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The relationship between positive behavior interventions and supports and school climate/ culture in elementary schools

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THE RELATIONSHIP BETWEEN POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS AND SCHOOL CLIMATE/CULTURE IN ELEMENTARY SCHOOLS

by

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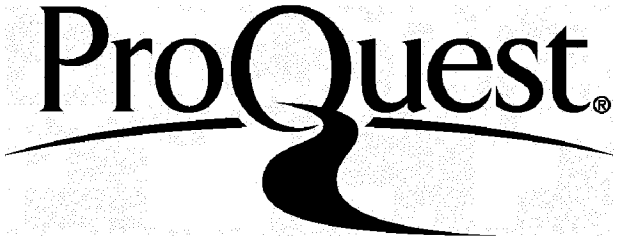

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ABSTRACT

Based on the Individuals with Disabilities Education Act (IDEA) mandates, weakened climate/culture, decreased academic scores, and endangered job security, the implementation of a successful behavioral intervention program within the school setting was a necessity (Horner & Sugai, 2000). Quantitative data were obtained from two assessment tools, the School-wide Evaluation Tool (SET) and the School Climate Assessment Instrument (SCAI). To determine the levels of implementation of Positive Behavior Interventions and Supports (PBIS), and if there were significant differences in the levels of the participating schools' climate and culture, the following research questions were answered: (a) What is the level of implementation of Positive Behavior Interventions and Supports in the selected schools over a three-year period? (b) Were there any significant differences in the levels of climate/culture amongst the selected schools? The population of the study came from the faculty of four elementary schools in northern Louisiana. To protect the anonymity of the schools, the participating schools were listed as Schools A through D. According to the General Index obtained from the SET, each of the four schools had satisfactory levels (for the school years of 2012-13, 2013-14, and 2014-15) of PBIS implementation, however it was noted that there were significant differences amongst all four schools in each dimension of the SCAI. Building level administrators can benefit from the findings of this study. Building level

administrators should guide their schools with the knowledge that consistent PBIS implementation and a positive climate/culture can provide progressive changes.

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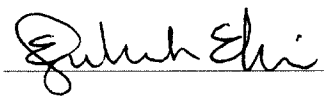
Author 

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DEDICATION

This dissertation is dedicated with love and thanks to my family and friends who offered their support to me on my educational journey. Your words of encouragement and prayers served as my second wind. I am forever grateful!

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CHAPTER I

INTRODUCTION

Sugai and Simonsen (2012) defined Positive Behavior Interventions and Supports (PBIS) as a systems approach for establishing the social culture and individualized behavioral supports needed for schools to be effective learning environments for all students. Baker (2005) noted that PBIS was conceptualized as a framework that identified predictable problems, selected logical strategies to improve outcomes, facilitated consistent implementation, and used data to evaluate their success. Lindsey (2008) noted that the purpose of PBIS was to establish a climate in which appropriate behavior was the norm. Lindsey (2008) also noted that the attention of PBIS was focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improved lifestyle results for all youth by minimizing targeted misbehaviors.

Healthy schools that upheld high academic standards, leadership, and reciprocity, provided a climate more conducive to student success and achievement (Hoy, Tarter, & Bliss, 1990). Climate and culture have been noted to be coinciding notions by theorists (Miner, 1995). According to Wang, Haertel, and Walberg (1997), the school climate and culture were among the top influences that affected the improvement of student achievement and organizational health. Sugai and Simonsen (2012) also noted that a school's culture was the standard used to identify acceptable and unacceptable behavior.

Additionally, Cornelius-White (2007) noted that positive classroom climate and culture were important for students' learning, achievement, and motivation. Woolfolk and Hoy (1990) defined climate as the atmosphere, while Heck and Marcoulides (1996) noted that culture was the composition of a school's values and norms. Sarason (1996) reported that changes made to improve schools without addressing the culture had been unsuccessful.

In 1995, Kauffman noted that the lack of social and academic preparation for school unfortunately was the norm in present-day society; children were now entering school settings unprepared to handle the expectations and obligations mandated by the school system. Due to the lack of preparation for high behavioral and academic expectations, the climate and culture at many schools were compromised and the importance of PBIS was more evident (Hoy & Tarter, 1997).

Statement of the Problem

With increased behavioral problems, concerns for effective interventions and methods of remediation for students with behavior problems surfaced (Kauffman, 1995). Carrell and Hoekstra (2009) noted that the addition of one troubled student to a classroom of 20 affected the climate and decreased academic scores more than two thirds of a percentile point.

Based on the mandates of PBIS through the Individuals with Disabilities Education Act (IDEA), schools were held accountable for regulating behavior, which led to the search for effective programming (Sugai & Simonsen, 2012). Additionally, Horner and Sugai (2000) noted that with the inception of academic accountability regulations, teacher retention was linked to performance, and any factors that inhibited student

performance had to be corrected; therefore, the implementation of a successful behavioral intervention program was imperative.

Significance of the Research Problem

The relationship between the classroom environment, student behavior, and academic engagement has been investigated by several researchers (Guardino & Fullerton, 2010; Hood-Smith & Leffingwell, 1983; Visser, 2001). Nelson, Martella, and Marchand-Martella (2002) noted that a classroom that was well-organized with established rules, allowed the teacher to have more positive interactions with students, increased time-on-task, and escalated student performance, all while it decreased the occurrence of challenging behaviors.

Presentation of Methods

This study examined data gathered from two assessment tools to determine the levels of Positive Behavior Interventions and Supports (PBIS), and if there were any significant differences in the levels of a school's climate/culture. The School-wide Evaluation Tool (SET), measured the levels of implementation of PBIS within each school (See Appendix A), and the School Climate Assessment Instrument (SCAI) was used to determine the significant differences in the levels of climate/culture amongst the selected schools (See Appendix B).

Research Questions/Hypotheses

The hypotheses were formulated from the following research questions:

1. What is the level of implementation of Positive Behavior Interventions and Supports in the selected schools over a three-year period?

2. Were there any significant differences in the levels of climate/culture amongst the selected schools?

According to research (Algozzine, Wang, & Violette, 2011; Cushing, 2000; Guardino & Fullerton, 2010; Harms, 2011) there is a link between Positive Behavior Interventions and Supports in elementary schools and climate/culture. It was hypothesized that there would be significant levels of implementation of climate/culture as measured on the SCAI amongst the schools that had high PBIS implementation as measured by SET scores. Analysis of data allowed for the hypothesis to be investigated.

Null Hypotheses

$H1_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Physical Appearance.

$H2_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Faculty Relations.

$H3_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Student Interactions.

$H4_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Leadership/Decisions.

$H5_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Discipline Environment.

$H6_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Learning/Assessment.

$H7_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Attitude and Culture.

$H8_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Community Relations.

Conceptual Framework

The conceptual framework that guided this study was developed by Talcott Parsons, and was known as the Parsonian Framework. Parsons (1967) specified that an organization was distinguished from others by its alignment toward the attainment of an identified goal. As a result of the new mandates outlined in IDEA for systems of education, the goal was to implement a behavior intervention program that would positively affect climate/culture. An important component of the Parsonian Framework was the A.G.I.L. model; which was a universal analytic model appropriate for analyzing all types of collectivities (Ritzer & Goodman, 2016). The A.G.I.L. model represented the four basic functions that all social systems must perform in order to thrive (Parsons, 1959).

Hoy, Tarter, and Woolfolk (2006) noted that the facets of the A.G.I.L. model interacted with one another to produce a positive dynamic for learning as well as a unified, constructive academic environment. According to Parsons (1959), "A" stood for adaptation and was defined as the acquisition of adequate resources, "G" represented the resolution and execution of goals, "I" signified integration, which was the coordination amongst the subunits of the system, and "L", which stood for latency. Latency denoted the generation, preservation, and transmission of the system's culture and values.

In 1973, Parsons and Platt expounded on the A.G.I.L. model and noted the three major levels of organizational structure to be technical, managerial, and institutional. When looking at the hierarchy of the model, the technical system was noted to be the

bottom level, and was noted to be where the product was manufactured. As it pertained to a system of education, the technical level was the classroom where the teacher taught and/or remediated the students. Above the technical level was the managerial level. In the system of education, this level housed members of administration (superintendents, principals, supervisors, etc.) whose purpose was to mediate and administer the decisions made by those in the institutional system. The institutional system was noted to be the top level and those in this level were responsible for the relationship of the organization to the larger society. Goals, laws, and standards were composed at this level. In the system of education, this level was composed of the governing bodies (district-level school board and state and national departments of education) associated with the schools. Tumtavitikul (2013) noted that when those from each of the three levels of an organization's structure worked diligently, the students and academic environment thrived.

The Parsonian Framework also noted an organization's subsystems. In 1961, the five subsystems were noted by Parsons to be production, supportive, maintenance, adaptive, and managerial. Production was noted to be the transformation of materials. The supportive subsystem's purpose was to garner resources and gain acceptability for the organization within the community. The act of recruiting, socializing, training, and preserving the organization was organized in the maintenance subsystem. The fourth subsystem was adaptive. In this subsystem, research, long-term planning, and changes were completed. The managerial subsystem controlled coordinated, developed policies, and directed the other subsystems. Wang et al. (1997) noted that the five subsystems were crucial to the success of all systems of education as they attempted to procure high levels

of academic performance, obtain and maintain a positive climate/culture, and garner support from the community.

Assumptions of Implementing Positive Behavior Interventions and Supports (PBIS)

The following assumptions were noted during the study:

1. PBIS should only be done to address problematic behavior, but according to Lewis, Sugai, and Colvin (1998), it was best practice to intervene before targeted behaviors occurred.
2. Faculty/staff viewed PBIS as an intervention or practice, however Sugai and Simonsen (2012) noted the following:

   > Although PBIS was comprised of research-based behavioral practices and interventions that had been shown to improve social behavior and academic achievement, PBIS was more accurately described as a "framework" or "approach" that provided the means of selecting, organizing, and implementing these evidence-practices by giving equal attention to (a) clearly defined and meaningful student outcomes, (b) data-driven decision making and problem-solving processes, and (c) systems that prepared and supported implementers to use these practices with high fidelity and durability (p. 4).

3. All responsibilities belonged to the administrative and/or PBIS team, and that PBIS was a "cure-all." Jolivette, Barton-Arwood, and Scott (2008) noted that unclear PBIS or lack of training and follow-up were the reasons teachers had skewed viewpoints, but according to Lassen, Steele, and Sailor (2006), the team(s) and teacher(s) had to partner together to ensure the success of PBIS and the promotion of climate/culture.
4. The behavioral climate of a school was not influenced by peer interactions as much as adult–student interactions, but according to Cushing (2000), if all students knew the school's behavioral expectations and were taught the same expectations, students were more prone to encourage and reinforce appropriate behavior in their peers.

5. According to Koegel, Koegel, and Dunlap (1996) an overwhelming amount of educators noted that all strategies had been tried and failed; therefore, another PBIS strategy would also be ineffective and the promotion of climate and culture were impossible. However, according to Guardino and Fullerton (2010), students who displayed problematic behaviors, especially chronic and severe behaviors, posed daily difficulties and needed several different methods to remediate the problematic behavior, function effectively, and cope adequately.

Limitations

The following limitations were noted during the study:

1. Data from the SCAI were limited to only faculty responses. Responses from parents, students, and administrators were not solicited.
2. Gathering data for determining if there were significant differences in the levels of climate/culture was confined to a self-reported survey.
3. Causality among variables was not determined because the research was not experimental.
4. The results of this study were limited to the population of elementary schools in Louisiana.

Delimitations

The following delimitations were noted during the study:

1. This study was confined to one school system in northern Louisiana.
2. This study was used to examine only elementary schools.

Definitions

Seven terms used throughout the study are climate, culture, Parsonian Framework, Positive Behavior Interventions and Supports, School Performance Score (SPS), student achievement, and student discipline. They are defined as follows:

1. Climate: Cybulski, Hoy, and Sweetland (2005) noted climate as a stable set of organizational characteristics that captured the tone or atmosphere of a school.
2. Culture: Referred to as a system of shared assumptions, values, and beliefs that showed people what was appropriate and inappropriate behavior (Chatman & Eunyoung Cha, 2003).
3. Parsonian Framework: Concepts based on the work of Parsons (Hoy, Tarter, & Kottkamp, 1991; Parsons, 1959; Parson, 1961; Parsons, 1967; Parsons & Platt, 1973; Ritzer & Goodman, 2016; Tumtavitikul, 2013).
4. Positive Behavior Interventions and Supports (PBIS): According to the National Technical Assistance Center on Positive Behavioral Interventions and Supports, U.S. Department of Education, Office of Special Education Programs (2015), PBIS was a system that referred to a change process for an entire school or district. The fundamental premise was teaching behavioral expectations in the same manner as any core curriculum subject.
5. School Performance Score (SPS): Since 1999, the Louisiana State Department of Education issued School Performance Scores for public schools, which were based on student achievement data. To communicate, the quality of school performance to families and the public, Louisiana adopted letter grades

(A-F). All schools with sufficient data received school performance scores (Louisiana State Department of Education, 2016).

6. Student Achievement – As noted in the Elementary and Secondary Education Act of 1965, and amended by the No Child Left Behind Act of 2001 (NCLB), there were numerous ways to measure student achievement: grades, graduation rates, the procurement of skills, and test scores (International Society for Technology in Education, 2008).
7. Student Discipline- Discipline came from the Latin word *disciplina,* meaning instruction or teaching to correct, strengthen, or perfect (Sailor, 2004). The conventional notion of discipline was based on obedience (Gartrell, 1997).

Purpose of the Study

In recent years, policymakers enforced increasingly greater accountability demands for student achievement and behavioral culpability; resulting in outlined proficient measures for student achievement by legislators (Algozzine et al., 2011). Schools struggled daily in efforts to meet the mandated standards, while dealing with the interference of behavioral issues (Stronach & Piper, 2008). Student disruptions resulted in the loss of substantial instructional time that ultimately impacted student performance (Sugai, 2003). As a result, the implementation of Positive Behavior Interventions and Supports increased in the schools.

Mirzajani and Morad (2015) noted that the collection and disaggregation of data (a) reinforced the efforts of principals who moved their schools to the advocacy levels for needed changes; (b) identified and capitalized on the best practices used to gain support from teachers and move them towards being vested in the vision of the principal; (c)

helped principals to examine and transform the way they originated needed changes; and (d) assisted principals with the development of specific strategies and attainment of support to move their school to a more proficient level of performance.

PBIS is neither a program nor a curriculum of prescribed approaches. Rather, it is conceptualized as a framework under which systems identified predictable problems, selected logical strategies to improve outcomes, facilitated consistent implementation, and used data to evaluate their success (Baker, 2005). In addition to instructional supports, Nakasto (2000) linked PBIS to academic achievement and appropriate social behavior. Cohn (2001) reported positive impacts on school climate with students and school staff, as a result of using PBIS. Further studies related to improvements in academics, showed progress in student behavior and school climate (Fleming et al., 2005; Horner et al., 2009; McIntosh, Chard, Boland, & Horner, 2006; Nelson, Colvin, & Smith, 1996; Wentzel, 1993). Enhancements in academic performance when both behavioral and instructional supports were provided was reported by several researchers (Horner, Sugai, & Vincent, 2005; Lewis & Sugai, 1999; Schaughency & Goodman, 2003; Scheffler & Aksamit, 2006; Sugai, 2003). Based on the aforementioned information, this study attempted to determine the levels of implementation of Positive Behavior Interventions and Supports, and if there were any significant differences in the levels of a school's climate and culture.

CHAPTER 2

REVIEW OF LITERATURE

Too many times children have entered school settings unprepared to handle the expectations and obligations to which the administrators, teachers, and other stakeholders have established (Kauffman, 1995). Research has shown that creating a positive school climate can assist districts, schools, and teachers with meeting goals (Fleming et al., 2005; Horner et al., 2004; McIntosh et al., 2006; Nelson et al., 1996; Wentzel, 1993). These goals included increased student achievement and minimized academic achievement gaps (MacNeil, Prater, & Busch, 2009); increased high school graduation rates (Christle, Jolivette, & Nelson, 2007); decreased teacher turnover; increased teacher satisfaction (Weiss, 1999); and more proficient performance at academically unacceptable schools (Becker & Luthar, 2002).

Positive Behavior Interventions and Supports (PBIS)

Lifestyle change and having a positive, productive educational experience was the overall goal of Positive Behavior Interventions and Supports (Killu, Weber, Derby, & Barretto, 2006). Koegel et al. (1996) insisted that Positive Behavior Interventions and Supports (PBIS) strategies be non-aversive and not rely on coercion or punishment. Nelson et al. (2002) referenced Positive Behavior Interventions and Supports as a contributing factor to positive teaching and learning environments and the reduction of

problematic behaviors, which would boost the school's climate and culture. According to Gable, Quinn, Rutherford, and Howell (1998), a learning environment flourished because PBIS provided educators with the resources to implement personalized interventions, while minimizing problematic behavior and increasing prosocial behavior.

According to LaRocque, Brown, and Johnson (2001), two memorandums were issued under the Individuals with Disabilities Education Act of 1997. The first memorandum suggested a child's behavior be covered in the Individualized Education Plan (IEP), and addressed immediately upon becoming problematic. The second memorandum issued by the Office of Special Education Programs named Positive Behavior Interventions and Supports (PBIS) as a key initiative. Though these memorandums were first composed for the special education population, they were revised and mandated that PBIS be an initiative for all students. The Individuals with Disabilities Education Act of 1997 (IDEA 97) not only mandated that the problem behaviors be addressed, but teaching acceptable replacement behaviors were noted to be a requirement as well (Drasgow, Yell, Bradley, & Shriner, 1999). The new requirements of IDEA 97 referred to the "best practices" proactive approach to decrease problem behavior in addition to increased school accountability through the application of behavioral and social learning, and organizational behavioral principles (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008).

Participation in Positive Behavior Interventions and Supports

In 1996, Nelson noted that in order to be proactive and teach acceptable behaviors, Positive Behavior Interventions and Supports programs needed to include four main elements: (a) school-wide practices, (b) classroom management interventions, (c)

individualized plans, and (d) a team to organize and guide the maintenance of the program. School wide practices had to outline behavior for the classroom, restroom, hallways, cafeteria, and playground; the expectations had to be posted. Bradshaw et al. (2008) noted that members of administration should discuss classroom management interventions during professional development and faculty meetings, and monitor it during evaluations and walk-throughs. Tucker and Stronge (2005) added that both teachers and students had to be taught the behavioral expectations.

Bradshaw, Mitchell, and Leaf (2010) noted at the onset of the school year, a team of at least six to ten staff members should be assembled to monitor the PBIS program. The team should be comprised of an administrator, and at least one of each of the following: (a) a classroom teacher, (b) an elective teacher, (c) a paraprofessional, and/or (d) an ancillary staff member (nurse, pupil appraisal representative, custodian, cafeteria worker, etc.). The team also needed to (a) meet at least twice a month to discuss the progress or lack thereof of the PBIS program, (b) develop materials to support program implementation, (c) train other staff members, (d) plan upcoming PBIS events, and (e) document gathered information throughout the month. May et al. (2003) determined the team was also responsible for collecting, analyzing, and using disciplinary data (e.g. discipline referrals, suspensions, detentions, and the removal of privileges [recess, assemblies, field trips, and classroom/school-wide celebrations]) for data-based decision making.

The Purpose of Measuring the Implementation of PBIS

In 2011, Harms noted that when measuring Positive Behavior Interventions and Supports, one was seeking to determine if the staff and teachers were doing what they

should do, when they should do it, and how they said they would do it. Harms also stated that change was likely to be seen first in adults and would not be visible until implementation was 80% proficient. Reviewing data helped schools know if they moved in the correct direction and how to reinforce their efforts.

According to Achenbach and Rescorla (2001) scales with minimal items, unless the items referred to very similar competencies, tended to have low alphas, and needed to be interpreted within the context of the overall measure. In 2006, Tobin advised schools to be careful and not to offer too many options for interval scales because it could lead to confusion. Ensuring that the correct measurement tool was used to assess the implementation of PBIS would produce more accurate data and provide insight to the school; asking detailed questions would determine which tool should be used. By inferring about the implementation measurement tool and what results were sought, the data gained was be beneficial to the success of the school. A study regarding the purpose of PBIS was conducted by Spaulding et al. in 2010. The results were noted to (a) identify effective classroom practices that had been proven to be effective, (b) identify different types of technical support that enhanced effective classroom practices, (c) identify key responsibilities to assure effective classroom practices were used, (d) identify various types of outcome data that were utilized in the reform of a school's climate/culture, and (e) inform the administrators of practices that increased faculty/staff morale.

The Review of Outcome Data

Todd, Campbell, Meyer, and Horner (2008) noted that Check-In/Check-Out (CICO) was a targeted intervention on the three-tiered Response to Intervention (RtI) system of support. It was to be used for students with mild behavioral difficulties. CICO

could also be used as in intensive intervention for students requiring individualized support. Anderson et al. (2008) noted that CICO was designed to reduce incidences of disruptive behavior and increase prosocial behavior. Campbell and Anderson (2008) noted that Check-In/Check-Out progress notes were helpful documents that measured the frequency of problematic behavior. The amount of correspondence to parents/guardians (letters and/or phone calls), lunch detentions, behavioral referrals, and suspension rates could also measure whether there was a decline in the frequency in problematic behavior. Lastly, a rise in test scores, increased grade point average, and increased classroom participation proved whether or not the Positive Behavior Interventions and Supports had a positive effect on school climate (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004).

According to Bradshaw, Koth, Thornton, and Leaf (2009), PBIS had a direct impact on the climate/culture of a school. The completion of the SET with school faculty/staff and students provided the members of administration with insight regarding the success of PBIS. According to Todd et al. (2012), the SET examined the status and need for improvement of four behavior support systems with-in the school: (a) school-wide discipline systems, (b) non-classroom management systems (e.g., cafeteria, hallway, and playground), (c) classroom management systems, and (d) systems for individual students engaging in chronic problematic behaviors. Each question in the SET was related to one of those four systems. They also said that "SET results were summarized and used for a variety of purposes including: (a) annual action planning, (b) internal decision making, (c) assessment of change over time, (d) awareness building of staff, and (e) team validation" (p.159). With positive behavior from students and optimal climate and culture, the morale of the faculty/staff would be high, as well as the rate of teacher

retention. It was also noted that absences (other than for illness and exigent circumstances) and disciplinary problems would be low if PBIS was effective (Sprick, Alabiso, & Yore, 2015).

