research question attempted to determine what predictive indicators, including PBIS tier level and demographic variables, were tied to the teachers' perception of their school's climate.

Conclusions

Multiple studies have suggested a connection between PBIS implementation and improvement of school climate and the overall organizational health of a school as well as the reductions in student misbehavior across multiple settings (Bradshaw et al., 2008; Psanos, 2013; Sugai & Horner, 2002), although none had studied the tier level of implementation of PBIS in relation to the perceptions of school climate. Research findings by Bradshaw et al. (2008) indicated the schools in their studies who implemented PBIS compared to their control schools who did not implement PBIS appeared to have a friendlier, more positive, and more collaborative work environment for staff.

Research points to PBIS as being an effective means to increase positive behaviors in students (Liaupsin et al., 2000). The PBIS structure and philosophy have been proven to help shape the direction of schools by providing all students with a system of reinforcement and reward for exhibiting positive behaviors (Baker, 2005; Sugai &

Horner, 2006). This systems approach has been significantly researched and found, when implemented with fidelity to have the potential to modify school climate by transforming overall student behavior. The current study yielded similar results with the implementation of PBIS presenting a significant effect on school climate. The use of this framework in schools is correlated and indeed predictive of positive teacher perceptions of school climate.

Data from this study were analyzed primarily through correlation and multiple regression. Out of the three research questions in this study, the results of one question yielded a positive correlation to teacher perceptions of school climate. As a result of the multivariate technique utilized, the researcher found the one predictor of teachers' perceptions on school climate was the implementation of PBIS in their school building.

The results of this survey support research regarding PBIS implementation in schools with the benefit of increasing teacher perceptions of a positive school climate. As a result, given predictors of this research study do support past research findings, indicating with PBIS implementation an educator may perceive a more unified faculty, and consistency of school structure, common language and responses to student discipline. The tier level of implementation was not a predictor of teachers' perceptions of school climate as seen in this study, although overall implementation at any tier level did yield significance in the perceptions of educators surveyed.

Recommendations for Future Research

The findings of this study offer implications for future researchers who may be interested in studying teachers' perceptions of school climate and PBIS. This study could be replicated among a larger population of public schools in Missouri. Empirical data

collected from other populations could allow school leaders to analyze the relationship between school climate and the implementation of PBIS, specifically the tier level.

Data were limited to the perception of educators regarding their school climate on the survey. The demographics of the research site and the nature of the study sample also increased the limitations of the study. This study surveyed only K-6 elementary school teachers in the South Central (RPDC Region 6) and Southwest (RPDC Region 7) Missouri elementary schools. Because this study limited the scope of research to school climate, future research could include additional variables that contribute to the overall school environment, or more specifically, leadership practices. Such factors related to a school's geographical location, the physical school building, class size, length of teacher tenure and attrition, principal turnover, and student enrollment and attrition could all be investigated. Socioeconomic factors, which have been shown to have a strong correlation to student outcomes (Brown, 2007), would also be appropriate in further research in the area of PBIS implementation and school climate.

Because this study limited the research to teacher perceptions of school climate, another research opportunity would be to examine other factors that contribute to school climate and the relationship among those factors. Literature has supported other possible factors that could be included in future studies regarding teacher perceptions of school climate, such as the inclusion of effective health promotion efforts and risk prevention, as well as the amount and level of resources available to a school. Future researchers could also include perceptions of school climate from all stakeholders, including teachers, administrators, and the community.

Finally, a qualitative or mixed-methods design could also be executed to further

investigate how school culture contributes to the school environment and plays a role in the learning process. Conducting a study that seeks deeper understanding on the human element of schooling, teacher beliefs, attitudes, and values, as well as those of the principal and students, would add additional knowledge to this topic. By way of observations, organizational documents, and interviews, a researcher could gather rich empirical data that was not extracted by this quantitative research study. Conducting a pretest, posttest model for implementation that would run over the course of one school year based on the tier level of implementation could look at the overall perceptions of the school climate, as well as where and what areas of such climate are mostly impacted by the implementation of such a framework.

In future research, opportunities to solicit better involvement of principal and district-level approval or support for such research could be beneficial to the magnitude of the study. This was a definite hurdle the researcher faced in this study. As noted earlier in the results chapter, the lower return on surveys suggested that a more controlled study of an experimental design for more specific comparisons of those teachers and schools that implement and do not implement PBIS may yield more significant results when studying specific predictive variables. Future researchers may benefit from participating in a more experimental design where one can make direct contact with principals and get the approval to do a two-group comparison.