The Link between PBIS and Enhanced Discipline in School

To reduce student behavior problems and promote a positive school climate, local school districts, educational researchers, and policymakers turned to Positive Behavior Intervention Supports (Horner et al., 2005). Several studies revealed that PBIS led to sustained alterations in schools' discipline practices and significantly reduced infractions (Barrett, Bradshaw, & Lewis-Palmer, 2008; Nersesian, Todd, Lehmann, &Watson, 2000; Taylor-Greene & Kartub, 2000). The tiered supports helped to manage behavior by providing different levels of assistance and interventions based on the students' various needs (U.S. Department of Education, 2014). Taylor-Greene et al. (1997) reviewed, conducted several studies, and noted a 42 percent reduction in discipline referrals following the implementation of PBIS. After the implementation of PBIS, Barrett et al. (2008), documented remarkable reductions in suspensions in elementary and middle schools. Muscott, Mann, and LeBrun (2008) noted reductions in discipline referrals in middle and high schools amongst schools trained in implementing PBIS.

Horner and Sugai (2000) described the six principles associated with PBIS that caused a decline in discipline issues. The first principle that must be adhered to is setting consensus driven behavior expectations. Next, the school must teach critical interpersonal skills followed by providing systematic positive reinforcement. In addition, to the above, the efficacy of the intervention must be monitored and the data must be disaggregated. Furthermore, the stakeholders must be involved in the comprising of discipline practices,

and lastly the exchange of reactive, punitive, and exclusionary strategies for proactive, preventive, and skill building orientation must occur.

Gottfredson (1997) and Lipsey (1991) noted that when system-wide behavioral intervention was paired with social skills training and academic curricula modifications, PBIS was shown to be an effective strategy in more than 800 studies. Social skills training, according to Bradshaw et al. (2010), referred to the development of non-cognitive student competencies. These competencies included awareness, self-management, resilience, social agility, and responsible decision-making. These skills were said to help students concentrate on learning through the practice of self-control (Deal & Peterson, 1999).

Attending school for students does not provide them with just an academic education, but also with the positive social interaction knowledge they lack. Help for some of the students determined their future not only in school, but in society as well. According to Horner and Sugai (2000), the message that the faculty needed to convey to the students was that effective behavior supports were not just about punishment and controlling their behaviors, but also about teaching the skills that made problematic behaviors irrelevant, and relatively minute.

In order for social competence to be mastered, students must be trained; teaching students how to interact more effectively with peers and adults enhanced conflict resolution, problem solving, negotiation, and friendship making abilities (Reid, Eddy, Fetrow, & Stoolmiller, 1999). Dishion, Patterson, Stoolmiller, and Skinner (1991) noted that establishment of positive social relationships between students and staff was an important training aspect. Dishion et al. (1991) also noted that not only do students need

training to create and promote a safe and positive school climate, but so do all school staff. The training should include how to engage students, encourage positive behavior, and how to provide feedback judiciously. Additionally, Weissberg and Greenberg (1998) noted that positively reinforcing students was imperative.

Behaviors

Behaviors can be deemed positive or negative dependent upon the judge. Hearron and Hildebrand (2009) noted that one's value system was contingent upon his/her family's circumstances, cultural background, and life experiences. Feelings about one's self and life in general contributed to one's perception as well. These parts of one's life determined what was believed to be a positive or negative behavior. Positive behaviors were those which helped children become well adjusted, productive adult members of society.

Positive Behavior

They (Hearron & Hildebrand, 2009) also noted that positive behaviors were showcased at a developmentally appropriate stage and paved the way for the next stage. Understanding and observing behaviors provided insight to schools with ways to adjust expectations so that the behavior was within the realm of possibility for children to achieve. After toddler years, Brazelton (1992) noted that action was the positive behavior that would be displayed. Action was the key to healthy development; an inclination that the child was growing. Action from age three and up would change as new milestones were met. Action began with continuous play and as the child entered school, merged to classroom/extracurricular participation, gathered with friends, partook in conversations,

exhibited displays of affection, completed school and household tasks, and/or enjoyed hobbies.

Acknowledging Positive Behaviors

The Positive Behavior Interventions and Supports (PBIS) model mandated that students receive incentives and be acknowledged for positive behaviors (Bradshaw et al., 2008). Acknowledging positive behaviors was a strategy that helped educators devote more time and attention to the desirable behavior rather than focusing on undesirable behaviors. According to Timm and Doubet (2007), the acknowledgement of positive behaviors was used on children from two years of age to preadolescence. Biglan (1995) noted that acknowledging positive behaviors was used to help increase and maintain positive child behaviors. Strain and Timm (2001) stated that acknowledging positive behaviors decreased aggressive and destructive behaviors, minimized the failure to follow instructions, and reduced inappropriate communication. This approach required that adults give positive responses to desired behavior. Timm and Doubet (2007) also proclaimed that positive responses involved communicating verbally and/or nonverbally in addition to the dissemination of tangible items.

Wood and Freeman-Loftis (2012) noted that in order for the acknowledgement of positive behavior to be successful, the use of positive words and tone of voice were imperative. First, the use of direct language must be a priority. When giving directions, noting behaviors, prompting the recollection of rules, minimizing inappropriate behavior, or merely engaging in conversation, language free of sarcasm, and negative words were mandates. Words, tone of voice, facial expression, body posture and gestures set the tone of the conversation and promoted a positive environment. The chosen language (a)

empowered students, (b) promoted learning, (c) assisted with the acquisitions of new skills, (d) helped to better the child, (e) ensured the desired behaviors, and (f) reduced power struggles. Brady, Forton, Porter and Wood (2003) reinforced Wood and Freeman-Loftis' positive word theory and elaborated on the responsibilities of the educators involved. Luiselli, Putnam, and Sunderland (2002), noted that there were four essential elements that promoted the reinforcement of positive behavior: (a) clarity, (b) consistency, (c) continuation, and (d) simplicity.

According to Luiselli et al. (2002), clarity (the first essential element) focused on clear plans, expectations, and procedures being conveyed to students, families, faculty/staff, and other stakeholders. Consistency is the second essential element that was noted to promote the reinforcement of positive behavior. It targeted the school and family members to ensure that they were on one accord as it pertained to interventions and approaches, as well as ensured that everyone was implementing the same expectations and reward system. The third element was continuation, which sought to ensure implementation with fidelity. This element was noted to be important to ensure the complete development of good habits and behaviors (Luiselli, Putnam, Handler, & Feinberg, 2005). According to Luiselli et al. (2002), the last element was simplicity, which aimed to guarantee that everyone understood the expectations and successfully implemented and/or executed each one.

Negative Behavior

Negative behaviors typically occurred because students had skill deficits, students did not know when to use skills, students were not taught what they needed to know, and/or skills were not taught in context (Lewis, Colvin, & Sugai, 2000; Lewis &

Garrison-Harrell, 1999). Brazelton (1992) noted that adults should not confuse "touchpoints" as negative behaviors. Touchpoints were defined as periods of time when a child's behavior "fell apart;" when they seemed to move backwards developmentally. Brazelton concluded that touchpoints invariably signaled a quick spurt of physical, cognitive, or socioemotional growth, which was when support in development was imperative. Teacher surveys also documented the extent of the problems that occurred. Thirty-five percent of teachers reported that student behavior interfered with their teaching (National Center for Education Statistics, 2007). In a study conducted by Sprague et al. in 2001, a reduction in problematic behavior levels was noted when PBIS was implemented. Decreases in problematic behavior were found in non-classroom areas where there were: (a) active teaching of expected behavior, (b) active supervision, (c) use of pre-correction for prevention, and/or (d) high rates of positive reinforcement(Lewis, Powers, Kelk, & Newcomer, 2002; Lewis et al., 1998).

Acknowledging Negative Behaviors

Shores, Gunter, and Jack (1993) noted that research indicated that one can improve behavior by 80% by noting someone's satisfactory actions. Wong, Wong, and Seroyer (2009) noted for a child to change an old behavior and exchange it with a new behavior, the new behavior must be carried out, on average, 28 times.

Positive Behavior Interventions and Supports highlighted using more positive feedback than negative. This method was often referred to as five positives to one negative or "5 to 1." In a study conducted in 2001 by Sprague et al., teachers found that providing more positive reinforcement throughout the school day led to lowered problematic behaviors in the school. Negative comments were not always comments that

were punitive; it could be a comment that offered a corrective declaration phrased without negative connotation. For example, Salend (2008) noted a negative comment was stating, "Please stop doing that behavior." Instead, the authority figure should remind the student of the behavior expectations and note the behavior that was displayed. It was beneficial to focus on the behaviors that were showcased in the classroom and provided feedback instead of focusing on correcting behaviors. According to Metzler, Biglan, Rusby, and Sprague (2001) behaviors had to be corrected, but had to be done quickly and the emphasis had to focus on the positive behaviors that went on in the classroom. McIntosh et al. (2006) recommended that authority figures use specific terms to praise students. The repetitive use of the phrase, "good job" failed in comparison to "thank you for raising your hand and waiting quietly until I addressed you." The more specific one was towards a student, the higher the impact and the more likely the student was to retain the way to showcase the desired behavior in the future.

Leadership

Leadership was an important component in the development and maintenance of the climate and culture of a school (Licata & Harper, 2001). Leadership was noted to be the art of creating a work atmosphere which motivated and directed the people who worked in the organization. It promoted the achievement of organizational aims and contributed to performance levels (Lashway, 1997; Manase, 1985; Sashkin, 1986).

Leadership and its Role in Climate and Culture

Leadership is a vital factor to the climate and culture of a school and a key component in the Positive Behavior Intervention and Support system (Sashkin, 1986).

The Parsonian Framework noted that when a school functioned at a sufficient level, the school adapted itself to its environment in efforts to reach its goals and promote the school's mission and vision (Parsons, 1959). Licata and Harper (1999) supported the aforementioned statement by adding that faculty/staff that received support and the necessary tools to be proactive in the learning process from their administrators, were more vested and willing to contribute to the school. However, according to Licata and Harper (1999), leadership alone would not suffice in the development and maintenance of satisfactory levels of climate/culture.

Leadership and its Role in Positive Behavior Interventions and Supports

Sugai, Horner, and Sprague (1999) argued that adequate, extensive training was a must. They also noted that administrators must ensure a well-trained faculty in order to ensure the successful implementation of the government mandate, Positive Behavior Interventions and Supports. Additionally the authors noted that faculty/staff training should occur at least twice during an 18-week period (a semester). Safran (2006) maintained that this allowed the staff the opportunity to voice all concerns and offer any suggestions that would make PBIS more successful.

Leadership was also responsible for ensuring that PBIS was implemented with fidelity (Safran, 2006). At the introduction of several initiatives, teachers showcased enthusiasm, but often were not able to carry out the requirements due to several reasons. According to Bradshaw, Reinke, Brown, Bevans, and Leaf (2008) these reasons included: (a) limited support, (b) feeling overwhelmed with other tasks, (c) not being vested in the school's mission and vision, (d) unclear directives, and (e) minimal training. The authors

also said monitoring and feedback by administrators should occur regularly to ensure the implementation of PBIS.

Lastly, it is leadership's responsibility to partake in and encourage active communication. Not only should leadership speak with the staff during follow-up observations of PBIS implementation, but other recurrent communication should occur. Bradshaw et al. (2008) noted that (a) having a suggestion box, (b) sending out emails with various professional development opportunities, (c) acknowledgments of great work with PBIS amongst all parties involved (students, families, faculty/staff, and other stakeholders), and (d) correspondence to the students' families regarding upcoming events and the progress or lack thereof of their child(ren) should all be completed in order to ensure the success of PBIS.

School Climate

Korkmaz (2004) noted that schools had to focus on the relationship between both inside and outside factors, and needed to pursue various methods to remediate potential deficits (specifically the use of Positive Behavior Interventions and Supports). The Parsonsian Framework conceptualized the two factors as instrumental needs and expressive needs (Parsons, 1959). Instrumental needs focused on the tasks and encompassed the goals of the organization. For a system of education, the goal was to find effective interventions and methods of remediation for students with behavior problems in an attempt to positively impact the climate/culture of a school. In an effort to promote the system of education's common goal, expressive needs focused on the emotional well-being of the faculty/staff. Parsons noted that focusing on the expressive needs of the faculty/staff was imperative in order to ensure everyone (a) maintained the

same mission and vision as the members of administration, (b) maintained high morale, (c) felt valued and empowered, and (d) was vested in the system of education's common goal.

Teaching and student learning were supported when the school's climate and culture were at a healthy level (Hoy & Miskel, 1991; Hoy & Tarter, 1997). Climate and culture were determined by the organization's display of (a) authenticity, (b) integrity, (c) accountability, (d) creativity, (e) trust, (f) service, and (g) communication amongst its employees (Laub, 2015). Laub (2015) also noted that when each level is functioning cohesively, students, teachers, and administrators will be able to exist in a constructive and collaborative learning environment.

As a result of an independent study from St. John's University (Gangi, 2010), that noted the School Climate Assessment Instrument (SCAI) was rated as the best assessment of school climate out of all leading options, the SCAI was chosen to measure the significant differences in the levels of climate/culture within the four participating elementary schools. Shindler (2016) noted that:

> The SCAI measured the levels of student achievement, school function, practice quality, and social and emotional health. The SCAI provided three options that represented three levels of phenomena. Item options represented the range of levels of institutional function, quality of practice and/or the experience of the participant at the school. Most items in the SCAI represent a range of phenomena from the most effective, functional, and/or desirable to those that represent the least functional, effective and/or desirable. (p.3)

Student Discipline and Climate in a School

A survey conducted by Public Agenda in 2015 determined that troubled children generated spillover effects in school. Results revealed that 85% of teachers and 73% of parents agreed that the "social experience of most students suffered at the expense of a

few chronic offenders" (p.16). Sun and Shek (2012) provided evidence that, in most cases, a single disruptive student affected the academic progress of every student in the class and altered the climate of the classroom.

According to Carrell and Hoekstra (2009), adding one troubled student to a classroom of 20 students decreased student reading and math test scores more than two-thirds of a percentile point (two to three percent of a standard deviation). Additionally, they noted that adding a misbehaving student also significantly increased behavior infractions of other students in the classroom by 16 percent. Bradshaw et al. (2008) conducted a study that documented the implementation of school-wide PBIS in elementary schools. The study noted that when faculty/staff implemented a discipline intervention program, specifically PBIS, the school was successful in achieving an improved climate. The United States Department of Education (2014) also implied that it was impossible to develop a safe, positive school where its climate and culture flourished when the school created inadequate, impartial discipline policies and practices that could not circumvent or alter improper student behavior, nor could they ensure policies were equitably applied.

Romi, Lewis, Roache, and Riley (2011) noted that students who were directed by forcible discipline were more distracted from their work and showed minimally responsible behavior in the classroom in comparison to students who were disciplined subtly. They added that aggressive discipline strategies were related to students' negativity towards the teacher and were a distraction from their work. In terms of students' well-being and motivation, Roache and Lewis (2011) reported that aggressive strategies produced negative results while subtle strategies yielded positive effects. If

order and standards were enforced in a reasonable manner, research has shown that students appreciated when their teachers were transparent, provided order, and upheld standards (Woolfolk-Hoy & Weinstein, 2006). Kauffman (1995) said that holding students accountable for their actions in developmentally appropriate ways helped students learn responsibility, respect, boundaries, and acceptable behaviors. Mainhard, Brekelmans, and Wubbels (2011) found that coercive teacher behavior was coupled with lower levels of teacher affiliation, yet supportive teacher behavior was associated with higher levels of teacher affiliation. They also found a negative correlation between teacher aggression and influence in class. It was noted that aggressive teacher behavior was seen as offensive and unacceptable. Kauffman (1995) noted when zero-tolerance policies and practices were coupled with suspension(s) and expulsion(s); such practices disintegrated trust between students and school faculty/staff. It also sabotaged efforts to create positive school climates that were imperative to the promotion of student achievement. Results of the report by the United States Department of Education (2014) implied that the development of positive school climate and improved school discipline policies and practices were critical steps to the growth of student achievement and the promotion of student success.

Climate, Culture, and Student Achievement

Tucker and Stronge (2005) noted that a school's climate, teachers' supports, and educational expectations of students are some of the most important factors associated with the students' academic achievement. Possible negative consequences for staff where climate and culture were low included: (a) a stressful work environment, (b) negative impact on the mental health of teachers, and (c) low student achievement (Boyd &

Shouse, 1997; Evans, 2004). Luiselli et al. (2005) proclaimed that establishing effective discipline practices was critical to ensuring academic success and providing a safe learning environment. A study conducted in elementary schools by Horner et al. (2009) noted that when systems of education were successful in implementing PBIS practices, the schools were experimentally linked to an improved perception of school safety. This conclusion was noted in the records of the School-wide Evaluation Tool (SET) conducted during the study. Additionally, according to Horner et al. (2009), with preliminary support, the implementation of PBIS was associated with an improved number of students who met the state reading standard.

When teachers were able to increase, strengthen, and maintain high levels of student academic engagement, there was a corresponding improvement in academic performance and achievement (DiPerna, Volpe, & Elliot, 2002). Greenwood, Delquardi, and Hall (1989) defined academic engagement as a student's observable and measurable behaviors that were related directly to classroom instruction. Greenwood (1991) expanded his definition of academic engagement to note that it was positively influenced by interventions that reduced disruption, distraction, and negative behaviors in the classroom.

Luiselli et al. (2005) noted that the implementation of preventative behavioral interventions reduced prevalence of antisocial behavior, and improved school climate, academic achievement, and culture. According to Shindler, Jones, Williams, Taylor, and Cadenas (2003), school climate and culture appeared to be the most predicative factors in any school's capacity to promote student achievement. Cornelius-White (2007) added that positive classroom climate and culture were important for students' learning,

achievement, and motivation. O'Connell (2008) noted that assessing and addressing school climate was an imperative component to any school's effort towards successful change and achievement. Fullan (2003) recapitulated the above research, when he noted that if the basic structure of a school was chaotic, its ability to promote academic growth would be minimal.

How to Promote School Climate in a School

Various studies have defined school climate differently. Halpin and Croft in 1963 noted a school's climate to be the "personality" of a school. James and Jones (1974) defined it as teacher satisfaction. Ma (2003) defined climate as academic emphasis. Pas, Bradshaw, and Herschfeldt (2012) noted school climate as the leading cause of teacher efficacy and effectiveness. Lynch (2016) also noted that the climate of a school can be affected by its physical appearance. Regardless of the definition, almost all the research that addressed school effectiveness suggested that the components of school climate (e.g. strong administrative leadership, high performance expectations, emphasis on basic skills, etc.) contributed to an effective school (Hoy et al., 1991).

Given the research-based relationship between school climate and academic achievement, various researchers (Hoy & Feldman, 1987; Hoy et al., 1990; Kauffman, 1995; United States Department of Education, 2014) outlined some steps to promote a healthy school climate in order to ensure academic achievement. The first step noted was to engage in deliberate efforts to create positive school climates. This task was accomplished by each school identifying goals (including discipline) for positive school climate. When compiling the goals, supports for all students (students of color, with disabilities, at risk of dropping out, homeless, refugees, those with parents who are

migrant workers, those in foster care, who have health concerns, are pregnant and/or parenting, English Language Learners, those who are a part of the Lesbian, Gay, Bisexual, Transgender, and Queer community, have behavioral problems, and those involved in the judicial system) should be included (The United States Department of Education, 2016). Areas of improvement were identified by completing a comprehensive needs assessment (United States Department of Education, 2014).

Next, Kauffman (1995) noted that schools must understand their civil rights responsibilities and aim to promote fairness and equality for all students. Successfully addressing civil rights responsibilities was accomplished by constantly reviewing policy, procedures, and practices. According to Tobin (2014), the Family Educational Rights and Privacy Act (FERPA) suggested that schools collect several types of data (according to privacy laws) to track progress towards the goal(s) and promote continuous improvement. In order to monitor the goal(s), schools had to create a committee that managed and monitored the data. According to the Parsonian Framework, the tasks and encompassed goals of a system of education was noted to be addressed by focusing on the instrumental needs (Parsons, 1959). Hoy et al. (1990) noted the committees needed to be comprised of students, teachers, administrators, parents, health professionals, and/or community representatives. In addition to managing and monitoring the data, the committee was also responsible for the receipt of complaints or the creation of alternative means for students, parents, and other stakeholders to convey concerns. The last step was to guarantee that clear and concise expectations and consequences were in place to prevent and/or address misbehavior (Hoy & Feldman, 1987).

Summary

Schools in the state of Louisiana were assigned grades based on their School Performance Score (SPS). Furthermore, the Local Education Agencies (LEA) that were responsible for schools that failed to make satisfactory School Performance Scores for three consecutive years, lost governing authority, and the schools were taken over by the state (Bradshaw et al., 2010). The mandates of the federal government, regarding the behavior of students in systems of education, warranted the implementation of an effective program that addressed and remediated problematic behavior(s). Additionally, climate/culture were noted by Bradshaw et al. (2010) to be among the top influences that affected the improvement of student achievement.

Given the heightened responsibility for guaranteeing positive student results, it became imperative to examine if the notable changes happened in schools that used PBIS. A study regarding the purpose of PBIS was conducted by Spaulding et al. in 2010. The results were noted to (a) identify effective classroom practices that had been proven to be effective, (b) identify different types of technical support that enhanced effective classroom practices, (c) identify key responsibilities to assure effective classroom practices were used, (d) identify various types of outcome data that were utilized in the reform of a school's climate/culture, and (e) inform the administrators of practices that increased faculty/staff morale. Additionally, Bradshaw et al. (2008) conducted a study that documented the implementation of school-wide PBIS in elementary schools, and when faculty/staff implemented a discipline intervention program, specifically PBIS, the school was successful in achieving an improved climate. Furthermore, in a study

conducted by Sprague et al. in 2001, a reduction in problematic behavior levels was noted when PBIS was implemented.

According to Bradshaw et al. (2009), PBIS had a direct impact on the climate/culture of a school. With positive behavior from students and ideal climate/culture, there would be high rates of morale and retention amongst the faculty/staff. Additionally, according to Sprick et al. (2015), if PBIS was effective, absences (other than for illness and exigent circumstances) and disciplinary problems would be low. The climate and culture of a school were also proven to have a significant relationship to student achievement (Hoy & Feldman, 1987; Hoy et al., 1990; Kauffman, 1995; Horner et al., 2009; United States Department of Education, 2014).

In the records of the School-wide Evaluation Tool (SET) conducted during the study by Horner et al. (2009), systems of education that were successful in implementing PBIS practices, noted an improved perception of school safety. The study provided the members of administration with insight regarding the success of PBIS. According to Todd et al. (2012), the SET examined the status and need for improvement in the areas of: (a) school-wide discipline systems, (b) non-classroom management systems (e.g., cafeteria, hallway, and playground), (c) classroom management systems, and (d) systems for individual students engaging in chronic problematic behaviors. They also said that "SET results were summarized and used for a variety of purposes including: (a) annual action planning, (b) internal decision making, (c) assessment of change over time, (d) awareness building of staff, and (e) team validation" (p.159).

As a result of being rated as the best assessment of school climate out of all leading options by St. John's University (Gangi, 2010), the SCAI was chosen to measure

the significant differences in the levels of climate/culture within the four participating elementary schools. Shindler (2016) noted:

> The SCAI measured the levels of student achievement, school function, practice quality, and social and emotional health. The SCAI provided three options that represented the range of levels of institutional function, quality of practice, and/or the experience of the participant at the school (p.3).

CHAPTER 3

METHOD

Positive Behavior Interventions and Supports provided educators with the means of developing and orchestrating the implementation of individualized interventions in a systematic and documented manner, with the dual intent of decreasing problematic behavior and increasing prosocial behavior while creating a thriving learning environment (Gable et al., 1998). With the above said, the purpose of this study was to determine the levels of Positive Behavior Interventions and Supports implementation, and if there were any significant differences amongst the levels of climate/culture.

Research Methods

Various research studies researched the relationship between climate and culture and student achievement in elementary schools (Browne, 2002; Goddard et al., 2000; Morey, 1996; Podgurski, 1990; Spence, 2003), and all of the studies were noted to be quantitative. Not only was the mathematical relationship among climate and cultural factors and student achievement being researched, the relationship between school climate and the level of Positive Behavior Interventions and Supports were also under scrutiny. In order to explore the relationship between the variables comprehensively, interviews and observations were completed along with the collection of quantitative data.

The School-wide Evaluation Tool (SET) collected quantitative data. The quantitative data were obtained through the analysis of SET General Index scores. Fowler and Cosenza (2009) noted that survey research provided a quantitative (numeric) description of trends, attitudes, or opinions of a population by studying a sample of that population. The data results were also obtained from the results of the School Climate Assessment Instrument (SCAI). The quantitative data also provided insight for the relationship between the variables (Fielding & Fielding, 1986; Merriam, 1998; Yin, 2003).

Participants

In order to determine if the climate and culture of a school were affected by the implementation of Positive Behavior Interventions and Supports (PBIS), four schools were studied. The population of the study came from the faculty of elementary schools in northern Louisiana. Faculty consisted of counselors and full-time teachers. No itinerant teachers, paraprofessionals, administrators, School Resource Officers, custodians, cafeteria workers, clerical workers, or long-term substitutes participated. These schools included two Title I schools and two non-Title I schools; all of which were opened for at least five years. To protect the anonymity of the schools, the participating schools were listed as Schools A through D. The information provided for each of the schools, came from the participating parish's website.

School A had 644 students enrolled and housed grades pre-kindergarten through fifth. Of the 644 students, 16% were Special Education students and 95% were considered economically disadvantaged. The school's performance score was 62.5, which was the equivalence of a D letter grade. When students were assessed on their

performance towards meeting grade-level expectations, 18% were "Above Grade Level," 50% were at "Grade Level," and 32% were "Below Grade Level." When the state of Louisiana reviewed data to determine if School A made progress with students who previously struggled academically, the following results were disclosed: 65 students were "Below Grade Level," but 45% "Exceeded Expectations" in English Language Arts. In Math, 40 students were "Below Grade Level," but 68% "Exceeded Expectations." The school earned progress points for students who were below grade level, yet exceeded expectations during that school year. The above information included all students in grades three through five that took the Partnership for Assessment of Readiness for College and Careers (PARCC), Louisiana Alternate Assessment-Level 1 (LAA-1), and Louisiana Alternate Assessment-Level 2 (LAA-2) tests.

School B had 615 students enrolled and housed grades pre-kindergarten through fifth. Of the 615 students, 9% were Special Education Students and 58% were considered economically disadvantaged. The school's performance score was 74.3, which is the equivalence of a C letter grade. When students were assessed on their performance towards meeting grade-level expectations 21% were "Above Grade Level," 64% were at "Grade Level," and 15% were "Below Grade Level." When the state of Louisiana reviewed data to determine if School B made progress with students who previously struggled academically, the following results were disclosed: 19 students were "Below Grade Level," but 53% "Exceeded Expectations" in English Language Arts. In Math, 27 students were "Below Grade Level," and 48% "Exceeded Expectations." The school earned progress points for students who were below grade level but who exceeded

expectations current year. The above information included all students in grades three through five that took the PARCC and LAA-1 and LAA-2 tests.

School C had 565 students enrolled and housed grades kindergarten through fifth. Of the 565 students, 9% were Special Education students and 28% were economically disadvantaged. The school's performance score was 113.2, which is the equivalence of an A letter grade. When students were assessed on their performance towards meeting grade-level expectations 55% were "Above Grade Level," 45% were at "Grade Level," and 0.02% were "Below Grade Level." When the state of Louisiana reviewed data to determine if School C made progress with students who struggled academically, the following results were disclosed: No information was available for students who were "Below Grade Level" or who "Exceeded Expectations" in Math. In English Language Arts, 12 students were "Below Grade Level," but 83% "Exceeded Expectations." The school earned progress points for students who were below grade level yet exceeded expectations during that school year. The above information included all students in grades three through five that took the PARCC and LAA-1 and LAA-2 tests.

School D had 929 students enrolled and housed grades kindergarten through fifth. Of the 929 students, 8% were Special Education Students and 19% were economically disadvantaged. The school's performance score was 107.0, which is the equivalence of an A letter grade. When students were assessed on their performance towards meeting grade-level expectations 52% were "Above Grade Level," 48% were at "Grade Level," and 0.04% were "Below Grade Level." When the state of Louisiana reviewed data to determine if School D made progress with students who struggled academically, the following results were disclosed: 18 students were "Below Grade Level," but 28%"

Exceeded Expectations" in English Language Arts. In Math, 12 students were "Below Grade Level" and 50% "Exceeded Expectations." The school earned progress points for students who were below grade level but who exceeded expectations in the current year. The above information included all students in grades three through five that took the PARCC and LAA-1 and LAA-2 tests.

Procedures

No data were collected prior to human use approval from Louisiana Tech University's IRB Committee (See Appendix C). However, the author of each instrument was contacted to obtain permission for use of the SET and SCAI (See Appendix D and E). Then, the researcher contacted the principals of all elementary schools in the participating parish to determine their willingness to participate in the study. Once the responses were received by the requested deadline, the superintendent of the participating schools was contacted by letter (See Appendix F) to obtain permission to conduct the study. Next, the Supervisor of Instruction was contacted to obtain the SET data for each of the participating schools. Following that, each principal received an email to send out to her faculty/staff to make them aware of the upcoming study (See Appendix G). During the meeting in which the participants (faculty/staff members) signed the informed consent forms, they were informed of their rights as per the National Research Act of 1974 and IRB guidelines (See Appendix H). Each participant was told that the study would not involve any situations in which the participants' safety and health could be in harm's way nor would they be misled. After completing the consent forms, each participant accessed the survey link (for the SCAI) on their laptops, and completed the survey. Because the SCAI was completed online, the data automatically uploaded to the

authors of the survey-Alliance for the Study of School Climate (ASSC) electronically. After each of the four participating schools completed the SCAI, the ASSC retrieved the data and compiled a series of tables that were emailed to the researcher. Upon the receipt of the data, the researcher disaggregated the provided tables for the purpose of determining if there were any significant levels of climate/culture amongst the four participating schools.

Role of the Researcher

The researcher was an employee in the same parish as the four schools involved in the study. She currently is in her fifth year as an Educational Diagnostician. The researcher's position in the participating school system did not ensure automatic authorization to conduct research. However, during her tenure with the parish, the researcher developed professional and personal relationships with some of the teachers and administrators, and those parties were willing to volunteer for the study. Additionally, because the researcher reviews student performance data on a daily basis (as a part of her job duties), she was aware of the strengths and/or weaknesses of the parish's schools. Therefore, some prior bias existed concerning the schools involved in the research. Maxwell (2013) noted that researchers should be honest regarding their biases, which is why the researcher attempted to alleviate the possible influences through the use of electronic surveys and external scorers. Taking precautions was essential in vindicating the influences of the biasing factors that were presented in this study.

Instruments and Measures

In order to measure the levels of implementation of PBIS, and the differences amongst the various levels of climate/culture, two instruments were used-the School-wide Evaluation Tool (SET) and the School Climate Assessment Instrument (SCAI). The SET is a multi-type measurement tool; it is a checklist, as well as an inventory. This checklist was provided to the staff because according to Sirajudeen, Pillai, Shah, and Mohan (2012), a checklist can establish inter-rater reliability, internal consistency, and content validity. The SCAI is an ordinal scale. Providing staff with an ordinal scale showcased the organization's attributes in ranking order, and measured the inter-rater agreement and the variations amongst the samples (Uebersax, 2006). By reviewing the collected data, the levels of implementation of PBIS were revealed and the significant differences amongst the levels of climate/culture were noted.

School-wide Evaluation Tool

Todd et al. (2012) created the School-wide Evaluation Tool (SET) to assess and evaluate the important features of school-wide behavior support. According to Vincent, Spaulding, and Tobin (2010), the SET results were used to evaluate the status of PBIS and to assist the school with strengthening the supports. They also noted that the SET was designed to determine the degree schools were using Positive Behavior Interventions Support. In addition, it was designed to determine if training and assistance efforts were the result of using PBIS. Lastly, the SET was designed to determine if the use of PBIS was related to a positive alteration in the security, social culture, and violent behavior in schools (Todd et al., 2012). In 2009, Horner et al. noted that the use of the SET was one option for gauging a school's fidelity of implementation on school-wide discipline

practices and systems. The School-wide Evaluation Tool collected data from various sources to generate a multi-perspective. Other data sources included office discipline referral patterns, staff survey results, safety surveys, and team checklist information (Todd et al., 2012).

The SET measured the percentage of implementation in seven feature areas of school-wide PBIS. The seven feature areas were (a) expectations defined, (b) behavioral expectations taught, (c) on-going system for rewarding behavioral expectations, (d) systems for responding to behavioral violations, (e) monitoring and decision-making, (f) management, and (g) district-level support (Sugai & Horner, 2006).

By answering each of the 28 evaluation questions within the seven feature areas, the information gathered from the SET was used to (a) evaluate features that were being implemented, (b) regulate yearly goals, (c) evaluate on-going efforts, (d) compose and edit procedures, and (e) compare year to year efforts in the area of school-wide PBIS (Horner et al., 2009). Information was gathered through multiple sources including a review of school records, direct observations, and staff and student interviews. To yield data, the SET had to first be scored by assigning a value of zero, one, or two. Zero meant not implemented, one stood for partially implemented, and two represented fully implemented. Subscale summary scores (percentage of possible points for each of the seven key features) were produced, and a total summary score as the mean of the seven subscale scores was computed.

Horner et al. (2005) recommended administration of the SET annually in the spring after at least a full semester of implementing PBIS with students. The authors noted that the SET took approximately two hours to complete. During this timeframe, a

30-minute interview with the administrator occurred. Also, at least 10 randomly selected staff (five minute per interview) and at least 15 students, who aren't actively engaged in instruction were questioned, which did not take longer than approximately one minute (per student) to interview. The interviewer also toured the building, and reviewed discipline records including instructional materials for teaching, correcting behavioral expectations, and the current school improvement and action plan (Vincent et al., 2010). See Appendix A for a copy of the assessment tool.

Administration of SET

Sugai, Horner, Lewis-Palmer, and Todd (2005) noted that the information necessary for the SET should be gathered through several sources. These sources included: the review of permanent products, observations, and staff (minimum of 10) and student (minimum of 15) interviews. There are multiple steps for gathering all of the necessary information. Because the participating district's Supervisor of Instruction, provided the researcher with the SET results of the four participating schools (for the years of 2012-13, 2013-14, and 2014-15), the following procedures were not carried out by the researcher, but by the Supervisor of Instruction each time the SET was conducted (in previous years).

The first step was to identify a contact person at the school. This person collected each of the products (discipline handbook, school improvement plan goals, Annual Action Plan for meeting school-wide behavior support goals, social skills instructional materials/ implementation time line, behavioral incident summaries or reports [e.g., office referrals, suspensions, expulsions], and the office discipline referral form) necessary to complete the SET. The contact person identified the time to preview the products

collected. Next, the administrator interview was conducted, followed by a tour of the school to observe posted school rules and the school crisis intervention plan in seven to ten locations. In addition to observations, student and staff interviews were conducted while on the school tour. After that, the data were scored and summarized. Finally, a meeting with the School Improvement Team was held to discuss the findings.

Scoring the SET

Once the procedure for collecting the necessary data was established, reviewing the data and scoring the SET averages, took two to three hours, which was the average time according to Sugai et al. (2005). Scores could be calculated on-line (www.pbisassessment.org) or by hand. Each of the 28 evaluation questions were required to be scored as a 0, 1, or 2. The scoring criteria were listed within each evaluation question. To score the 28 evaluation questions, the test administrator used the administrator responses, the calculated interview and observation scores, and the materials provided by the school. Then, the administrator added the total number of points scored, and recorded the total in the summary score box at the bottom of the scoring guide for each of the seven feature areas. Next, a percentage was calculated for each of the seven areas. To do this, the total points earned was divided by the total points possible. This provided an implementation score for each of the seven feature areas.

Sugai et al. (2005) also stated that the overall SET Implementation score is calculated when the percent earned from each of the seven feature areas is totaled. Then, that total number was divided by seven to yield an overall SET Implementation Score (mean of the means).

Schools that scored at least 80% on the SET general index and at least 80% on each of the subscale feature areas, executed school-wide PBIS at a universal level. According to Sugai and Horner (1999), schools noted to be performing at a universal level also supported team-based PBIS efforts, created a positive culture in the school, and made data-based decisions that were linked to larger school-wide efforts.

School Climate Assessment Instrument

The School Climate Assessment Instrument (SCAI) was divided into eight dimensions: (a) physical appearance, (b) faculty relations, (c) student interactions, (d) leadership and decision-making, (e) discipline environment, (f) learning/assessment, (g) attitude and culture, and (h) community relations. These eight dimensions encompassed a comprehensive definition of school climate and function.

The first dimension was physical appearance, which scrutinized the connection between the physical characteristics and environment of a school, and the climate that it promoted. This dimension included the degree to which purposeful efforts were made as it related to the maintenance, appearance, and treatment of the school environment (Hoy & Woolfolk, 1993).

Faculty relations examined the relationship between how members of the faculty related to one another and how their relationship affected the climate of the school. The degree to which collaboration, respect, capacity to interact, and a sense of collective purpose existed among the members of the faculty were also addressed in this dimension. Anderson (1982) noted that when measuring faculty relations, the way decisions were made and how duties were delegated and performed were revealed.

Student interactions examined the relationships among student expectations, peer interactions, their place in the school, and the climate that was created. When measuring student expectations, the degree to which students' interactions were ruled by deliberate intent in comparison to inadvertent qualities was noted (Fisher & Fraser, 1982).

The fourth dimension was leadership and decision making, which examined the relationships amongst decision-making instruments and the manner in which administrative authority was established. Leadership and decision making also measured the climate that was created from the leadership style and how school life was affected. Henry, Bobbett, and French (1990) noted that when leadership and decision making were assessed, the faculty/staff's shared sense of values and an operational vision were revealed.

Discipline environment examined the relationship between the management and discipline methods used within the school and the climate that was produced. This dimension included the degree to which management strategies promoted higher levels of responsibility and motivation. Management and motivation that were the result of teacher-student interactions were also measured (Wayson, 1982).

The relationships among the instructional strategies and the assessment methods used in the school and the climate that was created described learning, instruction, and assessment (the sixth dimension). In this dimension, the level of engagement, student empowerment, and authenticity defined instruction. Superior instruction and assessment methods were juxtaposed to less effective methods by the degree to which they stimulated a mindset of achievement rather than a consciousness of failure (Shindler et al., 2003).

Attitude and culture examined the universal outlooks and philosophies that operated within the school and their relationship to the climate. This dimension explored the degree to which social and/or shared bonds existed within the school. The attitudes that the faculty/staff possessed, the level of pride exhibited, and the degree to which they were vested were also measured (Ryder & Mitchell, 2013).

Shindler et al. (2003) noted that community relations was the dimension that examined the relationship between the way that the school was perceived externally and its climate. This dimension included the degree to which the school was welcoming. It also measured how the school took advantage of the resources in the local community.

Shindler (2016) declared that each measured item in the SCAI described specific aspects of school performance. The levels of performance could be classified into the following: (a) physical appearance, (b) faculty relations, (c) student interactions, (d) leadership/decisions, (e) discipline environment, (f) learning/assessment, (g) attitude and culture, and (h) community relations. To view the School Climate Assessment Instrument, see Appendix B for a copy of the assessment tool.

Administration of the SCAI

Shindler et al. (2003) recommended that the 71 question SCAI be dispersed to faculty/staff at a faculty meeting. Faculty in this study included counselors and full-time teachers. No itinerant teachers, paraprofessionals, administrators, School Resource Officers, custodians, cafeteria workers, clerical workers, or long-term substitutes were administered the SCAI. For each item, there were three descriptions. The respondent was to select the description that best described the current state at his/her school as a whole. The description was Level 3(high), Level 2 (middle), or Level 1(low). If the respondent

felt that his/her school's practices were in between two of the descriptions, the middle level had to be selected. Each item could only receive one indicator rating.

Scoring the SCAI

Shindler et al. (2003) noted that each item should be given a score. Marks in level three (high) were scored a five; results in the high middle category were scored at a four, and were also apart of level three. Notations in the middle of level two received a three, outcomes in the middle-low level received a two, and all tallies in the low level received a one. The mean score was obtained by dividing the total number of points for each item by the number of respondents.

Cohen (2011) noted that proficient schools produced scores (four to five) in level three (high).

Validity and Reliability

Validity and reliability are important concepts in research as they are used for enhancing the accuracy of the assessment (Tavakol & Dennick). Both the SET and SCAI were noted to have high validity and reliability in comparison to other comparable assessments; hence the reason they were chosen to address this study's research questions.

Internal Consistency

The internal consistency of the aforementioned scales were measured by using Cronbach's alpha. Cronbach's alpha was chosen to determine internal consistency because according to Szumal (2001):

> Cronbach's alpha represents the average correlation among all items included in a given scale and provides an estimate of the extent to which the observed score for

> a particular scale was representative of the "true" score for that measure. Cronbach's alpha measured how closely related a set of items are as a group. (p.7)

The SET included 28 questions that were divided into seven feature areas: (a) expectations defined, (b) expectations taught, (c) on-going system for rewarding behavioral expectations, (d) systems for responding to behavioral violations, (e) data and decision-making, (f) management, and (g) district-level support. The SCAI yielded an average for each of its eight dimensions: (a) physical appearance, (b) faculty relations, (c) student interactions, (d) leadership/decisions, (e) discipline environment, (f) learning/assessment, (g) attitude and culture, and (h) community relations.

Inter-rater Reliability

To determine the significance amongst the levels of climate/culture in the four participating schools, the inter-rater reliability of the SCAI was tested. This was done by conducting a series of one-way analyses of variance (ANOVA). The F statistics from the ANOVAs was used to determine if there was any significant variance in responses of staff members from different schools. Significant F statistics provided support for inter-rater consistency. In 1993, Cooke and Suzmal said the demonstration of inter-rater consistency was particularly important for measures of unit- or organizational-level phenomena (i.e., mission and philosophy, structures, human resource management, appraisal and reinforcement, skills/qualities, and group and organizational outcomes). They went on to say that unlike the measures of individual- or job-level phenomena (i.e., goal setting, technology, and individual outcomes), the variance in reports of group- and organizational-level phenomena by members of the same unit was more likely due to error than true variance. In turn, the inter-rater reliability results provided an indication of the stability of unit or organizational averages along particular measures. Shindler (2016)

noted that the SCAI had a high degree of inter-rater agreement. He noted this to be the result of the clear and concrete language used to define the levels at each item. A school can expect to obtain around .9 levels of inter-rater reliability.

Construct Validity of the SET

The validity of the SET was evaluated within Messick's (1988) unified construct validity framework. The conducted validity analyses were aimed at increasing understanding of the extent of empirical justification (if any) for specific interpretations and uses of SET scores; for example, measures of the level of implementation of PBIS programs in schools and/or as documentation of change in various implementation levels. Todd et al. (2012) stated that "using data for decision-making is a best practice; however, using data sources in isolation is not. While the SET measures the general index of PBIS implementation and is a strong research tool, it does not provide staff or student perception, student progress information, or a format for action planning. However, the general index scores noted whether the implementation levels of each SET subfactor was sufficient, and that information could be used to identify areas of remediation. The index for measuring PBIS implementation was correlated using a Pearson r = .75 score. Using multiple data sources together works well when a school is making data-based decisions" (p. 147).

Reliability of the SET

The reliability of the SET was assessed through (a) a variety of correlational analyses involving test–retest and internal consistency of items, subscales, and the total SET score and (b) calculations of interobserver agreement percentages (Horner et al.,

2004). Cronbach's coefficient alpha internal consistency index for all SET subscales and the SET total score was also calculated. According to Horner et al. (2004):

> These results documented an overall alpha of .96 and demonstrated that the correlational structure of the SET meets and exceeds standard psychometric criteria for discriminability, internal consistency, and test–retest reliability in instrumentation used primarily for research purposes. Nunnally (1975) and others have suggested that for research purposes, item/scale correlations should exceed r = .30, and internal consistency indices should exceed r = .60. (p.6)

Construct Validity of the SCAI

Shindler et al. (2003) noted that each of the eight scales is based in a theoretical set of constructs. Items within each scale related to one another on both the practical and theoretical levels. At the core of the items were a set of principles that predicted school efficacy.