Summary

This research concluded that the implementation of PBIS is a significant predictor of teachers' perceptions on school climate, based on data from select Missouri public schools. This study also attempted to look at a number of other possible variables that

may also impact teacher perceptions of school climate. The research from this study strengthens the evidence that there is a positive relationship between PBIS implementation and school climate (Sugai, 2009). A weak slight positive significance was found based on the gender of the educator reporting. The tier level of implementation was not found to be a significant predictor of teacher perceptions of school climate based on this data.

The results of this study should be used as a basis for additional research in the area of school climate and PBIS implementation. Continued research in the areas of school climate and PBIS implementation, the use of other school intervention systems other than PBIS, and other variables surrounding the learning environment may allow school leaders to establish and maintain healthier schools and, ultimately, improve teacher perceptions and student outcomes.

This research has begun to look at the predictor variables of teacher perceptions of school climate in relation to PBIS. While this research showed only the connection to the implementation of PBIS within a school building, better surveying of larger schools or collecting information in a face-to-face context may make for better data collection of the variables perceived to be tied to teacher perceptions of school climate as hypothesized by the researcher. The researcher's experience regarding tier level of implementation differs from the survey data, with furthering the tier level of PBIS implementation having a greater effect on a positive school climate. When schools do attempt the cooperative efforts of addressing students' behaviors with the implementation of PBIS, or other behavioral framework or program, the school would appear to reap the benefits of better school climate. The perceptions of better school climate, in turn, works well for teachers'

morale, students' achievement, and perhaps overall productivity of the school building or district in a given year. It is imperative to continue the research in this area to improve the effectiveness of the teaching and learning in our schools.

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Appendix A

OCDQ-RE

Directions: The following are statements about your school, Please indicate the extent to which each statement characterizes your school.	Rarely Occurs	Sometimes Occurs	Often Occurs	Very Frequently Occurs
1. The teachers accomplish their work with vim, vigor, and pleasure.	1	2	3	4
2. Teachers' closest friends are other faculty members at this school.	1	2	3	4
3. Faculty meetings are useless.	1	2	3	4
4. The principal goes out of his/her way to help teachers.	1	2	3	4
5. The principal rules with an iron fist.	1	2	3	4
6. Teachers leave school immediately after school is over.	1	2	3	4
7. Teachers invite faculty members to visit them at home.	1	2	3	4
8. There is a minority group of teachers who always oppose the majority.	1	2	3	4
9. The principal uses constructive criticism.	1	2	3	4
10. The principal checks the sign-in sheet every morning.	1	2	3	4
11. Routine duties interfere with the job of teaching.	1	2	3	4
12. Most of the teachers here accept the faults of their colleagues.	1	2	3	4
13. Teachers know the family background of other faculty members.	1	2	3	4
14. Teachers exert group pressure on non-conforming faculty members.	1	2	3	4
15. The principal explains his/her reasons for criticism to teachers.	1	2	3	4
16. The principal listens to and accepts teachers' suggestions.	1	2	3	4
17. The principal schedules the work for the teachers.	1	2	3	4
18. Teachers have too many committee requirements.	1	2	3	4
19. Teachers help and support each other.	1	2	3	4
20. Teachers have fun socializing together during school time.	1	2	3	4
21. Teachers ramble when they talk at faculty meetings.	1	2	3	4
22. The principal looks out for the personal welfare of teachers.	1	2	3	4
23. The principal treats teachers as equals.	1	2	3	4
24. The principal corrects teachers' mistakes.	1	2	3	4
25. Administrative paperwork is burdensome at this school.	1	2	3	4
26. Teachers are proud of their school.	1	2	3	4
27. Teachers have parties for each other.	1	2	3	4
28. The principal compliments teachers.	1	2	3	4
29. The principal is easy to understand.	1	2	3	4
30. The principal closely checks classroom (teacher) activities.	1	2	3	4
31. Clerical support reduces teachers' paperwork.	1	2	3	4
32. New teachers are readily accepted by colleagues.	1	2	3	4
33. Teachers socialize with each other on a regular basis.	1	2	3	4
34. The principal supervises teachers closely.	1	2	3	4
35. The principal checks lesson plans.	1	2	3	4

36. Teachers are burdened with busy work.	1	2	3	4
37. Teachers socialize together in small, select groups.	1	2	3	4
38. Teachers provide strong social support for colleagues.	1	2	3	4
39. The principal is autocratic.	1	2	3	4
40. Teachers respect the professional competence of their colleagues.	1	2	3	4
41. The principal monitors everything teachers do.	1	2	3	4
42. The principal goes out of his/her way to show appreciation to teachers.	1	2	3	4

Appendix B

Demographic Questionnaire

The purpose of this questionnaire is for you to provide some basic background information about yourself and your experience with Positive Behavior Interventions and Supports. Please complete the following demographics questionnaire.