Reliability of the SCAI

Clifford, Menon, Gangi, Condon, and Hornung, (2012) noted that the SCAI instruments tended to achieve greater levels of reliability than instruments that used a yes or no structure because the items were very descriptive. Analytic type measures (i.e., rubrics) were shown to obtain higher degrees of reliability when compared to ratings obtained from undefined Likert scales. Subjectivity was greatly decreased in analytic type items when compared to purely Likert-type items. Shindler (2016) noted that in practice, the SCAI demonstrated exceptionally high levels of reliability as measured by the Chronbach's Alpha reliability test (.97). The accepted standard, according to Shindler (the author of the SCAI), for a reliable instrument is .7. Each of the sub-scales of the SCAI full version reflected alpha scores much better than the standard and other well-known school climate instruments.

Data Analysis

The three years of gathered SET data were analyzed for trend analysis. The seven subscale scores and the general index summary mean score were analyzed for each school, and then were compared to one another to establish any possible trends. Additionally, tables displaying the findings over the three-year period were created. In addition to the trend analysis, a narrative detailing the results was compiled.

To report the data of the SCAI, descriptive statistics through the mean and standard deviation for all subscales, as well as the overall score for each school were computed. To assist in the statistical analysis, comparisons amongst the four schools, as measured by the SCAI, were computed. Significant differences were showcased using an ANOVA. Additionally, the alpha was set at .05. A narrative was completed to note the results of the SCAI along with trend analysis data of the SET subscale scores and overall mean scores of each school, in order to look for similarities and notable comparisons.

Conclusion

In 2007, the authors (Barber & Mourshed) of the international McKinsey Report, *How the Best- Performing School Systems Come Out on Top* said, "All of the top-performing systems recognized cannot improve what they do not measure" (p.52). Therefore, this study attempted to examine various sources of data to determine the implementation levels of Positive Behavior Interventions and Supports (PBIS) (by reviewing SET data), and if there were any significant differences in the levels of climate/culture amongst the four participating schools (by administering the SCAI) .

This study attempted to determine the levels of implementation of PBIS and if there were any significance differences amongst the levels of climate and culture. This

study approached the problem from a quantitative paradigm, gaining quantitative data from conducting the Schoolwide Evaluation Tool (SET) and School Climate Assessment Instrument (SCAI) on the elementary level.

CHAPTER 4

DATA ANALYSIS

Statement of the Problem and Purpose of Study

Kauffman (1995) noted that elevated behavioral problems caused concerns for effective interventions. Kauffman's claims were supported by Carrell and Hoekstra (2009). They noted that a classroom's climate would be affected and suffer from decreased academic scores of more than two thirds of a percentile point if one of twenty students showcased problematic behavior. Academic accountability regulations linked teacher retention to performance; so any factors that affected the climate/culture, and inhibited student performance had to be corrected. Based on altered climate/culture, decreased academic scores, and jeopardized job security, the implementation of a successful behavioral intervention program was imperative (Horner & Sugai, 2000).

Furthermore, due to the Individuals with Disabilities Education Act (IDEA) mandates, scientifically-based interventions and methods of reform for students with behavior problems was essential (Horner & Sugai, 2000). Based on the mandates of PBIS through IDEA, schools were held accountable for regulating behavior, which led to the search for effective programming (Sugai & Simonsen, 2012). Cohn (2001) reported positive impacts on school climate with students and school faculty/staff, as a result of using PBIS.

Legislative officials imposed progressively higher accountability demands for student achievement and behavioral accountability in recent years. Legislators outlined proficient measures for student achievement that local systems of education are expected to meet or exceed (Algozzine et al., 2011). According to Stronach and Piper (2008), the interference of behavioral issues caused schools to struggle daily in efforts to meet the mandated standards. Instructional time decreased due to student disruptions, and negatively impacted student performance (Sugai, 2003). As a result, the implementation of Positive Behavior Interventions and Supports (PBIS) increased in the schools.

Nakasto (2000) linked instructional supports and PBIS to academic achievement and appropriate social behavior. Several researchers (Horner et al., 2005; Lewis & Sugai, 1999; Schaughency & Goodman, 2003; Scheffler & Aksamit, 2006; Sugai, 2003) supported Nakasto's findings and noted enhancements in academic performance when both instructional and behavioral supports were provided. Further studies related to improvements in academics showed progress in student behavior and school climate (Fleming et al., 2005; Horner et al., 2009; McIntosh et al., 2006; Nelson et al., 1996; Wentzel, 1993). Based on the aforementioned information, this study attempted to determine the levels of implementation of Positive Behavior Interventions and Supports, and if there were any significant differences in the level of climate/culture in four elementary schools.

This study examined data gathered from two assessment tools to determine the levels of implementation of Positive Behavior Interventions and Supports (PBIS), and if there were significant differences in the levels of the participating schools' climate and culture. The first assessment tool used was the School-wide Evaluation Tool (SET),

which measured the effectiveness and knowledge amongst faculty/staff and students regarding PBIS within each school. The second tool, the School Climate Assessment Instrument (SCAI), noted each school's climate and culture. The findings from the study addressed the following research questions:

1. What is the level of implementation of Positive Behavior Interventions and Supports in the selected schools over a three-year period?
2. Were there any significant differences in the levels of climate/culture amongst the selected schools?

Analysis of Data

Data from the SET and SCAI were gathered, reviewed, and then analyzed to determine the levels of PBIS implementation and if there were any significant differences in the levels of climate/culture amongst the selected schools. The disaggregated data provided quantifiable results.

SET Data Results

Each school's level of Positive Behavior Interventions and Supports (PBIS) implementation was measured using the School-wide Evaluation Tool. Sugai et al. (2005) noted that schools that scored 80% on the SET general index and 80% on each of the subscale indexes for teaching behavioral expectations executed school-wide PBIS at a universal level. Tables one through four present the results for each school.

As seen in Table 1, during the 2012-13 school year, School A failed to successfully define expectations and explain the violations systems (below 80%), however the school's general index was satisfactory (above 80%). The 2013-14 and 2014-15 school years received perfect scores (100%).

Table 1

Summary SET Data for School A

Feature Area	2012-13 (%)	2013-14 (%)	2014-15 (%)
Expectations Defined	75	100	100
Expectations Taught	90	100	100
Reward System	100	100	100
Violations System	75	100	100
Data and Decision-Making	100	100	100
Management	100	100	100
District Level Support	100	100	100
General Index	91.4	100	100

As seen in Table 2, although in both the 2012-13 and 2013-14 school years, School B had one area that could be improved upon (2012-13, Violations System; 2013-14, Management), School B's subscale and general indexes were satisfactory (above 80%). The results of the 2014-15 school year noted perfect scores (100%) for School B.

Table 2

Summary SET Data for School B

Feature Area	2012-13 (%)	2013-14 (%)	2014-15 (%)
Expectations Defined	100	100	100
Expectations Taught	100	100	100
Reward System	100	100	100
Violations System	87.5	100	100
Data and Decision-Making	100	100	100
Management	100	88	100
District Level Support	100	100	100
General Index	98.2	98	100

School C's subscale and general indexes were satisfactory (above 80%). As seen in Table 3, the results of the 2012-13, 2013-14, and 2014-15 school years for School C indicated perfect scores (100%) for each year.

Table 3

Summary SET Data for School C

Feature Area	2012-13 (%)	2013-14 (%)	2014-15 (%)
Expectations Defined	100	100	100
Expectations Taught	100	100	100
Reward System	100	100	100
Violations System	100	100	100
Data and Decision-Making	100	100	100
Management	100	100	100
District Level Support	100	100	100
General Index	100	100	100

School D's subscale and general indexes were satisfactory (above 80%). As seen in Table 4, School D produced perfect scores (100%) for the 2012-13, 2013-14, and 2014-15 school years.

Table 4

Summary SET Data for School D

Feature Area	2012-13 (%)	2013-14 (%)	2014-15 (%)
Expectations Defined	100	100	100
Expectations Taught	100	100	100
Reward System	100	100	100
Violations System	100	100	100
Data and Decision-Making	100	100	100
Management	100	100	100
District Level Support	100	100	100
General Index	100	100	100

Descriptive Statistics

In order to determine if the climate and culture of a school were affected by the implementation of Positive Behavior Interventions and Supports (PBIS), four schools were studied. The population for this study came from the faculty of four elementary schools in northern Louisiana. Faculty consisted of counselors and full-time teachers. No itinerant teachers, paraprofessionals, administrators, School Resource Officers, custodians, cafeteria workers, clerical workers, or long-term substitutes participated. A total of 137 faculty members participated. The configuration of the responding schools varied from pre-kindergarten to fifth grade (PK-5); two of the participating schools were Title I schools and the other two were non-Title I schools; all of which have been opened for at least five years. To protect the anonymity of the schools, they were listed as Schools A through D.

Participants in each of the four schools completed the 71 question SCAI electronically. The questions were answered by selecting a score of one through five. As shown in Table 5, 42 surveys were distributed to School A, but only 38 participants completed the survey; yielding a participation rate of 90.50%. School B produced 28 participants from the 31 surveys (90.32% participation rate) that were distributed. From the 31 distributed surveys at School C, answers were produced from 28 participants, for a total participation rate of 90.32%. School D had the highest participation rate (97%); 32 of the 33 surveys that were distributed were completed. Overall, a total of 137 participants responded to the electronic survey; however, only 126 participants returned useable surveys; yielding an overall 92% participation rate.

Table 5

School Climate Assessment Instrument (SCAI) Total Return Rate

School	Surveys Sent	Surveys Completed	Percentage Returned
A	42	38	90.50
B	31	28	90.32
C	31	28	90.32
D	33	32	97.00
Total	137	126	92.00

The first dimension measured by the SCAI, amongst the four schools, was Physical Appearance. Results are shown in Table 6. In each of the four subtests, three of the four schools (A, C, and D) produced a mean over 4.00; the highest possible mean is 5.00. The subtest means for School D were extremely high (4.63 to 4.91), however School B's scores ranged from 3.07 to 4.00.

Additionally, School B produced the largest standard deviation on each subtest, between 1.15 and 1.38. Neither School A (.55-.91) nor D (.30-.71) produced a standard deviation above 1.00. School D had the lowest standard deviation scores.

Table 6

Mean and Standard Deviation SCAI Dimension 1: Physical Appearance

School	Participants	A1		B1		C1		D1	
		$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD
A	38	4.61	.71	4.34	.91	4.74	.55	4.18	.91
B	28	3.71	1.38	3.07	1.21	4.00	1.15	3.64	1.22
C	28	4.68	.86	4.07	.63	4.57	.63	4.29	1.12
D	32	4.91	.30	4.78	.55	4.88	.71	4.63	.55

Note: N=126. Headings A1 through D1 represent each question in Dimension 1: Physical Appearance.

There were ten subtests measured in the second dimension (Faculty Relations) of the SCAI. As shown in Table 7, all of the mean scores for School A were at or above 4.34. Just as with Dimension 1: Physical Appearance, School B had the lowest mean scores (3.18 to 3.93); failing to produce any means above 4.00. Eight of the ten scores produced for School C were at or above 4.00; however, the two outliers were 3.68 and 3.96. School D had the highest mean scores (4.72 to 4.94).

All of the scores produced for the standard deviation were at or below .86 for School A. School B had the highest standard deviation for nine of the ten subtests (.92 to1.34). Only two of the ten subtests for School C produced standard deviations above 1.00 (1.04 and 1.07), the other eight scores ranged from .64 to .94. None of School D's subtests produced standard deviations above .76.

Table 7

Mean and Standard Deviation SCAI Dimension 2: Faculty Relations

S	P	A2		B2		C2		D2		E2		F2		G2		H2		I2		J2	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.66	.63	4.34	.75	4.58	.64	4.61	.70	4.53	.69	4.68	.57	4.50	.73	4.84	.49	4.55	.72	.47	.86
B	28	3.54	1.20	3.61	1.20	3.64	1.06	3.57	.92	3.18	1.25	3.54	1.07	3.93	1.15	3.50	1.35	3.64	1.34	3.50	1.14
C	28	4.50	.75	4.39	.83	4.43	.69	4.39	1.07	3.96	.92	4.46	.64	4.14	1.04	3.68	.94	4.43	.74	4.00	.94
D	32	4.91	.30	4.75	.51	4.75	.76	4.78	.55	4.75	.51	4.94	.25	4.84	.45	4.72	.52	4.88	.34	4.72	.63

Note. N=126. S=School; P=Participants. Headings A2 through J2 represent each question in Dimension 2: Faculty Relations.

The results of Dimension 3: Student Interactions of the SCAI are shown in Table 8, and were similar to the first two dimensions, Physical Appearance and Faculty Relations. School B had the lowest means (3.11 to 4.07) and highest standard deviations (1.06 to 1.50) amongst all the subtest of Dimension 3: Student Interactions; eight of the nine subtests had a mean below 4.00, and all nine subtests had a standard deviation above 1.00. Eight of the nine subtests for the mean of School A were at or above 4.00 (4.00 to 4.80); one subtest score was 3.90. School C also had eight of its nine mean scores to fall between 4.07 and 4.80; one subtest score was 3.90. School D had the highest means (4.63 to 5.00 range) and lowest standard deviation (.00 to.80).

Table 8

Mean and Standard Deviation SCAI Dimension 3: Student Interactions

S	P	A3		B3		C3		D3		E3		F3		G3		H3		I3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.72	.52	4.76	.49	4.29	.87	4.34	.88	4.00	.97	4.80	.47	4.21	.84	3.90	1.06	4.11	1.09
B	28	3.43	1.20	3.82	1.22	3.39	1.07	3.64	1.06	3.54	1.29	4.07	1.12	3.54	1.00	3.11	1.50	3.57	1.43
C	28	4.61	.69	4.61	.74	4.11	.74	4.40	.69	4.14	.85	4.86	.45	4.11	.88	3.90	1.29	4.07	.86
D	32	4.88	.42	4.88	.34	4.75	.51	4.84	.37	4.60	.80	5.00	.00	4.81	.54	4.63	.71	4.78	.49

Note. N=126. S=School; P=Participants. Headings A3 through I3 represent each question in Dimension 3: Student Interactions.

The mean results of Dimension 4 (of the SCAI) as shown in Table 9, revealed the same trends as dimensions one through three-School D had the highest mean (4.66 to 4.97) scores amongst the 11 subtests. School A produced 11 means scores above 4.40 (4.42 to 4.87). All 11 subtest mean scores for School B were under 3.65 (3.11 to 3.64). 10 of the mean subtest scores for School C were above 4.00 (4.04 to 4.79); 3.82 was the outlier. School B had the highest standard deviations amongst the four schools (1.14 to1.57); all 11 subtests were above 1.00, whereas Schools A (.37 to .80) and D (.18 to .87) did not have any scores above .90.

Table 9

Mean and Standard Deviation SCAI Dimension 4: Leadership/Decisions

S	P	A4		B4		C4		D4		E4		F4		G4		H4		I4		J4		K4	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.84	.37	4.45	.80	4.84	.37	4.53	.73	4.63	.63	4.42	.76	4.87	.34	4.61	.64	4.82	.46	4.71	.57	4.73	.55
B	28	3.39	1.57	3.32	1.36	3.36	1.37	3.11	1.45	3.18	1.28	3.46	1.14	3.29	1.38	3.46	1.45	3.61	1.29	3.64	1.31	3.46	1.20
C	28	4.40	1.07	4.46	.79	4.79	.63	3.82	.94	4.14	1.04	4.14	.93	4.07	1.15	4.10	1.13	4.43	.93	4.04	1.00	4.18	.82
D	32	4.97	.18	4.84	.45	4.84	.37	4.75	.57	4.84	.45	4.75	.57	4.88	.42	4.66	.87	4.90	.30	4.88	.49	4.91	.39

Note. N=126. S=School; P=Participants. Headings A4 through K4 represent each question in Dimension 4: Leadership/Decisions.

The fifth dimension measured by the SCAI was Discipline Environment. As shown in Table 10, School D had the highest means (4.53 to 4.94) and lowest standard deviations (.25 to .76) amongst the nine subtests. School B continued the trend of lowest means (2.92 to 3.64) and highest standard deviations (.99 to 1.33). Additionally, School B's mean scores were the lowest thus far, with a range of 2.92 to 3.36. While all of School A's mean scores, for the nine subtests, were above 4.10 (4.11 to 4.68), School C produced three mean scores below 4.00 (3.68, 3.79, and 3.89).

Table 10

Mean and Standard Deviation SCAI Dimension 5: Discipline Environment

S	P	A5		B5		C5		D5		E5		F5		G5		H5		I5	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.53	.60	4.40	.75	4.47	.64	4.11	1.03	4.60	.64	4.58	.68	4.40	.79	4.55	.76	4.68	.53
B	28	3.36	1.25	3.21	1.20	3.32	1.22	2.92	1.33	3.32	1.16	3.50	1.11	3.14	1.33	3.64	.99	3.29	1.12
C	28	3.89	.92	3.79	1.10	4.29	.90	3.68	1.16	4.43	.79	4.57	.84	4.54	1.00	4.71	.85	4.54	.69
D	32	4.81	.47	4.78	.55	4.81	.47	4.53	.76	4.94	.25	4.94	.35	4.81	.54	4.78	.55	4.91	.39

Note. N=126. S=School; P=Participants. Headings A5 through I5 represent each question in Dimension 5: Discipline Environment.

Dimension 6: Learning and Assessment of the SCAI was composed of 11 subtests. Results are shown in Table 11. Though School B, reached the 4.0 mean level, for the first time, it still produced the lowest mean scores (3.39 to 4.07) amongst the four participating schools. School D, yet again, had the highest means (4.60 to 4.94). All (11) subtests for School A produced a mean above the 4.40 level (4.42 to 4.71). School C also produced 11 scores above the 4.30 level (4.32 to 4.67).

School B produced the highest standard deviations (.88 to1.48; five of the scores were at or below 1.00). School A and D did not have any standard deviations above 1.00 (School A's range was .52 to.86, and .25 to.87 was the range for School D). School C's standard deviation scores ranged between .56 to 1.07. 10 of those 11 scores were below .95; the outlier was 1.07.

Table 11

Mean and Standard Deviation SCAI Dimension 6: Learning/Assessment

S	P	A6		B6		C6		D6		E6		F6		G6		H6		I6		J6		K6	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.58	.68	4.45	.86	4.63	.59	4.71	.52	4.63	.67	4.53	.73	4.42	.79	4.55	.60	4.50	.80	4.61	.75	4.50	.76
B	28	3.39	1.08	3.46	1.48	3.96	1.00	4.07	1.02	4.00	.90	4.04	1.10	3.68	.94	4.04	1.10	3.68	.94	4.04	.88	3.71	1.12
C	28	4.44	.79	4.36	.95	4.46	.88	4.67	.61	4.61	.69	4.64	.56	4.50	.75	4.43	.79	4.32	.94	4.46	1.07	4.46	.79
D	32	4.94	.25	4.75	.62	4.88	.49	4.86	.42	4.75	.62	4.69	.64	4.63	.66	4.66	.55	4.60	.87	4.78	.49	4.69	.59

Note. N=126. S=School; P=Participants. Headings A6 through K6 represent each question in Dimension 6: Learning/Assessment.

The seventh dimension measured by the SCAI was Attitude and Culture. Results are shown in Table 12. As with five of the previous six dimensions, School B did not reach the 4.0 mean level (3.11-3.86), whereas Schools A (4.00-4.79), C (4.18-4.68) and D (4.41-4.97) did. School B had the lowest means (3.29-3.86) produced from the 12 subtests, and School D had the highest means (4.41-4.97).

Both School A and School D had 12 subsets that were below 1.00 standard deviations. School A's standard deviation range was .53 to .87. School D continued the pattern of being the school with the lowest standard deviation (.18 to .80) on the SCAI, while School B had the highest standard deviations (11 [of the 12] subtests ranged between .92 and 1.42). Three of the 12 dimensions associated with School C had standard deviations above 1.00 (1.02, 1.04, and 1.05).

Table 12

Mean and Standard Deviation SCAI Dimension 7: Attitude and Culture

S	P	A7		B7		C7		D7		E7		F7		G7		H7		I7		J7		K7		L7	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
A	38	4.79	.53	4.00	.87	4.55	.76	4.39	.72	4.58	.68	4.71	.62	4.03	.85	4.58	.68	4.50	.73	4.55	.69	4.74	.55	4.61	.64
B	28	3.86	1.15	3.29	1.01	3.54	.92	3.29	1.05	3.64	1.28	3.64	1.28	3.57	1.00	3.11	1.42	3.68	1.12	3.64	1.16	3.64	1.19	3.50	1.04
C	28	4.57	.69	4.21	.88	4.68	.55	4.18	1.05	4.32	1.02	4.46	1.04	4.36	.68	4.68	.67	4.57	.69	4.39	.79	4.43	.79	4.46	.74
D	32	4.84	.37	4.41	.80	4.84	.51	4.91	.30	4.91	.30	4.94	.25	4.66	.60	4.91	.30	4.97	.18	4.91	.30	4.91	.30	4.75	.51

Note. N=126. S=School; P=Participants. Headings A7 through L7 represent each question in Dimension 7: Attitude and Culture.

The last dimension on the SCAI was Community Relations. Results are shown in Table 13. The eighth dimension mirrored the previous seven-School D had the highest means (4.91 to 4.97); all above 4.90. The scores produced for Schools A (4.16 to 4.84) and C (4.32 to 4.64), were above 4.15. Though School B had three subtests that produced scores above 3.70, it also had the lowest means (3.39 to 3.86) amongst the five subtests.

Schools C (.48 to .98) and D (.18 to .39) produced scores for the five subtests that did not exceed 1.00. School A had four scores out of five that were below 1.00 (the range was .63-.92); 1.18 was the outlier. School B had the highest standard deviation; all five scores exceeded 1.00 (1.08 to 1.47).

Table 13

Mean and Standard Deviation SCAI Dimension 8: Community Relations

School	P	A8		B8		C8		D8		E8	
		$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD
A	38	4.66	.63	4.84	.44	4.16	.92	4.45	.72	4.05	1.18
B	28	3.57	1.35	3.71	1.27	3.39	1.47	3.71	1.08	3.86	1.18
C	28	4.64	.56	4.82	.48	4.32	.98	4.46	.79	4.43	.74
D	32	4.94	.25	4.91	.39	4.97	.18	4.91	.39	4.97	.18

Note. N=126. P=Participants. Headings A8 through D8 represent each question in Dimension 8: Community Relations.

Means and standard deviations for the overall scores on the SCAI, for each other the four schools are presented in Table 14. A mean score of 5.00 was the highest possible mean score that could be earned on the SCAI. Three of the four schools produced means above 4.25 (Schools A, C, and D) on the SCAI. School D had an overall mean of 4.82; which was the highest mean of the participating schools. School B's mean was the only school below 4.25, with a mean of 3.56.

School D's overall standard deviation (.36) on the SCAI, was notably lower than the other three participating schools. The standard deviation scores for School A (.71) and C (.83) were similar to one another. School B had the highest standard deviation (1.20), and was the only school to exceed a standard deviation of 1.00.

Table 14

Overall Scores on SCAI: Mean and Standard Deviation: Dimensions 1-8

School	Participants	$\overline{X}$	SD
A	38	4.50	.71
B	28	3.56	1.20
C	28	4.27	.83
D	32	4.82	.36

Note. N=126.

As shown in Table 15, three schools had means on Dimension 1: Physical Appearance, above 4.00 (A-4.47, C-4.40, and D-4.80), whereas, School B had a mean of 3.61. To determine if a significant difference existed between groups on Dimension 1: Physical Appearance, an ANOVA was performed. Results are shown in Table 16.

Table 15

Dimension 1: Physical Appearance
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	152	4.47	.75
B	112	3.61	1.28
C	112	4.40	.98
D	128	4.80	.55

Note. N=126.

As shown in Table 16, there were significant differences in the levels of climate/culture on Dimension 1: Physical Appearance amongst the four schools. The F value was 36.286 (3, 500) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 17.

Table 16

ANOVA SCAI Dimension 1: Physical Appearance

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	89.740	3	29.913	36.286	.000
Within Groups	412.188	500	.824		
Total	501.929	503			

Note. N=126.

As shown in Table 17, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 1: Physical Appearance. As can be seen in Table 15 and 17, the participants from School A (mean=4.47) rated Dimension 1: Physical Appearance significantly higher than the participants from School B (mean=3.61); but had a significantly lower (4.47) mean than the participants from School D (mean=4.80). The participants from School B (mean=3.61) rated Dimension 1: Physical Appearance significantly lower than the participants from School A (mean=4.47), School C (mean=4.40), and School D (mean=4.80). The ratings from the participants from School C (mean=4.40) were significantly lower than the participants from School D (mean=4.80).

Table 17

Multiple Comparisons SCAI Dimension 1: Physical Appearance

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	.85996*	.11307	.000	.5428	1.1771
	C	.06532	.11307	.954	-.2518	.3825
	D	-.32977*	.10892	.028	-.6353	-.0242
B	A	-.85996*	.11307	.000	-1.1771	-.5428
	C	-.79464*	.12133	.000	-1.1350	-.4543
	D	-1.18973*	.11748	.000	-1.5193	-.8602
C	A	-.06532	.11307	.954	-.3825	.2518
	B	.79464*	.12133	.000	.4543	1.1350
	D	-.39509*	.11748	.011	-.7246	-.0656
D	A	.32977*	.10892	.028	.0242	.6353
	B	1.18973*	.11748	.000	.8602	1.5193
	C	.39509*	.11748	.011	.0656	.7246

Note. N=126.* The mean difference is significant at the 0.05 level.

As can be seen in Table 18, small effect sizes (less than 0.50) were shown for comparisons of schools A to B (0.38), D to A (0.24), C to B (0.33), and D to C (0.24). A medium effect size (0.52) was shown when comparing schools D to B. Since statistically significant differences were found for Dimension 1: Physical Appearance, null hypothesis one was rejected.

Table 18

Means, Standard Deviation, Effect Size: Dimensions 1: Physical Appearance

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.47	0.75	B	28	3.61	1.28	0.82	0.38
D	32	4.80	0.55	A	38	4.47	0.75	0.50	0.24
C	28	4.40	0.98	B	28	3.61	1.28	0.69	0.33
D	32	4.80	0.55	B	28	3.61	1.28	1.21	0.52
D	32	4.80	0.55	C	28	4.40	0.98	0.50	0.24

Note. N=126.

As shown in Table 19, three schools had means on Dimension 2: Faculty Relations, above 4.00 (A-4.58, C-4.24, and D-4.80), whereas, School B had a mean of 3.56. To determine if a significant difference existed between groups on Dimension 2: Faculty Relations, an ANOVA was performed. Results are shown in Table 20.

Table 19

Dimension 2: Faculty Relations
Means and Standard Deviations by Schools

School	Responses	$\bar{X}$	SD
A	380	4.58	.69
B	280	3.56	1.17
C	280	4.24	.89
D	320	4.80	.50

Note. N=126.

As shown in Table 20, there were significant differences in the levels of climate/culture on Dimension 2: Faculty Relations amongst the four schools. The F value was 126.657 (3, 1256) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 21.

Table 20

ANOVA SCAI Dimension 2: Faculty Relations

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	261.138	3	87.046	126.657	.000
Within Groups	863.194	1256	.687		
Total	1124.333	1259			

Note. N=126.

As shown in Table 21, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D

with regard to Dimension 2: Faculty Relations. As can be seen in Table 19 and Table 21, the participants from School A (mean=4.58) rated Dimension 2: Faculty Relations significantly higher than the participants from School B (mean=3.56) and School C (mean=4.24), but significantly lower than the participants from School D (mean=4.80). The participants from School B (mean=3.56) rated Dimension 2: Faculty Relations significantly lower than the participants from School A (mean=4.58), School C (mean=4.24), and School D (mean=4.80). The ratings from the participants from School C (mean=4.24) were significantly lower than the participants from School D (mean=4.80).

Table 21

Multiple Comparisons SCAI Dimension 2: Faculty Relations

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	1.01203*	.06529	.000	.8293	1.1948
	C	.33703*	.06529	.000	.1543	.5198
	D	-.22681*	.06290	.005	-.4029	-.0507
B	A	-1.01203*	.06529	.000	-1.1948	-.8293
	C	-.67500*	.07006	.000	-.8711	-.4789
	D	-1.23884*	.06784	.000	-1.4287	-1.0489
C	A	-.33703*	.06529	.000	-.5198	-.1543
	B	.67500*	.07006	.000	.4789	.8711
	D	-.56384*	.06784	.000	-.7537	-.3739
D	A	.22681*	.06290	.005	.0507	.4029
	B	1.23884*	.06784	.000	1.0489	1.4287
	C	.56384*	.06784	.000	.3739	.7537

Note. N=126. * The mean difference is significant at the .05 level.

As can be seen in Table 22, small effect sizes (less than 0.50) were shown for comparisons of schools A to C (0.21), C to B (0.31), D to A (0.18), and D to C (0.36). Medium effect sizes were shown when comparing schools A to B (0.47) and D to B

(0.57). Since statistically significant differences were found for Dimension 2: Faculty Relations, null hypothesis two was rejected.

Table 22

Means, Standard Deviation, Effect Size: Dimension 2: Faculty Relations

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.58	0.69	B	28	3.56	1.17	1.06	0.47
A	38	4.58	0.69	C	28	4.24	0.89	0.43	0.21
D	32	4.80	0.50	A	38	4.58	0.69	0.37	0.18
C	28	4.24	0.89	B	28	3.56	1.17	0.65	0.31
D	32	4.80	0.50	B	28	3.56	1.17	1.38	0.57
D	32	4.80	0.50	C	28	4.24	0.89	0.78	0.36

Note. N=126.

As shown in Table 23, three schools had means on Dimension 3: Student Interactions, above 4.00 (A-4.34, C-4.31, and D-4.80), whereas, School B had a mean of 3.57. To determine if a significant difference existed between groups on Dimension 3: Student Interactions, an ANOVA was performed. Results are shown in Table 24.

Table 23

Dimension 3: Student Interactions
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	342	4.34	.88
B	252	3.57	1.23
C	252	4.31	.87
D	288	4.80	.52

Note. N=126.

As shown in Table 24, there were significant differences in the levels of climate/culture on Dimension 3: Student Interactions amongst the four schools. The F value was 85.453 (3, 1130) and the significance was .000. To determine where the

differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 25.

Table 24

ANOVA SCAI Dimension 3: Student Interactions

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	205.903	3	68.634	85.453	.000
Within Groups	907.597	1130	.803		
Total	1113.500	1133			

Note. N=126.

As shown in Table 25, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D with regard to Dimension 3: Student Interactions. As can be seen in Table 23 and Table 26, the participants from School A (mean=4.34) rated Dimension 3: Student Interactions significantly higher than the participants from School B (mean=3.57), but significantly lo5er than the participants from School D (mean=4.80). The participants from School B (mean=3.57) rated Dimension 3: Student Interactions significantly lower than the participants from School A (mean=4.34), School C (mean=4.31), and School D (mean=4.80). The ratings from the participants from School C (mean=4.31) were significantly lower than the participants from School D (mean=4.80).

Table 25

Multiple Comparisons SCAI Dimension 3: Student Interactions

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	.77464*	.07440	.000	.5663	.9829
	C	.03258	.07440	.979	-.1757	.2409
	D	-.45303*	.07168	.000	-.6537	-.2524
B	A	-.77464*	.07440	.000	-.9829	-.5663
	C	-.74206*	.07984	.000	-.9656	-.5185
	D	-1.22768*	.07731	.000	-1.4441	-1.0112
C	A	-.03258	.07440	.979	-.2409	.1757
	B	.74206*	.07984	.000	.5185	.9656
	D	-.48562*	.07731	.000	-.7020	-.2692
D	A	.45303*	.07168	.000	.2524	.6537
	B	1.22768*	.07731	.000	1.0112	1.4441
	C	.48562*	.07731	.000	.2692	.7020

Note. N=126. * The mean difference is significant at the .05 level.

As can be seen in Table 26, small effect sizes (less than 0.50) were shown for comparisons of schools A to B (0.34), D to A (0.30), A to C (0.02), C to B (0.33), and D to C (0.32). A medium effect size (0.55) was shown when comparing schools D to B. Since statistically significant differences were found for Dimension 3: Student Interactions, null hypothesis three was rejected.

Table 26

Means, Standard Deviation, Effect Size: Dimension 3: Student Interactions

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.34	0.88	B	28	3.57	1.23	0.72	0.34
D	32	4.80	0.52	A	38	4.34	0.88	0.37	0.30
A	38	4.34	0.88	C	28	4.31	0.87	0.34	0.02
C	28	4.31	0.52	B	28	3.57	1.23	0.69	0.33
D	32	4.80	0.52	B	28	3.57	1.23	1.30	0.55
D	32	4.80	0.52	C	28	4.31	0.87	0.68	0.32

Note. N=126.

As shown in Table 27, three schools had means on Dimension 4: Leadership/Decisions, above 4.00 (A-4.68, C-4.23, and D-4.84), whereas, School B had a mean of 3.37. To determine if a significant difference existed between groups on Dimension 3: Student Interactions, an ANOVA was performed. Results are shown in Table 28.

Table 27

Dimension 4: Leadership/Decisions
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	418	4.68	.60
B	308	3.37	1.34
C	308	4.23	.98
D	352	4.84	.49

Note. N=126.

As shown in Table 28, there were significant differences in the levels of climate/culture on Dimension 4: Leadership/Decisions amongst the four schools. The F value was 182.618 (3, 1382) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 29.

Table 28

ANOVA SCAI Dimension 4: Leadership/Decisions

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	425.915	3	141.972	182.618	.000
Within Groups	1074.400	1382	.777		
Total	1500.315	1385			

Note. N=126.

As shown in Table 29, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, B and C, B and D, and C and D with regard to Dimension 4: Leadership/Decisions. As can be seen in Table 27 and Table 29, the participants from School A (mean=4.68) rated Dimension 4: Leadership/Decisions significantly higher than the participants from School B (mean=3.37) and School C (mean=4.23). The participants from School B (mean=3.37) rated Dimension 4: Leadership/Decisions significantly lower than the participants from School A (mean=4.68), School C (mean=4.23), and School D (mean=4.84). The ratings from the participants from School C (mean=4.23) were significantly lower the participants from School D (mean=4.84).

Table 29

Multiple Comparisons SCAI Dimension 4: Leadership/Decisions

		Mean Difference			95% Confidence Interval	
(I) school	(J) school	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	1.30366*	.06621	.000	1.1183	1.4890
	C	.44327*	.06621	.000	.2579	.6286
	D	-.16103	.06378	.095	-.3396	.0175
B	A	-1.30366*	.06621	.000	-1.4890	-1.1183
	C	-.86039*	.07105	.000	-1.0593	-.6615
	D	-1.46469*	.06879	.000	-1.6572	-1.2721
C	A	-.44327*	.06621	.000	-.6286	-.2579
	B	.86039*	.07105	.000	.6615	1.0593
	D	-.60430*	.06879	.000	-.7969	-.4118
D	A	.16103	.06378	.095	-.0175	.3396
	B	1.46469*	.06879	.000	1.2721	1.6572
	C	.60430*	.06879	.000	.4118	.7969

Note. N=126. * The mean difference is significant at the .05 level.

As can be seen in Table 30, small effect sizes (less than 0.50) were shown for comparisons of schools A to C (0.27), C to B (0.34), and D to C (0.37). Medium effect sizes were shown when comparing schools D to B (0.59) and A to B (0.53). Since statistically significant differences were found for Dimension 5: Leadership/Decisions, null hypothesis four was rejected.

Table 30

Means, Standard Deviation, Effect Size: Dimension 4: Leadership/Decisions

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.68	0.60	B	28	3.37	1.34	1.26	0.53
A	38	4.68	0.60	C	28	4.23	0.98	0.55	0.27
C	28	4.23	0.98	B	28	3.37	1.34	0.73	0.34
D	32	4.84	0.49	B	28	3.37	1.34	1.46	0.59
D	32	4.84	0.49	C	28	4.23	0.49	0.79	0.37

Note. N=126.

As shown in Table 31, three schools had means on Dimension 5: Discipline Environment, above 4.00 (A-4.48, C-4.27, and D-4.81), whereas, School B had a mean of 3.30. To determine if a significant difference existed between groups on Dimension 5: Discipline Environment, an ANOVA was performed. Results are shown in Table 32.

Table 31

Dimension 5: Discipline Environment
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	342	4.48	.74
B	252	3.30	1.19
C	252	4.27	.98
D	288	4.81	.51

Note. N=126.

As shown in Table 32, there were significant differences in the levels of climate/culture on Dimension 5: Discipline Environment amongst the four schools. The F value was 147.802 (3, 1130) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 33.

Table 32

ANOVA SCAI Dimension 5: Discipline Environment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	335.876	3	111.959	147.802	.000
Within Groups	855.962	1130	.757		
Total	1191.838	1133			

Note. N=126.

As shown in Table 33, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D with regard to Dimension 5: Discipline Environment. As can be seen in Table 31 and Table 33, the participants from School A (mean=4.48) rated Dimension 5: Discipline Environment significantly higher than the participants from School B (mean=3.30) and School C (mean=4.27), but significantly lower than the participants from School D (mean=4.81). The participants from School B (mean=3.30) rated Dimension 5: Discipline Environment significantly lower than the participants from School A (mean=4.48), School C (mean=4.27), and School D (mean=4.81). The ratings from the participants from School C (means=4.27) were significantly lower than the participants from School D (mean=4.81).

Table 33

Multiple Comparisons SCAI Dimension 5: Discipline Environment

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	1.17794*	.07225	.000	.9757	1.3802
	C	.20969*	.07225	.039	.0074	.4120
	D	-.33297*	.06961	.000	-.5278	-.1381
B	A	-1.17794*	.07225	.000	-1.3802	-.9757
	C	-.96825*	.07754	.000	-1.1853	-.7512
	D	-1.51091*	.07507	.000	-1.7211	-1.3007
C	A	-.20969*	.07225	.039	-.4120	-.0074
	B	.96825*	.07754	.000	.7512	1.1853
	D	-.54266*	.07507	.000	-.7528	-.3325
D	A	.33297*	.06961	.000	.1381	.5278
	B	1.51091*	.07507	.000	1.3007	1.7211
	C	.54266*	.07507	.000	.3325	.7528

Note. N=126. * The mean difference is significant at the .05 level.

As can be seen in Table 34, small effect sizes (less than 0.50) were shown for comparisons of schools A to C (0.12), A to D (0.25), C to B (0.41), and D to C (0.33). Medium effect sizes were shown when comparing schools D to B (0.64) and A to B (0.51). Since statistically significant differences were found for Dimension 5: Discipline Environment, null hypothesis five was rejected.

Table 34

Means, Standard Deviation, Effect Size: Dimension 5: Discipline Environment

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.48	0.74	B	28	3.30	1.29	1.19	0.51
A	38	4.48	0.74	C	28	4.27	0.98	0.24	0.12
D	32	4.81	0.51	A	38	4.48	0.74	0.52	0.25
C	28	4.27	0.98	B	28	3.30	1.19	0.89	0.41
D	32	4.81	0.51	B	28	3.30	1.19	1.65	0.64
D	32	4.81	0.51	C	28	4.27	0.98	0.69	0.33

Note. N=126.

As shown in Table 35, three schools had means on Dimension 6: Learning/Assessment, above 4.00 (A-4.56, C-4.50, and D-4.74), whereas, School B had a mean of 3.84. To determine if a significant difference existed between groups on Dimension 6: Learning/Assessment, an ANOVA was performed. Results are shown in Table 36.

Table 35

Dimension 6: Learning/Assessment
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	418	4.56	.71
B	308	3.84	1.08
C	308	4.50	.81
D	352	4.7	.59

Note. N=126.

As shown in Table 36, there were significant differences in the levels of climate/culture on Dimension 6: Learning/Assessment amongst the four schools. The F value was 71.925 (3, 1350) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 37.

Table 36

ANOVA SCAI Dimension 6: Learning/Assessment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	141.947	3	47.316	71.925	.000
Within Groups	888.098	1350	.658		
Total	1030.044	1353			

Note. N=126.

As shown in Table 37, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 6: Learning/Assessment. As can be seen in Table 35 and Table 37, the participants from School A (mean=4.56) rated Dimension 6: Learning/Assessment significantly higher than the participants from School B (mean=3.84), but significantly lower than the participants from School D (mean=4.74). The participants from School B (mean=3.84) rated Dimension 6: Learning/Assessment significantly lower than the participants from School A (mean=4.56), School C (mean=4.50), and School D (mean=4.74). The ratings from the participants from School C (mean=4.50) were significantly lower than the participants from School D (mean=4.74).

Table 37

Multiple Comparisons SCAI Dimension 6: Learning/Assessment

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	.71087*	.06091	.000	.5404	.8813
	C	.05827	.06091	.822	-.1122	.2288
	D	-.17310*	.06025	.041	-.3417	-.0045
B	A	-.71087*	.06091	.000	-.8813	-.5404
	C	-.65260*	.06536	.000	-.8355	-.4697
	D	-.88397*	.06474	.000	-1.0652	-.7028
C	A	-.05827	.06091	.822	-.2288	.1122
	B	.65260*	.06536	.000	.4697	.8355
	D	-.23137*	.06474	.005	-.4126	-.0502
D	A	.17310*	.06025	.041	.0045	.3417
	B	.88397*	.06474	.000	.7028	1.0652
	C	.23137*	.06474	.005	.0502	.4126

Note. N=126. *. The mean difference is significant at the .05 level.

As can be seen in Table 38, small effect sizes (less than 0.50) were shown for comparisons of schools A to B (0.38), D to A (0.24), C to B (0.33), and D to C (0.24). A

medium effect size was shown when comparing schools D to B (0.52). Since statistically significant differences were found for Dimension 6: Learning/Assessment, null hypothesis six was rejected.

Table 38

Means, Standard Deviation, Effect Size: Dimension 6: Learning/Assessment

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.56	0.71	B	28	3.84	1.08	0.82	0.38
D	32	4.74	0.59	A	38	4.56	0.71	0.50	0.24
C	28	4.50	0.81	B	28	3.84	1.08	0.69	0.33
D	32	4.74	0.59	B	28	3.84	1.08	1.21	0.52
D	32	4.74	0.59	C	28	4.50	0.81	0.50	0.24

Note. N=126.

As shown in Table 39, three schools had means on Dimension 7: Attitude and Culture, above 4.00 (A-4.50, C-4.44, and D-4.83), whereas, School B had a mean of 3.56. To determine if a significant difference existed between groups on Dimension 7: Attitude and Culture, an ANOVA was performed. Results are shown in Table 40.

Table 39

Dimension 7: Attitude and Culture
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	456	4.50	.73
B	336	3.54	1.14
C	336	4.44	.82
D	128	4.83	.45

Note. N=126.

As shown in Table 40, there were significant differences in the levels of climate/culture on Dimension 7: Attitude and Culture amongst the four schools. The F value was 160.260 (3, 1508) and the significance was .000. To determine where the

differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 41.

Table 40

ANOVA SCAI Dimension 7: Attitude and Culture

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	312.605	3	104.202	160.260	.000
Within Groups	980.505	1508	.650		
Total	1293.110	1511			

Note. N=126.

As shown in Table 41, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 7: Attitude and Culture. As can be seen in Table 39 and Table 41, the participants from School A (mean=4.50) rated Dimension 7: Attitude and Culture significantly higher than the participants from School B (mean=3.56), but significantly lower than the participants from School D (mean=4.83). The participants from School B (mean=3.56) rated Dimension 7: Attitude and Culture significantly lower than the participants from School A (mean=4.50), School C (mean=4.44), and School D (mean=4.83). The ratings from the participants from School C (mean=4.44) were significantly lower than the participants from School D (mean=4.83).

Table 41

Multiple Comparisons SCAI Dimension 7: Attitude and Culture

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	.94565*	.05797	.000	.7834	1.1079
	C	.05874	.05797	.795	-.1035	.2210
	D	-.32593*	.05585	.000	-.4822	-.1696
B	A	-.94565*	.05797	.000	-1.1079	-.7834
	C	-.88690*	.06221	.000	-1.0610	-.7128
	D	-1.27158*	.06024	.000	-1.4402	-1.1030
C	A	-.05874	.05797	.795	-.2210	.1035
	B	.88690*	.06221	.000	.7128	1.0610
	D	-.38467*	.06024	.000	-.5533	-.2161
D	A	.32593*	.05585	.000	.1696	.4822
	B	1.27158*	.06024	.000	1.1030	1.4402
	C	.38467*	.06024	.000	.2161	.5533

Note. N=126. *. The mean difference is significant at the .05 level.