1. Gender:
    a. Male
    b. Female
2. How many years have you been in education? _____
3. How many years have you been teaching at current school? _____
4. Is your school a K-2, K-4, K-6, 3-4, or 5-6 school building?
    a. K-2
    b. K-4
    c. K-6
    d. 3-4
    e. 5-6
    f. other
5. How many students are in your school?
    a. Less than 300 (small)
    b. 301-500 (medium
    c. 501 or more (large)
6. Is your school currently implementing PBIS?
    a. Yes

b. No

7. If your school is currently implementing PBIS, for how long? _____

8. If your school is currently implementing PBIS, at what level?

    a. Tier One

    b. Tier Two

    c. Tier Three

9. Is your school located in the Missouri RPDC Southwest or South Central Region?

    a. Missouri RPDC Southwest Region

    b. Missouri RPDC South Central Region

10. Your current role in the school building?

    a. Teacher

    b. Counselor

    c. Paraprofessional/Aide

    d. Student Teacher

    e. Other _____

Appendix C

Consent Email

Dear Colleague,

My name is Rebecca Quackenbush and I am an assistant principal at Summit Intermediate in Nixa, MO. I am a doctoral student at Southwest Baptist University and I am conducting a research study to extend the limited research that exists on the impact of the varying levels of PBIS implementation on school climate as seen in the perceptions of teachers. I am surveying all elementary teachers (K-6) in the South Central and Southwest Missouri RPDC Regions Six and Seven. Since you are the teacher at your current elementary school, I would like to ask for your participation. I realize that you are very busy; the survey should take no more than 15 minutes of your time to complete. The survey is completely confidential. It will ask you for demographic information and your experience with perceptions regarding and knowledge levels of PBIS and school climate within your current school building.

Your privacy is important; your answers will be combined with other participants and reported in aggregate form. Information reported will not indicate individual participants or school districts. There is no penalty should you choose not to participate or answer all of the questions. Your completion and submission of the survey will indicate your consent to participate and permission to use the information that you have provided in my study.

Before you make a final decision about participation, please read the following statements about how your responses will be used and how your rights as a participant will be protected:

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without names or other identifying information.
- Your participation will take approximately 15 minutes. During this time you will answer questions about how you perceive the impact of the varying levels of PBIS implementation on school climate within your school building.

This project was reviewed and approved by the RRB Committee at Southwest Baptist University (326-1659). The committee believes that the research procedures adequately safeguard the subjects' privacy, welfare, civil liberties and rights.

Upon completion of this survey, your e-mail address will be entered into a random drawing for a $10 gift card to show my appreciation for your valuable time.

You may contact me at 417-773-0661 if you have questions or concerns about your participation. If you would like a copy of the results of this study you may contact me via E-mail at beckyquackenbush@nixaschools.net. Thank you for your time and consideration.

Sincerely,
Rebecca Quackenbush

Appendix D

Instrument Permission Request Email

Dr. Wayne K. Hoy, D. Ed.

School of Educational Policy and Leadership

Ohio State University

Columbus, OH 43210

Dear Dr. Hoy:

My name is Rebecca J. Quackenbush and I am a Doctoral Student in the Ed. D. program at Southwest Baptist University. I am seeking permission to use the Organizational Climate Description For Elementary Schools (OCDQ-RE) for my dissertation, "The Relationship Between Teacher Perceptions of School Climate and Use of Positive Behavior Interventions and Supports."

In regard to my dissertation, I intend to conduct a quasi-experimental analysis studying the perceptions of teachers based on their tier level of implementation of PBIS on school climate. Ultimately, I seek to further determine the relationship between PBIS implementation as it is sustained through the levels and years of implementation related to school climate.

In summary, I would be honored if you would allow me permission to use your Organizational Climate tool as the survey instrument in my dissertation with SBU. At this time, the OCDQ-RE appears to be the appropriate vehicle for acquiring the data necessary in a K-6 environment. Additionally, I would be willing to supply you with my full results and comply with any requirements you have on the use of your tools. Any feedback you have in this area would be welcomed and greatly appreciated.

Please let me know if you have any questions or would like additional information on my study. I can be reached at (417)773-0661 or beckyquackenbush63@gmail.com I look forward to hearing from you.

Sincerely,

Rebecca J. Quackenbush

Appendix E

Instrument Permission E-mail

Dear Rebecca-

You have my permission to use the OCDQ-RE for your research.

Best wishes.

Wayne

Wayne K. Hoy

Fawcett Professor Emeritus in

Education Administration

The Ohio State University

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