As can be seen in Table 42, small effect sizes (less than 0.50) were shown for comparisons of schools A to B (0.44), D to A (0.26), C to B (0.41), and D to C (0.28). A medium effect size (0.59) was shown when comparing schools D to B. Since statistically significant differences were found for Dimension 7: Attitude and Culture, null hypothesis seven was rejected.

Table 42

Means, Standard Deviation, Effect Size: Dimension 7: Attitude and Culture

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.50	0.73	B	28	3.56	1.14	0.98	0.44
D	32	4.83	0.45	A	38	4.50	0.73	0.54	0.26
C	28	4.44	0.82	B	28	3.56	1.14	0.89	0.41
D	32	4.83	0.45	B	28	3.56	1.14	1.47	0.59
D	32	4.83	0.45	C	28	4.44	0.82	0.59	0.28

Note. N=126.

As shown in Table 43, three schools had means on Dimension 8: Community Relations, above 4.00 (A-4.43, C-4.54, and D-4.94), whereas, School B had a mean of 3.65. To determine if a significant difference existed between groups on Dimension 8: Community/Relations, an ANOVA was performed. Results are shown in Table 44.

Table 43

Dimension 8: Community Relations
Means and Standard Deviations by Schools

School	Responses	$\overline{X}$	SD
A	190	4.43	.86
B	140	3.65	1.27
C	140	4.54	.74
D	160	4.94	.26

Note. N=126.

As shown in Table 44, there were significant differences in the levels of climate/culture on Dimension 8: Community Relations amongst the four schools. The F value was 58.602 (3, 626) and the significance was .000. To determine where the differences were between groups, a Scheffe' Post Hoc test was performed. Results are shown in Table 45.

Table 44

ANOVA SCAI Dimension 8: Community Relations

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	127.686	3	42.562	58.602	.000
Within Groups	454.657	626	.726		
Total	582.343	629			

Note. N=126.

As shown in Table 45, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 8: Community Relations. As can be seen in Table 43 and Table 45, the participants from School A (mean=4.43) rated Dimension 8: Community Relations significantly higher than the participants from School B (mean=3.65), but significantly lower than the participants from School D (mean=4.94). The participants from School B (mean=3.65) rated Dimension 8: Community Relations significantly lower than the participants from School A (mean=4.43), School C (mean=4.54), and School D (mean=4.94). The ratings from School C (mean=4.54) were significantly lower than School D (mean=4.94).

Table 45

Multiple Comparisons SCAI Dimension 8: Community Relations

		Mean Difference			95% Confidence Interval	
(I) School	(J) School	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
A	B	.78158*	.09492	.000	.5155	1.0477
	C	-.10414	.09492	.752	-.3702	.1619
	D	-.50592*	.09144	.000	-.7622	-.2496
B	A	-.78158*	.09492	.000	-1.0477	-.5155
	C	-.88571*	.10186	.000	-1.1712	-.6002
	D	-1.28750*	.09863	.000	-1.5640	-1.0110
C	A	.10414	.09492	.752	-.1619	.3702
	B	.88571*	.10186	.000	.6002	1.1712
	D	-.40179*	.09863	.001	-.6782	-.1253
D	A	.50592*	.09144	.000	.2496	.7622
	B	1.28750*	.09863	.000	1.0110	1.5640
	C	.40179*	.09863	.001	.1253	.6782

Note. N=126. * The mean difference is significant at the .05 level.

As can be seen in Table 46, small effect sizes (less than 0.50) were shown for comparisons of schools A to B (0.34), D to A (0.37), C to B (0.39), and D to C (0.34). A medium effect size (0.58) was shown when comparing schools D to B. Since statistically significant differences were found for Dimension 8: Community Relations, null hypothesis eight was rejected.

Table 46

Means, Standard Deviation, Effect Size: Dimension 8: Community Relations

School	N	Mean	Standard Deviation	School	N	Mean	Standard Deviation	Cohen's *d*	Effect Size
A	38	4.43	0.86	B	28	3.65	1.27	0.82	0.38
D	32	4.94	0.26	A	38	4.43	0.86	0.50	0.24
C	28	4.54	0.74	B	28	3.65	1.27	0.69	0.33
D	32	4.94	0.26	B	28	3.65	1.27	1.21	0.52
D	32	4.94	0.26	C	28	4.54	0.74	0.50	0.24

Note. N=126.

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

As of late, policymakers imposed more accountability requests for student achievement and behavioral culpability; bringing about delineated measures for student achievement by lawmakers (Algozzine et al., 2011). Schools battled every day in endeavors to meet the required standards, while managing the impedance of behavioral issues (Stronach & Piper, 2008). Behavioral disturbances brought about the loss of considerable instructional time that affected academic performance (Sugai, 2003). Furthermore, with the initiation of academic accountability regulations, teacher retention was connected to performance, so any elements that negatively influenced the climate/culture and performance of students, had be remediated. Thus, the execution of Positive Behavior Interventions and Supports expanded in the schools. Based on the aforementioned information, this study attempted to determine the levels of implementation of Positive Behavior Interventions and Supports amongst four elementary schools, and if there were any significant differences in the levels of a school's climate and culture.

This study examined data gathered from two assessment tools to determine the levels of Positive Behavior Interventions and Supports (PBIS) implementation, and if there were significant differences amongst the participating schools' climate and culture. An ANOVA and Scheffe' Post Hoc test were run to note the significant differences.

Alpha was set at .05. The first assessment tool used was the School-wide Evaluation Tool (SET), which measured the effectiveness and knowledge amongst faculty/staff and students regarding PBIS within each school. The second tool, the School Climate Assessment Instrument (SCAI), noted each school's climate and culture. The findings from the study addressed the following research questions:

1. What is the level of implementation of Positive Behavior Interventions and Supports in the selected schools over a three-year period?
2. Were there any significant differences in the levels of climate/culture amongst the selected schools?

Findings

As a result of descriptive data analysis, the SET data provided from the participating parish's Supervisor of Instruction, yielded satisfactory levels of implementation of Positive Behavior Interventions and Supports (PBIS) for the school years of 2012-13, 2013-14, and 2014-15. In order to determine whether there were significant differences in the levels of climate/culture amongst the four elementary schools, this study addressed the following null hypotheses:

$H1_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Physical Appearance. Data Analysis showed that there was a significant difference with regard to the dimension of Physical Appearance as measured by the SCAI. As a result, Hypothesis 1 was rejected.

$H2_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Faculty Relations. Data Analysis showed

that there was a significant difference with regard to the dimension of Faculty Relations as measured by the SCAI. As a result, Hypothesis 2 was rejected.

$H3_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Student Interactions. Data Analysis showed that there was a significant difference with regard to the dimension of Student Interactions as measured by the SCAI. As a result, Hypothesis 3 was rejected.

$H4_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Leadership/Decisions. Data Analysis showed that there was a significant difference with regard to the dimension of Leadership/Decisions as measured by the SCAI. As a result, Hypothesis 4 was rejected.

$H5_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Discipline Environment. Data Analysis showed that there was a significant difference with regard to the dimension of Discipline Environment as measured by the SCAI. As a result, Hypothesis 5 was rejected.

$H6_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Learning/Assessment. Data Analysis showed that there was a significant difference with regard to the dimension of Learning/Assessment as measured by the SCAI. As a result, Hypothesis 6 was rejected.

$H7_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Attitude and Culture. Data Analysis showed that there was a significant difference with regard to the dimension of Attitude and Culture as measured by the SCAI. As a result, Hypothesis 7 was rejected.

$H8_0$. There will be no significant difference in levels of climate/culture amongst the selected schools in the dimension of Community Relations. Data Analysis showed that there was a significant difference with regard to the dimension of Community Relations as measured by the SCAI. As a result, Hypothesis 8 was rejected.

Discussion

The seven feature areas and general index of the SET were examined to determine the level of implementation of Positive Behavior Interventions and Supports in the selected schools over a three-year period. Additionally, the eight dimensions of the SCAI were examined to assess if there were any significant differences in the levels of climate/culture amongst the selected schools; conclusions are described in the following paragraphs.

Research Question #1

The first research question of this study was quantitative in nature, investigating the level of implementation of Positive Behavior Interventions and Supports (PBIS) in the four elementary schools of a northern Louisiana school system over a three-year period. Data gathered from four elementary schools in the form of School-wide Evaluation Tool (SET) general index scores served to answer this question.

To determine the levels of PBIS for each school, as measured by the SET, a general index score for a period of three school years (2012-13, 2013-14, and 2014-15) was generated. According to Sugai and Horner (1999), any school that showcased a School-wide Evaluation Tool (SET) general index score of 80% and above, executed school-wide positive behavior support at a universal (satisfactory) level. Based on the SET data provided from each of the schools' principals, each school had satisfactory levels of implementation of Positive Behavior Interventions and Supports (PBIS) for the school years of 2012-13, 2013-14, and 2014-15.

The SET was noted to measure the implementation of PBIS, which has been directly linked to higher student achievement. Carrell and Hoekstra (2009) noted that academic scores decreased more than two thirds of a percentile point if one of twenty students showcased problematic behavior. Sprague et al. (2001) noted that a reduction in problematic behavior levels was noted when PBIS was implemented. Sprick et al. also noted in 2015, that if PBIS was effective, disciplinary problems would be low.

Schools C and D earned perfect general index scores (100%) each year. Based on the School Performance Scores (SPS) associated with Schools C (113.2) and D (107.0), the data seem to coincide. Although School A and B had documented low School Performance Scores (School A-62.5 and School B-74.3), each received satisfactory SET scores (no general index score was below 90%). There is a conflicting depiction of the implementation levels of PBIS at schools A and B, based on the high General Index Scores noted on the SET and the low SPS generated by the Louisiana Department of Education.

Research Question #2

The second research question of this study was quantitative in nature, investigating whether there were significant differences in the levels [(a) physical appearance, (b) faculty relations, (c) student interactions, (d) leadership/decisions, (e) disciple and management environment, (f)learning/assessment, (g) attitude and culture, and (h)community relations] of climate/culture amongst the four elementary schools of a northern Louisiana school system. Data gathered from four elementary schools in the form of School Climate Assessment Instrument (SCAI) scores served to answer this question.

To determine if there were significant differences amongst each of the eight dimensions of climate/culture as measured by the SCAI, an ANOVA was generated. A Scheffe was used to determine the differences between the groups. Each of the eight generated ANOVAs, noted significant differences (.000).

The main findings were related to the differences amongst the levels of climate/culture. Eight dimensions of the SCAI were examined to assess potential significance amongst each of the four participating elementary schools. Additionally, the effect size of each dimension was examined to determine the practical use.

Upon reviewing Dimension 1: Physical Appearance, it was noted that there were four questions. Of the four questions, the participants from School A rated four questions above 4.0; which totaled 172 responses above 4.0 (100%), out of the 172 recorded answers. The participants from School B rated one of the four questions above 4.0 (25%); which totaled 28 responses above 4.0, out of the 112 recorded answers. The participants from School C rated four of the four questions above 4.0 (100%); which totaled 112 responses above 4.0, out of the 112 recorded answers. The participants from School D

rated four of the four questions above 4.0 (100%); which totaled 128 responses above 4.0, out of the 128 recorded answers.

Null Hypothesis 1. Previous research has found that the physical appearance of a school will affect the climate/culture. The results of regarding Dimension 1: Physical Appearance were supported by Nelson (1996). He noted that in order for the physical appearance of the school to be upheld and not affect the climate/culture of the school, the expectations of maintenance and school-wide practices (associated with physical appearance) had to be taught to staff and students. Additionally, Hoy and Woolfolk (1993) noted the connection between the physical characteristics and environment of a school and the climate that it promoted. Lynch (2016) also noted that the physical appearance of a school can positively affect school climate. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Physical Appearance; as a result, hypothesis one was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 1: Physical Appearance. Furthermore, the participants from School A rated Dimension 1: Physical Appearance significantly higher than the participants from School B, but had a significantly lower mean than the participants from School D. The participants from School B rated Dimension 1: Physical Appearance significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were

significantly lower than the participants from School D. Upon examining the effect size of Dimension 1: Physical Appearance, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 2: Faculty Relations, it was noted that there were 10 questions. Of the 10 questions, the participants from School A rated 10 questions above 4.0(100%); which totaled 380 responses above 4.0, out of the 380 recorded answers. The participants from School B rated zero of the 10 questions above 4.0 (0%); which totaled zero responses above 4.0, out of the 280 recorded answers. The participants from School C rated eight of the 10 questions above 4.0 (80%); which totaled 224 responses above 4.0, out of the 280 recorded answers. The participants from School D rated 10 of the 10 questions above 4.0 (100%); which totaled 320 responses above 4.0, out of the 320 recorded answers.

Null Hypothesis 2. Previous research has found that the faculty relations of a school will affect the climate/culture. The results regarding Dimension 2: Faculty Relations were supported by Sprick et al. (2015). Their research noted that schools with optimal climate/culture had higher rates of staff with high morale, positive staff interactions, and higher staff retention rates. Additionally, Lassen et al. (2006) noted that teachers that partnered together were able to ensure the success of PBIS and the promotion of climate/culture. Furthermore, Reid et al. (1999) noted that teaching students and faculty/staff how to interact effectively enhanced conflict resolution, problem solving, negotiation, and friendship making abilities, which enriched the school's climate/culture. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Faculty Relation; as a result, hypothesis two was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D with regard to Dimension 2: Faculty Relations. Furthermore, the participants from School A rated Dimension 2: Faculty Relations significantly higher than the participants from School B and School C, but significantly lower than the participants from School D. The participants from School B rated Dimension 2: Faculty Relations significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were significantly lower than the participants from School D. Upon examining the effect size of Dimension 2: Faculty Relations, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 3: Student Interactions, it was noted that there were nine questions. Of the nine questions, the participants from School A rated eight questions above 4.0; which totaled 304 responses above 4.0 (89%), out of the 342 recorded answers. The participants from School B rated one of the nine questions above 4.0 (11%); which totaled 28 responses above 4.0, out of the 252 recorded answers. The participants from School C rated eight of the nine questions above 4.0 (89%); which totaled 224 responses above 4.0, out of the 252 recorded answers. The participants from School D rated nine of the nine questions above 4.0 (100%); which totaled 288 responses above 4.0, out of the 288 recorded answers.

Null Hypothesis 3. Previous research has found that the student interactions of a school will affect the climate/culture. The results regarding Dimension 3: Student Interactions study were supported by Reid et al. (1999). They noted that teaching students and faculty/staff how to interact effectively enhanced conflict resolution, problem solving, negotiation, and friendship making abilities, which enriched the school's climate/culture. Additionally, Nelson et al. (2002), noted that positive interactions with students decreased the occurrence of challenging behaviors. Furthermore, Cushing (2000), noted that if all students knew the school's behavioral expectations and were taught the same expectations, students were more prone to encourage and reinforce appropriate behavior in their peers. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Student Interactions; as a result, hypothesis three was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D with regard to Dimension 3: Student Interactions. The participants from School A rated Dimension 3: Student Interactions significantly higher than the participants from School B, but significantly lower than the participants from School D. The participants from School B rated Dimension 3: Student Interactions significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were significantly lower than the participants from School D. Upon examining the effect size of Dimension 3: Student

Interactions, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 4: Leadership/Decisions, it was noted that there were 11 questions. Of the 11 questions, the participants from School A rated 11 questions above 4.0 (100%); which totaled 418 responses above 4.0, out of the 418 recorded answers. The participants from School B rated zero of the 11 questions above 4.0 (0%); which totaled zero responses above 4.0, out of the 308 recorded answers. The participants from School C rated 10 of the 11 questions above 4.0 (91%); which totaled 280 responses above 4.0, out of the 308 recorded answers. The participants from School D rated 11 of the 11 questions above 4.0 (100%); which totaled 352 responses above 4.0, out of the 352 recorded answers.

Null Hypothesis 4. Previous research has found that the leadership of a school will affect the climate/culture. The results regarding Dimension 4: Leadership/Decisions study was supported by Licata and Harper (2001). They noted that leadership is a vital factor to the climate/culture of a school and is a key component in the Positive Behavior Intervention and Support system. Additionally, Laub (2015) stated that administrators were able to dwell in a constructive and collaborative learning environment, when the climate/culture was functioning cohesively. Furthermore, Hoy et al. (1990) noted that a healthy school that had apposite leadership provided a climate more conducive to student success and achievement. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected

schools in the dimension of Leadership/Decisions; as a result hypothesis four was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, B and C, B and D, and C and D with regard to Dimension 4: Leadership/Decisions. Furthermore, the participants from School A rated Dimension 4: Leadership/Decisions significantly higher than the participants from School B and School C. The participants from School B rated Dimension 4: Leadership/Decisions significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were significantly lower the participants from School D. Upon examining the effect size of Dimension 4: Leadership/Decisions, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 5: Discipline Environment, it was noted that there were nine questions. Of the nine questions, the participants from School A rated nine questions above 4.0(100%); which totaled 342 responses above 4.0, out of the possible 342 recorded answers. The participants from School B rated zero of the nine questions above 4.0 (0%); which totaled zero responses above 4.0, out of the 252 recorded answers. The participants from School C rated six of the nine questions above 4.0 (67%); which totaled 168 responses above 4.0, out of the 252 recorded answers. The participants from School D rated nine of the nine questions above 4.0 (100%); which totaled 288 responses above 4.0, out of the 288 recorded answers.

Null Hypothesis 5. Previous research has found that the discipline environment of a school will affect the climate/culture. The results regarding Dimension 5: Discipline Environment study were supported by Horner et al. (2005). They noted to reduce student

behavior problems and promote a positive school climate, local school districts, educational researchers, and policymakers turned to PBIS. In addition, Nelson et al. (2002) noted that a classroom that was well-organized with established rules contributed to higher student performance. Parsons (1961) also noted that the environment would contribute to the levels of motivation, performance, and exhibition of societal norms as it pertains to behavior and manners; all of which can affect the climate/culture of a school. Furthermore, the United States Department of Education (2014) noted that the development of positive school climate and improved school discipline policies and practices were critical steps to the growth of student achievement and the promotion of student success. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Discipline Environment; as a result, hypothesis five was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and C, A and D, B and C, B and D, and C and D with regard to Dimension 5: Discipline Environment. Furthermore, the participants from School A rated Dimension 5: Discipline Environment significantly higher than the participants from School B and School C, but significantly lower than the participants from School D. The participants from School B rated Dimension 5: Discipline Environment significantly lower than the participants from School A, School C. and School D. The ratings from the participants from School C were significantly lower than the participants from School D. Upon examining the effect size

of Dimension 5: Discipline Environment, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 6: Learning/Assessment, it was noted that there were 11 questions. Of the 11 questions, the participants from School A rated all 11 questions above 4.0 (100%); which totaled 418 responses above 4.0, out of the 418 recorded answers. The participants from School B rated five of the 11 questions above 4.0 (45%); which totaled 140 responses above 4.0, out of the 308 recorded answers. The participants from School C rated 11 of the 11 questions above 4.0 (100%); which totaled 308 responses above 4.0, out of the 308 recorded answers. The participants from School D rated 11 of the 11 questions above 4.0 (100%); which totaled 352 responses above 4.0, out of the 352 recorded answers.

Null Hypothesis 6. Previous research has found that the learning/assessment of a school will affect the climate/culture. The results regarding Dimension 6: Learning/Assessment study were supported by Sun and Shek (2012). They provided evidence that, in most cases, a single disruptive student affected the academic progress of every student in the class and altered the climate of the classroom. In addition, Nakasato (2000) noted that PBIS was linked to academic achievement. Furthermore, Hoy et al. (1990) noted that high academic standards provided a climate more conducive to student success and achievement. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Learning/Assessment; as a result, hypothesis six was

rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 6: Learning/Assessment. Furthermore, the participants from School A rated Dimension 6: Learning/Assessment significantly higher than the participants from School B, but significantly lower than the participants from School D. The participants from School B rated Dimension 6: Learning/Assessment significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were significantly lower than the participants from School D. Upon examining the effect size of Dimension 6: Learning/Assessment, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 7: Attitude and Culture, it was noted that there were 12 questions. Of the 12 questions, the participants from School A rated all 12 questions above 4.0 (100%); which totaled 456 responses above 4.0, out of the 456 recorded answers. The participants from School B rated zero of the 12 questions above 4.0 (0%); which totaled zero responses above 4.0, out of the 336 recorded answers. The participants from School C rated 12 of the 12 questions above 4.0 (100%); which totaled 336 responses above 4.0, out of the 336 recorded answers. The participants from School D rated 12 of the 12 questions above 4.0 (100%); which totaled 384 responses above 4.0, out of the 384 recorded answers.

Null Hypothesis 7. Previous research has found that the attitude and culture of a school will affect the climate/culture. The results regarding Dimension 7: Attitude and Culture study were supported by Hoy et al. (1991). Their research suggests that that the

components of school climate (e.g. strong administrative leadership, high performance expectations, emphasis on basic skills, etc.) contributed to an effective school. Additionally, Cornelius-White (2007) added that positive classroom climate and culture were important for students' learning, achievement, and motivation. Furthermore, Wang et al. (1997) noted that the culture was among the top influences that affected the improvement of student achievement and organizational health. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Attitude and Culture; as a result, hypothesis seven was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and D, B and C, B and D, and C and D with regard to Dimension 7: Attitude and Culture. Furthermore, the participants from School A rated Dimension 7: Attitude and Culture significantly higher than the participants from School B, but significantly lower than the participants from School D. The participants from School B rated Dimension 7: Attitude and Culture significantly lower than the participants from School A, School C, and School D. The ratings from the participants from School C were significantly lower than the participants from School D. Upon examining the effect size of Dimension 7: Attitude and Culture, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Upon reviewing Dimension 8: Community Relations, it was noted that there were five questions. Of the five questions, the participants from School A rated five questions

above 4.0(100%); which totaled 190 responses above 4.0, out of the190 recorded answers. The participants from School B rated zero of the five questions above 4.0 (0%); which totaled zero responses above 4.0, out of the140 recorded answers. The participants from School C rated five of the five questions above 4.0 (100%); which totaled 140 responses above 4.0, out of the 140 recorded answers. The participants from School D rated five of the five questions above 4.0 (100%); which totaled 160 responses above 4.0, out of the 160 recorded answers.

Null Hypothesis 8. Previous research has found that the community relations of a school will affect the climate/culture. The results regarding Dimension 8: Community Relations study were supported by Hoy and Feldman (1987). They noted that community representatives should be included in the process of managing and monitoring data. The United States Department of Education (2016) noted that in order to improve the climate/culture of a school, supports for all students in the community should be identified and a comprehensive needs assessment to establish areas for improvement should be done. Furthermore, Luiselli et al. (2002) noted that when PBIS was implemented and expectations were concisely conveyed to the students, families, faculty/staff, along with the community partners, the school would have a healthy climate/culture. This study produced data consistent with the aforementioned research.

As a result of statistical analysis, there was sufficient evidence to reject the claim that there was no significant difference in levels of climate/culture amongst the selected schools in the dimension of Community Relations; as a result, hypothesis eight was rejected. An ANOVA noted a significance level of .000. Additionally, results of the Scheffe' Post Hoc test revealed significant differences between Schools A and B, A and

D, B and C, B and D, and C and D with regard to Dimension 8: Community Relations. Furthermore, School A rated Dimension 8: Community Relations significantly higher than the participants from School B, but significantly lower than the participants from School D. The participants from School B rated Dimension 8: Community Relations significantly lower than the participants from School A, School C, and School D. The ratings from School C were significantly lower than School D. Upon examining the effect size of Dimension 8: Community Relations, the results did not produce any effect sizes over a medium value; the effects were noted but not substantial.

Conclusions

According to the General Index obtained from the SET, each of the four schools had satisfactory levels (for the school years of 2012-13, 2013-14, and 2014-15) of PBIS implementation, however it was noted that there were significant differences amongst all four schools in each dimension of the SCAI. Upon reviewing the data for the SCAI, it was noted that participants from School D rated each of the eight dimensions [(a) physical appearance, (b) faculty relations, (c) student interactions,(d) leadership/decisions, (e) disciple and management environment, (f)learning/assessment, (g) attitude and culture, and (h) community relations] significantly higher than participants from Schools A, B, and C, with the exception of Dimension 4: Leadership/Decisions, where no significant difference was noted between Schools A and D. It was also noted that School B was rated significantly lower than Schools A, C, and D on all eight dimensions.

Recommendations for Practice

Building level administrators can benefit from the findings of this study. Based on the general index scores obtained on the seven sub-factors of the SET and mean scores obtained on the eight dimensions of the SCAI, a building level administrator would be able to identify areas of remediation. The administrator would also be able to reward the faculty/staff and students for the areas of proficiency. Additionally, because each administrator will receive a detailed report of the obtained scores, collaboration amongst administrators may provide insight on procedures and interventions to implement in an effort to obtain higher scores on the SET and SCAI, as well as promote a positive climate/culture in their schools.

Several factors that affect student achievement fall outside of the control of the school. However, climate/culture is one factor that has been demonstrated to affect student achievement which is within the control of the school. Building level administrators should guide their schools with the knowledge that consistent PBIS and a positive climate/culture can contribute to improved (a) physical appearance; (b) faculty relations; (c) student interactions; (d) leadership/decisions; (e) disciple and management environment; (f)learning/assessment; (g) attitude and culture; and (h) community relations. Because effect sizes were small to medium, results should be interpreted with caution. Practitioners should be careful to avoid making broad statements based solely on the results of this study.

Recommendations for Future Research

The relationship between the implementation of Positive Behavior Interventions and Supports (PBIS) and school climate/culture warrants further study. Given the wealth

of data that are available, a larger sample of schools would give a better indication of the nature of the relationship between PBIS and school climate/culture.

Since the focus of this study was not actually on the size of the schools surveyed, and each of the school's population was different, further study may be warranted to examine the impact of school size on the relationship between PBIS and school climate/culture. Future researchers are also encouraged to survey paraprofessionals along with teachers and counselors; this may be especially important in Title I schools that have multiple adults, teachers, or tutors in a classroom.

Another area of beneficial study would be to have the researcher to conduct the School-wide Evaluation Tool (SET) his/herself, due to the apparent discrepancy in scoring for each school. Despite the documented, public record (provided by the participating district and/or noted on the district's website) of low School Performance Scores, each school received satisfactory general index scores on the SET. Conducting the SET and not using the data provided by the district of study, will minimize bias, eliminate inflated scores, and provide a more accurate vision of PBIS implementation amongst the schools of study.

APPENDIX A

SCHOOL-WIDE EVALUATION (SET)

School-wide Evaluation Tool
(SET)

Overview

Purpose of the SET

The School-wide Evaluation Tool (SET) is designed to assess and evaluate the critical features of school-wide effective behavior support across each academic school year. The SET results are used to:

1. assess features that are in place,
2. determine annual goals for school-wide effective behavior support,
3. evaluate on-going efforts toward school-wide behavior support,
4. design and revise procedures as needed, and
5. compare efforts toward school-wide effective behavior support from year to year.

Information necessary for this assessment tool is gathered through multiple sources including review of permanent products, observations, and staff (minimum of 10) and student (minimum of 15) interviews or surveys. There are multiple steps for gathering all of the necessary information. The first step is to identify someone at the school as the contact person. This person will be asked to collect each of the available products listed below and to identify a time for the SET data collector to preview the products and set up observations and interview/survey opportunities. Once the process for collecting the necessary data is established, reviewing the data and scoring the SET averages takes two to three hours.

Products to Collect

1. _____ Discipline handbook
2. _____ School improvement plan goals
3. _____ Annual Action Plan for meeting school-wide behavior support goals
4. _____ Social skills instructional materials/ implementation time line
5. _____ Behavioral incident summaries or reports (e.g., office referrals, suspensions, expulsions)
6. _____ Office discipline referral form(s)
7. _____ Other related information

Using SET Results

The results of the SET will provide schools with a measure of the proportion of features that are 1) not targeted or started, 2) in the planning phase, and 3) in the implementation/ maintenance phases of development toward a systems approach to school-wide effective behavior support. The SET is designed to provide trend lines of improvement and sustainability over time.

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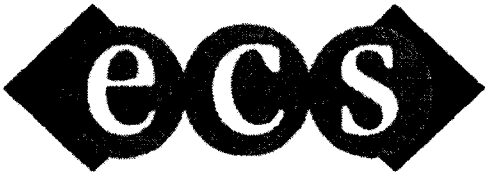

School-wide Evaluation Tool
(SET)
Implementation Guide

School _____ **Date** _____

District _____ **State** _____

Step 1: Make Initial Contact

A. Identify school contact person & give overview of SET page with the list of products needed.
B. Ask when they may be able to have the products gathered. Approximate date: _____
C. Get names, phone #'s, email address & record below.

Name_____ Phone_____

Email_____

Products to Collect

1. _____ Discipline handbook
2. _____ School improvement plan goals
3. _____ Annual Action Plan for meeting school-wide behavior support goals
4. _____ Social skills instructional materials/ implementation time line
5. _____ Behavioral incident summaries or reports (e.g., office referrals, suspensions, expulsions)
6. _____ Office discipline referral form(s)
7. _____ Other related information

Step 2: Confirm the Date to Conduct the SET

A. Confirm meeting date with the contact person for conducting an administrator interview, taking a tour of the school while conducting student & staff interviews, & for reviewing the products.
Meeting date & time _____

Step 3: Conduct the SET

A. Conduct administrator interview.
B. Tour school to conduct observations of posted school rules & randomly selected staff (minimum of 10) and student (minimum of 15) interviews.
C. Review products & score SET.

Step 4: Summarize and Report the Results

A. Summarize surveys & complete SET scoring.
B. Update school graph.
C. Meet with team to review results.
Meeting date & time _____

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School-wide Evaluation Tool
(SET)
Scoring Guide

School _____ **Date** _____

District _____ **State** _____

Pre _____ **Post** _____ **SET data collector** _____

Feature	Evaluation Question	Data Source (circle sources used) P= product; I= interview; O= observation	Score: 0-2
A. Expectations Defined	1. Is there documentation that staff has agreed to 5 or fewer positively stated school rules/ behavioral expectations? (0=no; 1= too many/negatively focused; 2 = yes)	Discipline handbook, Instructional materials P Other _____	
	2. Are the agreed upon rules & expectations publicly posted in 8 of 10 locations? (See interview & observation form for selection of locations). (0= 0-4; 1= 5-7; 2= 8-10)	Wall posters O Other _____	
B. Behavioral Expectations Taught	1. Is there a documented system for teaching behavioral expectations to students on an annual basis? (0= no; 1 = states that teaching will occur; 2= yes)	Lesson plan books, Instructional materials P Other _____	
	2. Do 90% of the staff asked state that teaching of behavioral expectations to students has occurred this year? (0= 0-80%; 1= 81-89%; 2=90%-100%)	Interviews I Other _____	
	3. Do 90% of team members asked state that the school-wide program has been taught/reviewed with staff on an annual basis? (0= 0-50%; 1= 51-89%; 2=90%-100%)	Interviews I Other _____	
	4. Can at least 70% of 15 or more students state 67% of the school rules? (0= 0-50%; 1= 51-69%; 2= 70-100%)	Interviews I Other _____	
	5. Can 90% or more of the staff asked list 67% of the school rules? (0= 0-50%; 1= 51-89%; 2=90%-100%)	Interviews I Other _____	
C. On-going System for Rewarding Behavioral Expectations	1. Is there a documented system for rewarding student behavior? (0= no; 1= states to acknowledge, but not how; 2= yes)	Instructional materials, Lesson Plans, Interviews P Other _____	
	2. Do 50% or more students asked indicate they have received a reward (other than verbal praise) for expected behaviors over the past two months? (0= 0-25%; 1= 26-49%; 2= 50-100%)	Interviews I Other _____	
	3. Do 90% of staff asked indicate they have delivered a reward (other than verbal praise) to students for expected behavior over the past two months? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other _____	
D. System for Responding to Behavioral Violations	1. Is there a documented system for dealing with and reporting specific behavioral violations? (0= no; 1= states to document, but not how; 2 = yes)	Discipline handbook, Instructional materials P Other _____	
	2. Do 90% of staff asked agree with administration on what problems are office-managed and what problems are classroom-managed? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other _____	
	3. Is the documented crisis plan for responding to extreme dangerous situations readily available in 6 of 7 locations? (0= 0-3; 1= 4-5; 2= 6-7)	Walls O Other _____	

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Feature	Evaluation Question	Data Source (circle sources used) P= product; I= interview; O= observation	Score: 0-2
	4. Do 90% of staff asked agree with administration on the procedure for handling extreme emergencies (stranger in building with a weapon)? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other _____	
E. Monitoring & Decision-Making	1. Does the discipline referral form list (a) student/grade, (b) date, (c) time, (d) referring staff, (e) problem behavior, (f) location, (g) persons involved, (h) probable motivation, & (i) administrative decision? (0=0-3 items, 1= 4-6 items; 2= 7-9 items)	Referral form P (circle items present on the referral form)	
	2. Can the administrator clearly define a system for collecting & summarizing discipline referrals (computer software, data entry time)? (0=no, 1= referrals are collected; 2= yes)	Interview I Other _____	
	3. Does the administrator report that the team provides discipline data summary reports to the staff at least three times/year? (0= no; 1= 1-2 times/yr.; 2= 3 or more times/yr)	Interview I Other _____	
	4. Do 90% of team members asked report that discipline data is used for making decisions in designing, implementing, and revising school-wide effective behavior support efforts? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other _____	
F. Management	1. Does the school improvement plan list improving behavior support systems as one of the top 3 school improvement plan goals? (0= no, 1= 4th or lower priority; 2 = 1st- 3rd priority)	School Improvement Plan, P Interview Other I	
	2. Can 90% of staff asked report that there is a school-wide team established to address behavior support systems in the school? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other _____	
	3. Does the administrator report that team membership includes representation of all staff? (0= no, 2= yes)	Interview I Other	
	4. Can 90% of team members asked identify the team leader? (0= 0-50%; 1= 51-89%; 2= 90-100%)	Interviews I Other	
	5. Is the administrator an active member of the school-wide behavior support team? (0= no, 1= yes, but not consistently; 2 = yes)	Interview I Other _____	
	6. Does the administrator report that team meetings occur at least monthly? (0=no team meeting, 1=less often than monthly, 2= at least monthly)	Interview I Other _____	
	7. Does the administrator report that the team reports progress to the staff at least four times per year? (0=no, 1= less than 4 times per year, 2= yes)	Interview I Other _____	
	8. Does the team have an action plan with specific goals that is less than one year old? (0=no, 2=yes)	Annual Plan, calendar P Other	
G. District-Level Support	1. Does the school budget contain an allocated amount of money for building and maintaining school-wide behavioral support? (0= no; 2= yes)	Interview I Other _____	
	2. Can the administrator identify an out-of-school liaison in the district or state? (0= no; 2=yes)	Interview I Other	
Summary Scores:	A = /4	B = /10	C = /6	D = /8	E = /8
	F = /16	G = /4	Mean = /7		

Administrator Interview Guide

Let's talk about your discipline system

1) Do you collect and summarize office discipline referral information? Yes No If no, skip to #4
2) What system do you use for collecting and summarizing office discipline referrals? (E2)
   a) What data do you collect? _____
   b) Who collects and enters the data? _____
3) What do you do with the office discipline referral information? (E3)
   a) Who looks at the data? _____
   b) How often do you share it with other staff? _____
4) What type of problems do you expect teachers to refer to the office rather than handling in the classroom/ specific setting? (D2)

5) What is the procedure for handling extreme emergencies in the building (i.e. stranger with a gun)? (D4)

Let's talk about your school rules or motto

6) Do you have school rules or a motto? Yes No If no, skip to # 10.
7) How many are there? _____
8) What are the rules/motto? (B4, B5)

9) What are they called? (B4, B5)

10) Do you acknowledge students for doing well socially? Yes No If no, skip to # 12.

11) What are the social acknowledgements/ activities/ routines called (student of month, positive referral, letter home, stickers, high 5's)? (C2, C3)

Do you have a team that addresses school-wide discipline? If no, skip to # 19

12) Has the team taught/reviewed the school-wide program with staff this year? (B3) Yes No
13) Is your school-wide team representative of your school staff? (F3) Yes No
14) Are you on the team? (F5) Yes No
15) How often does the team meet? (F6) _____
16) Do you attend team meetings consistently? (F5) Yes No
17) Who is your team leader/facilitator? (F4) _____
18) Does the team provide updates to faculty on activities & data summaries? (E3, F7) Yes No
    If yes, how often? _____
19) Do you have an out-of-school liaison in the state or district to support you on positive behavior support systems development? (G2) Yes No
    If yes, who? _____
20) What are your top 3 school improvement goals? (F1)

21) Does the school budget contain an allocated amount of money for building and maintaining school-wide behavioral support? (G1) Yes No

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Additional Interviews

In addition to the administrator interview questions there are questions for Behavior Support Team members, staff and students. ***Interviews can be completed during the school tour.*** Randomly select students and staff as you walk through the school. Use this page as a reference for all other interview questions. Use the interview and observation form to record student, staff, and team member responses.

Staff Interview Questions
Interview a minimum of 10 staff

1) What are the _____ (school rules, high 5's, 3 bee's)? (B5)
(Define what the acronym means)

2) Have you taught the school rules/behavioral expectations this year? (B2)

3) Have you given out any _____ since _____? (C3)
(rewards for appropriate behavior) (2 months ago)

4) What types of student problems do you or would you refer to the office? (D2)

5) What is the procedure for dealing with a stranger with a gun? (D4)

6) Is there a school-wide team that addresses behavioral support in your building?

7) Are you on the team?

Team Member Interview Questions

1) Does your team use discipline data to make decisions? (E4)

2) Has your team taught/reviewed the school-wide program with staff this year? (B3)

3) Who is the team leader/facilitator? (F4)

Student Interview Questions
Interview a minimum of 15 students

1) What are the _____ (school rules, high 5's, 3 bee's)? (B4)
(Define what the acronym means.)

2) Have you received a _____ since _____? (C2)
(reward for appropriate behavior) (2 months ago)

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Interview and Observation Form

	Staff questions (Interview a minimum of 10 staff members)							Team member questions			Student questions	
	What are the school rules? Record the # of rules known.	*Have you taught the school rules/ behave. exp to students this year?*	*Have you given out any _____ since _____?* (2 mos.)	*What types of student problems do you or would you refer to the office?*	*What is the procedure for dealing with a stranger with a gun?*	*Is there a team in your school to address school-wide behavior support systems?*	*Are you on the team? If yes, ask team questions*	*Does your team use discipline data to make decisions?*	*Has your team taught/ reviewed SW program w/staff this year?*	*Who is the team leader/ facilitator?*	*What are the [school rules]?* Record the # of rules known	*Have you received a _____ since _____?*
1		Y N	Y N			Y N	Y N	Y N	Y N		1	Y N
2		Y N	Y N			Y N	Y N	Y N	Y N		2	Y N
3		Y N	Y N			Y N	Y N	Y N	Y N		3	Y N
4		Y N	Y N			Y N	Y N	Y N	Y N		4	Y N
5		Y N	Y N			Y N	Y N	Y N	Y N		5	Y N
6		Y N	Y N			Y N	Y N	Y N	Y N		6	Y N
7		Y N	Y N			Y N	Y N	Y N	Y N		7	Y N
8		Y N	Y N			Y N	Y N	Y N	Y N		8	Y N
9		Y N	Y N			Y N	Y N	Y N	Y N		9	Y N
10		Y N	Y N			Y N	Y N	Y N	Y N		10	Y N
11		Y N	Y N			Y N	Y N	Y N	Y N		11	Y N
12		Y N	Y N			Y N	Y N	Y N	Y N		12	Y N
13		Y N	Y N			Y N	Y N	Y N	Y N		13	Y N
14		Y N	Y N			Y N	Y N	Y N	Y N		14	Y N
15		Y N	Y N			Y N	Y N	Y N	Y N		15	Y N
Total							X				Total	

Location	Front hall/ office	Class 1	Class 2	Class 3	Cafeteria	Library	Other setting (gym, lab)	Hall 1	Hall 2	Hall 3
Are rules & expectations posted?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
Is the documented crisis plan readily available?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	X	X	X

APPENDIX B

SCHOOL CLIMATE ASSESSMENT INSTRUMENT (SCAI)

Alliance for the Study of School Climate
California State University, Los Angeles
www.calstatela.edu/schoolclimate

School Climate Assessment Instrument (SCAI)
Elementary Teacher Version

Directions: Rate each item below. For each item there are 3 descriptions. Select the rating that best describes the current state at your school as a whole - Level 3(high), 2 (middle) or 1 (low). If you feel that the practices at your school rates between two of the descriptions provided then select the middle level option. Each item should receive only 1 rating/mark.

1. Physical Appearance	***Level – 3 (high)***	***Level – 2 (middle)***	***Level – 1 (low)***
	High ***high-middle***	***middle*** ***middle-low***	***low***
1.a	Welcoming to outsiders, the school projects its identity to visitors.	Some signage for visitors as they enter the building.	Little concern for the image of the school.
1.b	School colors are easy to find and reflect a high level of school spirit.	School spirit and use of school colors is related mostly to sports.	Very little appearance of school colors and/or school spirit.
1.c	Staff and students take ownership of physical appearance.	Staff regularly comments on school appearance, but students do not feel any sense of personal ownership.	The schools appearance is left solely to the janitorial staff.
1.d	There is essentially no litter.	Litter cleaned at the end of day.	People have given up the battle over litter.
1.e	Current student work is displayed to show pride and ownership by students.	Some student work is displayed.	Few and/or only top performances/products are displayed.
1.f	Things work and/or get fixed immediately.	Things get fixed when someone complains enough.	Many essential fixtures, appliances and structural items remain broken.
1.g	Staff and students have respect for custodians.	Most staff members are cordial with custodians.	Custodians are demeaned.
1.h	Graffiti is rare because students feel some sense of ownership of the school.	Graffiti occurs occasionally, but is dealt with by the staff.	Graffiti occurs frequently and projects the hostility of students toward their school.

2. Faculty Relations Level – 3 (high)		Level – 2 (middle)		Level –1 (low)
High	high-middle	middle	middle-low	low
2.a				
Faculty members commonly collaborate on matters of teaching.		Most faculty members are congenial to one another, and occasionally collaborate		Typically faculty members view one another competitively
2.b				
Faculty members approach problems as a team/collective.		Faculty members attend to problems as related to their own interests.		Faculty members expect someone else to solve problems.
2.c				
Faculty members use their planning time constructively and refrain from denigrating students in teacher areas.		Faculty members use time efficiently but feel the need to consistently vent displaced aggression toward students.		Faculty members look forward to time away from students so they can share their "real feelings" about them
2.d				
Faculty members are typically constructive when speaking of each other and/or administrators.		Faculty members wait for safe opportunities to share complaints about other teachers and/or administrators		Faculty members commonly use unflattering names for other faculty and/or administration in private.
2.e				
Faculty members feel a collective sense of dissatisfaction with status quo, and find ways to take action to improve		Faculty members give sincere "lip service" to the idea of making things better.		Faculty members are content with the status quo and often resentful toward change-minded staff
2.f				
Faculty members exhibit high level of respect for one another.		Faculty members exhibit respect for a few of their prominent colleagues.		Faculty members exhibit little respect for self or others.
2.g				
Faculty meetings are attended by most all, and address relevant content		Faculty meetings are an obligation that most attend, but are usually seen as a formality		Faculty meetings are seen as a waste of time and avoided when possible.
2.h				
Staff and all-school events are well attended by faculty.		There are few regular attendees at school events		Faculty and staff do a minimum of investing in school-related matters
2.i				
Leadership roles are most likely performed by faculty members with other faculty expressing appreciation		Leadership roles are accepted grudgingly by faculty.		Leadership is avoided, and the motives of those who do take leadership roles are questioned
2.j				
Faculty members have the time and interest to commune with one another, and feel very little isolation		Faculty members congregate in small cordial groups, yet commonly feel a sense that teaching is an isolating profession		Faculty members typically see no need to relate outside the walls of their class.

3. Student Interactions				
Level - 3		Level - 2		Level -1
High	high-middle	middle	middle-low	low
3.a ——o—— o —— o —— o —— o ——				
Students feel a sense of community, and "school" is defined by the warm regard for the inhabitants of the building.		Students feel as though they have friends and are safe, but the school is just a place they have to attend.		Students feel no sense of affiliation with the school.
3.b ——o—— o —— o —— o —— o ——				
Students of various cultures and sub-groups blend, interrelate, and feel like valued members of the community.		Students of various sub-groups most often stay separate.		Various sub-groups are hostile to one another.
3.c ——o—— o —— o —— o —— o ——				
Students readily accept the purpose of zero tolerance for "put-downs."		Students think put-downs are just part of their language.		Put-downs lead to hostility and even violence.
3.d ——o—— o —— o —— o —— o ——				
Many students attend school events.		A few regulars attend school events.		It is un-cool to attend school events.
3.e ——o—— o —— o —— o —— o ——				
"Popular" students feel an obligation to serve the school, not a sense of entitlement.		"Popular" students treat the other **"popular"** students well.		"Popular" students use their political capital to oppress those less popular.
3.f ——o—— o —— o —— o —— o ——				
Most students feel safe from violence.		Most students don't expect much severe violence but accept minor acts of harassment almost daily.		Most students do not feel safe from violent acts, large or small.
3.g ——o—— o —— o —— o —— o ——				
Leaders are easy to find due to the wide range of gifts that are validated and harnessed.		Leaders come from a small group of students.		Students avoid leadership for fear of being viewed negatively by peers.
3.h ——o—— o —— o —— o —— o ——				
Most of the adult attention is placed on encouraging the positive student role models who are taught to be **servant-leaders.**		The adult attention at the school is about evenly split between students who are positive role models and those who often cause trouble.		Most of the adult attention in the school is spent on those students who cause the most trouble.
3.i ——o—— o —— o —— o —— o ——				
Most students expect to be given ownership over decisions that affect them.		Most students are upset when rights are withdrawn, but typically take little action.		Most students assume that they have few rights.

4. Leadership/Decisions		
Level - 3	Level - 2	Level – 1
High / high-middle	middle / middle-low	low
4.a		
School has a sense of vision and a mission that is shared by all staff.	School has a set of policies, a written mission, but no cohesive vision.	School has policies that are used inconsistently.
4.b		
Vision comes from the collective will of the school community.	Vision comes from leadership.	Vision is absent.
4.c		
School's decisions are conspicuously grounded in the mission.	Policies and mission exist but are not meaningful toward staff action.	Mission may exist but is essentially ignored.
4.d		
Vast majority of staff members feel valued and listened to.	Selected staff members feel occasionally recognized.	Administration is seen as playing favorites.
4.e		
A sense of "shared values" is purposefully cultivated.	Most staff share a common value to do what they think is best for their students.	Guiding school values are absent or in constant conflict.
4.f		
Staff understands and uses a clear system for selecting priority needs, and has a highly functioning team for "shared decision-making."	There is a SDM committee but most real power is in a "loop" of insiders/decision-makers.	Decisions are made autocratically or accidentally.
4.g		
Most of the faculty and staff have a high level of trust and respect for leadership.	Some faculty and staff members have respect for leadership.	Most faculty and staff members feel at odds with the leadership.
4.h		
Teacher leadership is systematic and integral to the school's leadership strategy.	Some teachers take leadership roles when they feel a great enough sense of responsibility.	Leadership is seen as solely the domain of the administration.
4.i		
Leadership demonstrates a high level of accountability, and finds ways to "make it happen."	Leadership is highly political about how resources are allocated and often deflects responsibility.	Leadership seems disconnected to outcomes and find countless reasons why "it can't happen."
4.j		
Leadership is in tune with students and community.	Leadership has selected sources of info about the community and students.	Leadership is isolated from the students and community.
4.k		
Leadership is in tune with others' experience of the quality of school climate.	Leadership makes pro forma statements about wanting good school climate.	Leadership does not see school climate as a necessary interest.

5. Discipline Environment	Level – 3		Level - 2		Level – 1
	High	high-middle	middle	middle-low	low
5.a	School-wide discipline policy is consistently applied.		School-wide discipline policy is used by some staff.		School-wide discipline policy exists in writing only.
5.b	It is evident from student behavior that there are clear expectations and consistency in the discipline policy.		In many classes there are clear expectations and most teachers are fair and unbiased.		Students have to determine what each teacher expects and behavioral interventions are defined by a high level of subjectivity.
5.c	Most teachers use effective discipline strategies that are defined by logical consequences and refrain from punishments or shaming.		Most teachers use some form of positive or assertive discipline but accept the notion that punishment and shaming are necessary with some students.		Most teachers accept the notion that the only thing the students in the school understand is punishment and/or personal challenges.
5.d	Maximum use of student-generated ideas and input.		Occasional use of student-generated ideas.		Teachers make the rules and students should follow them.
5.e	Most consider teaching and discipline within the lens of basic student needs that must be met for a functional class.		Most have some sensitivity to student needs, but the primary goal of classroom management is control.		Most view all student misconduct as disobedience and/or the student's fault.
5.f	Teacher-student interactions could be typically described as supportive and respectful.		Teacher-student interactions could be typically described as fair but teacher-dominated.		Teacher-student interactions are mostly teacher-dominated and reactive.
5.g	Management strategies consistently promote increased student self-direction over time.		Management strategies promote acceptable levels of classroom control over time, but are mostly teacher-centered.		Management strategies result in mixed results: some classes seem to improve over time, while others seem to decline.
5.h	In most classes, teachers create a sense of belonging and community.		In most classes, teachers are able to create a place where things run smoothly.		In most classes, there are frequent problems and conflict.
5.i	When disciplining students, teachers typically focus on the problematic behavior, not the student as a person.		When disciplining students, teachers are typically assertive yet often reactive, and give an overall inconsistent message.		When disciplining students, teachers are typically personal and often antagonistic.

6. Learning/Assessment				
Level – 3		Level – 2		Level – 1
High	high-middle	middle	middle-low	low
6.a Learning targets for assessments are clear and attainable for learners.		Most high-achieving students can find a way to meet the teacher's learning targets.		Students see grades as relating to personal or random purposes.
6.b Instruction/Assessment promotes students' sense of ownership and responsibility for their learning.		Instruction/Assessment is most often focused on relevant learning, yet mostly rewards the high-achievers.		Instruction/Assessment is focused on bits of knowledge that can be explained and then tested.
6.c The grading in most classes focuses on both the end result and the process.		Focusing on the process is encouraged but what is graded is mostly the end result of the work.		The focus of grades is typically the final product.
6.d Instruction is dynamic, involving learner-centered, and challenging.		Instruction is mainly teacher-centered that at times can be interesting and relevant.		Instruction is boring and disconnected from the students and is almost always lecture and independent seatwork.
6.e Students learn to work cooperatively and as members of teams.		Some teachers buy into the idea of cooperative learning.		Cooperative learning is rare as it is seen as leading to chaos and cheating.
6.f Classroom dialogue is characterized by higher-order thinking (e.g., analysis, application, and synthesis).		Classroom dialogue is active and engaging but mostly related to obtaining right answers.		Classroom dialogue is infrequent and/or involves a small proportion of students.
6.g Students consistently feel as though they are learning subjects in-depth.		Students are engaged in quality content, but the focus is mostly on content coverage.		Students feel the content is only occasionally meaningful and never investigated in-depth.
6.h Students are seen as the primary users of assessment information, and assessment is used for the purpose of informing the learning process.		Assessment is seen as something that occurs at the end of assignments. Grades are used primarily for student-to-student comparison.		Assessment is used to compare students to one another and/or to send a message to lazy students.
6.i Students are given systematic opportunities to reflect on their learning progress.		Mostly higher-level students are given occasional opportunities to reflect on their learning in some classes.		Teaching is seen as providing maximum input, and little opportunity for reflection exists.
6.j Teachers have some mode of making sense of, and being responsive to, varying learning styles.		Teachers are aware of learning styles as a concept, and make some attempt in that area.		Teachers expect all students to conform to their teaching style.
6.k Teachers promote the view that intelligence and ability are a function of each student's effort and application, and are not fixed. The major emphasis is placed on the process over the product.		Teachers promote the view that effort has a lot to do with how much students are able to accomplish. The major emphasis is placed on working to produce good products.		Teachers promote the view that intelligence and ability are fixed/innate traits and not all students have what it takes. The major emphasis is on the comparison of products/grades.

7. Attitude and Culture	Level – 3		Level – 2		Level – 1
	High	high-middle	middle	middle-low	low
7.a	Students feel as though they are part of a community.		Students feel as though they are part of a society.		Students feel as though they are visitors in a building.
7.b	Students voluntarily correct peers who use destructive and/or abusive language.		Students seek adult assistance to stop blatant verbal abuse.		Students accept verbal abuse as a normal part of their day.
7.c	Students speak about the school in proud, positive terms.		Students speak of the school in neutral or mixed terms.		Students denigrate the school when they refer to it.
7.d	Most students feel listened to, represented, and that they have a voice.		Most students see some evidence that some students have a voice.		Most students feel they have very little voice when at school.
7.e	**There is a common expectation at the school that Bullying in any form is not acceptable, so it is rare.**		**There is some bullying, but the adults in the school are making an effort to reduce it.**		**There is a lot of bullying at the school and adults feel very helpless to change it.**
7.f	Teachers share commonly high expectations for all students.		Most teachers have high expectations for students who show promise.		Often teachers openly express doubts about the potential of some students.
7.g	Most students feel as though they owe their school a debt of gratitude upon graduation.		Graduates feel that they had an acceptable school experience.		A high number of students graduate feeling cheated.
7.h	Students feel welcome and comfortable in talking to adults and/or designated peer counselors.		Some students have a few staff that they target for advice.		Students assume adults do not have any interest in their problems.
7.i	School maintains traditions that promote school pride and a sense of historical continuity.		School maintains traditions that some students are aware of but most see as irrelevant to their experience.		School has given up on maintaining traditions due to apathy.
7.j	**Adults take care that students' lives at school are enjoyable and they provide strategies for students to deal with stress.**		**Some adults help students be less stressful, while some make students more stressful.**		**Adults mostly make things more stressful for the students.**
7.k	**Most students feel pretty relaxed and comfortable during the school day.**		**Most students feel some stress most of the time.**		**Most students feel very stressed most of the time.**
7.l	Most students feel a sense of belonging to something larger.		Most students see some evidence that efforts are made to promote school spirit.		Most students feel alone, alienated and/or part of a hostile environment.

8. Community Relations				
Level – 3		Level – 2		Level – 1
High	high-middle	middle	middle-low	low
8.a o o o o o				
School is perceived as welcoming to all parents.		School is perceived as welcoming to certain parents.		School is suspicious of why parents would want to visit.
8.b o o o o o				
School sends out regular communication to community, including invitations to attend key events.		School sends out pro forma communication that may be plentiful but is not created with the consumers' needs in mind.		School sends out pro forma communication only.
8.c o o o o o				
Athletic events and Fine Arts performances are well attended due to deliberate efforts toward promotion and audience appreciation.		Athletic events and Fine Arts performances are attended by a die-hard following and/or only when things are going well.		Athletic events and Fine Arts performances are poorly attended and as a result progressively less effort is made by participants.
8.d o o o o o				
Service learning efforts are regular, promoting student learning and positive community-relations.		Service learning is performed, but very infrequently due to perceived inconvenience.		Service learning is seen as just a glorified field trip and therefore not worth the time or expense.
8.e o o o o o				
Volunteer efforts are well coordinated and volunteers are plentiful, and conspicuously appreciated.		Volunteers are willing, but are often unaware of the events and/or feel a lack of guidance.		Volunteers are hard to find or unreliable.

8. Community Relations	Level – 3		Level – 2		Level – 1
	High	high-middle	middle	middle-low	low
8.a	o	o	o	o	o
	School is perceived as welcoming to all parents.		School is perceived as welcoming to certain parents.		School is suspicious of why parents would want to visit.
8.b	o	o	o	o	o
	School sends out regular communication to community, including invitations to attend key events.		School sends out pro forma communication that may be plentiful but is not created with the consumers' needs in mind.		School sends out pro forma communication only.
8.c	o	o	o	o	o
	Athletic events and Fine Arts performances are well attended due to deliberate efforts toward promotion and audience appreciation.		Athletic events and Fine Arts performances are attended by a die-hard following and/or only when things are going well.		Athletic events and Fine Arts performances are poorly attended and as a result progressively less effort is made by participants.
8.d	o	o	o	o	o
	Service learning efforts are regular, promoting student learning and positive community-relations.		Service learning is performed, but very infrequently due to perceived inconvenience.		Service learning is seen as just a glorified field trip and therefore not worth the time or expense.
8.e	o	o	o	o	o
	Volunteer efforts are well coordinated and volunteers are plentiful, and conspicuously appreciated.		Volunteers are willing, but are often unaware of the events and/or feel a lack of guidance.		Volunteers are hard to find or unreliable.

APPENDIX C

HUMAN USE COMMITTEE APPROVAL

LOUISIANA TECH
UNIVERSITY

OFFICE OF UNIVERSITY RESEARCH

MEMORANDUM

TO: Ms. Zaheerah El-Amin and Dr. Bryan McCoy

FROM: Dr. Stan Napper, Vice President Research & Development

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: February 10, 2017

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"The Relationship between Positive Behavior Interventions and Supports and School Climate/Culture in Elementary Schools"

HUC 17-055

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. ***This approval was finalized on February 10, 2017 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond February 10, 2018.*** Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

Please be aware that you are responsible for reporting any adverse events or unanticipated problems.

If you have any questions, please contact Dr. Mary Livingston at 257-2292 or 257-5066.

APPENDIX D

INSTRUMENT PERMISSION: SET

Gmail **Zaheerah El-Amin <zelamin85@gmail.com>**

SET

3 messages

Zaheerah El-Amin <zelamin85@gmail.com> Mon, Oct 31, 2016 at 10:14 PM
To: george.sugai@uconn.edu

Good evening,

My name is Zaheerah El-Amin. I am a doctoral candidate, and am currently seeking approval from the IRB to conduct my study. In order to do so, I need to have permission to use your instrument, the SET. Can you please tell me what I need to do in order to receive written permission from you?

Please feel free to respond to this email or contact me at 318-471-0218.

Zaheerah El-Amin

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george sugai <george.sugai@uconn.edu> Mon, Oct 31, 2016 at 11:38 PM
To: Zaheerah El-Amin <zelamin85@gmail.com>
Cc: Robert Horner <robh@uoregon.edu>, Kent McIntosh <kentm@uoregon.edu>

Zaheerah,

You can use this email as record of permission to use the SET and the Tiered Fidelity Inventory (TFI). We ask that you cite the OSEP Center (www.pbis.org) as your source. In addition, we request that you seek approval if you make any modifications.

You also may want to use the TFI which is replacing the SET. See http://www.pbis.org/evaluation/evaluation-tools.

George

George Sugai, Ph.D.
Carole J. Neag Endowed Professor
Center for Behavioral Education and Research (www.cber.org)
OSEP Center on Positive Behavioral Interventions and Supports (www.pbis.org)
OSEP Early Childhood Personnel TA Center (www.ecpcta.org)
Neag School of Education
University of Connecticut
george.sugai@uconn.edu

APPENDIX E

INSTRUMENT PERMISSION: SCAI

Gmail Zaheerah El-Amin <zelamin85@gmail.com>

School Climate Assessment Inventory

2 messages

Zaheerah El-Amin <zelamin85@gmail.com> Mon, Oct 31, 2016 at 9:51 PM
To: jshindl@calstatela.edu

Good evening,

My name is Zaheerah El-Amin. I am a doctoral candidate, and am currently seeking approval from the IRB to conduct my study. In order to do so, I need to have permission to use your instrument (School Climate Assessment Inventory). Can you please tell me what I need to do in order to receive written permission from you?

Please feel free to respond to this email or contact me at 318-471-0218.

Zaheerah El-Amin

Shindler, John <jshindl@exchange.calstatela.edu> Tue, Nov 1, 2016 at 1:17 PM
To: Zaheerah El-Amin <zelamin85@gmail.com>

Hi Zaheerah,

Per our phone conversation. Here is the file for the elementary teacher version.

Good Luck,

John Shindler

APPENDIX F

SUPERINTENDENT CONSENT FORM

THE RELATIONSHIP BETWEEN POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS AND SCHOOL CLIMATE/CULTURE IN ELEMENTARY SCHOOLS STUDY CONSENT FORM

As the superintendent, you are being asked to provide consent for a research study that measures the relationship between Positive Behavior Interventions and Supports and the climate/culture in elementary schools. Please read this form carefully and ask any questions you may have before granting permission for the study to be conducted.

What the study is about: This study will attempt to determine the relationship between Positive Behavior Interventions and Supports and an elementary school's climate/culture.

What I will ask teachers and counselors to do: If you consent to this study, the School Climate Assessment Inventory (SCAI) will be electronically dispersed to faculty members. The survey (SCAI) is comprised of 76 questions. Faculty includes counselors and full-time teachers. No itinerant teachers, paraprofessionals, administrators, SRO officers, custodians, cafeteria workers, clerical workers, or long-term substitutes will be administered the SCAI.

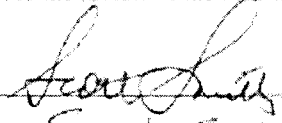
Risks and benefits: I do not anticipate any risks in you participating in this study. There are no benefits to the participant, but the researcher will obtain a better understanding of the relationship between Positive Behavior Interventions and Supports (PBIS) and school climate/culture.

Compensation: None

Answers will be confidential. The records of this study will be kept private; reporting will be done anonymously. No individual identities or school/district information will be released. Research records will be kept in a locked file; only the researcher will have access to the records. None of the collected data results will be shared with school administrators.

Taking part is voluntary: Taking part in this study is completely voluntary. If you decide not to provide consent for the study, it will not affect your current or future relationship with the researcher, nor will there be any repercussions from school administration.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to the administration of the SCAI to the faculty of the participating schools. I also consent to the review of the SET binders that are housed at each of the four participating schools.

Your Signature  Date 1/26/2017

Your Name (printed) Scott Smith Position Supt. Bossier Schools

This consent form will be kept by the researcher for at least three years beyond the end of the study.

APPENDIX G

PRINCIPAL LETTER TO STAFF

Greetings.

At this week's staff meeting you will receive a link to complete a survey from Zaheerah El-Amin. Many of you know Zaheerah, as she serves on our school's Pupil Appraisal team. Your participation in this study is for the sole purposes of her dissertation, and the results will not be released to your administrator(s), employing school, or district. Your participation in the survey has been approved by myself and Superintendent Smith.

Your responses will not be disclosed to any administrators, nor will you be asked to identify yourself. Additionally, because there are no identification markers, Mrs. El-Amin cannot inform me of who does or does not participate. Taking part in this study is completely voluntary. If you decide not to partake in the study, it will not affect your current or future relationship with Mrs. El-Amin, your employing school, or district, nor will there be any repercussions from school administration.

A consent form will be completed at the staff meeting prior to completion of the survey. At the bottom of the consent form are two boxes noting whether or not you will be participating. Please complete the form and hand it to Mrs. El-Amin when she comes around. The completion of this form will provide your consent and give Mrs. El-Amin an idea of how many surveys to expect. Even if you choose not to participate, noting you will not be participating and returning the "Teacher Consent Form" enables Mrs. El-Amin to subtract your responses from the total expected, and expedite her wait time.

If you have any questions, please contact Zaheerah El-Amin at 318-471-0218. You are not required to provide any identifying information to receive clarity regarding your participation.

Sincerely,

Principal

APPENDIX H

TEACHER CONSENT FORM

THE RELATIONSHIP BETWEEN POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS AND SCHOOL CLIMATE/CULTURE IN ELEMENTARY SCHOOLS STUDY TEACHER CONSENT FORM

You are being asked to take part in a research study that measures the relationship between Positive Behavior Interventions and Supports and the climate/culture in elementary schools. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: This study will attempt to determine the relationship between Positive Behavior Interventions and Supports and an elementary school's climate/culture.

What I will ask you to do: If you agree to participate in this study, the School Climate Assessment Inventory (SCAI) will be dispersed to faculty members during a monthly faculty meeting. The survey (SCAI) is comprised of 71 questions. Faculty includes counselors and full-time teachers. No itinerant teachers, paraprofessionals, administrators, SRO officers, custodians, cafeteria workers, clerical workers, or long-term substitutes will be administered the SCAI. Your responses will help validate SET data. This study is being conducted for the purposes of my dissertation.

Risks and benefits: I do not anticipate any risks in you participating in this study. There are no benefits to the participant, but the researcher will obtain a better understanding of the relationship between Positive Behavior Interventions and Supports (PBIS) and school climate/culture.

Online survey tools disclosure: The server may collect information and your IP address indirectly and automatically via "cookies".

Compensation: None

Your answers will be confidential. The records of this study will be kept private; reporting will be done anonymously. No individual identities or school/district information will be released. Research records will be kept in a locked file; only the researcher will have access to the records. None of the collected data results will be shared with school administrators.

Taking part is voluntary: Taking part in this study is completely voluntary. If you decide not to take part in the study, it will not affect your current or future relationship with the researcher, nor will there be any repercussions from school administration.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Please check the appropriate box below.

☐ I choose to participate ☐ I do <u>not</u> choose to participate.

This consent form will be kept by the researcher for at least three years beyond the end of the study.

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VITA

Zaheerah El-Amin Clark was born in Shreveport, Louisiana. She is a product of the Caddo Parish School System. Upon high school graduation, Zaheerah began her collegiate career at Northwestern State University where she majored in Health and Exercise Science. As a result of Hurricane Katrina, the school system needed rebuilding. At this time, Zaheerah took advantage of the employment opportunity, moved to New Orleans, Louisiana, and began teaching. For the next six years, Zaheerah would teach in New Orleans at Murray Henderson Elementary/Middle School, which was a part of the Recovery School District. She would also earn a Master's Degree in Special Education from Xavier University, and begin working on her Specialist Degree from Northwestern State.

In 2012, Zaheerah finished her coursework with Northwestern State and moved back to Shreveport. At this time, she began the Educational Leadership doctoral program with Louisiana Tech University. She now serves as an Educational Diagnostician for Bossier Parish Schools. Zaheerah holds the following certifications: Child Search Coordinator.Early Childhood, Educational Diagnostician, Educational Leadership, Elementary Grades (1-5), Health and Physical Education (K-12), Mild/Moderate (1-12), and Reading Specialist.