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The Relationship of the Implementation of Positive Behavior Interventions and Supports to Improve Academic Achievement

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Interventions and Supports to improve Academic Achievement

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The foundation for PBiS and its practices is that academic achievement and social behaviors are connected. It becomes difficult for students to learn when the student is spending more time in discipline-related interactions than in those related to learning academic content. School administrators and teachers have become increasingly frustrated with the impact of poor student behavior on academic achievement in their schools. The situation leads to the public perception that student behavior is out of control. Isolated situations of violence (e.g., school shootings) contribute to the perception. Teachers continually struggle to master classroom management strategies that are proactive, preventative in nature, and lead to improved student achievement.

In this study quantitative data was collected through the examination of standardized scores identified students earned on both the NeSA-R , NeSA-M, and MAP both before and after the implementation of PBiS. The data was analyzed descriptively and comparatively. Results indicated that students earned better standardized scores following the implementation of PBiS. Qualitative data was also analyzed for a deeper understanding of the process and implementation process of PBiS. Leadership team members, Norris Middle School staff members and students all indicated implementation of PBiS has helped with positive changes with students at Norris Middle School.

Students as well as staff members reported positive changes with students and how they treated other students within the building along with taking ownership for their behaviors and making better choices.

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Chapter One

Introduction

Educating elementary and secondary students today is a greater than ever challenge for teachers and administrators. In addition to the increased emphasis on accountability for student achievement implemented with the passage of the No Child Left Behind Act, school administrators are searching for school-wide prevention models that promote a positive school culture and reduce discipline problems. Several different programs are available that systematically manage student behavior problems by creating school-wide plans that clearly define positive behavioral expectations as well as provide incentives to students who meet the behavioral expectations, and establish a consistent strategy for managing student behavior problems (Bradshaw, Mitchell, & Leaf, 2010; Horner, Sugai, Todd, & Lewis-Palmer, 2005; Sugai & Horner, 2006).

Student discipline continues to be one of the most important issues confronting educators and administrators within public schools. A report by the U.S. Secretary of Education and the U.S. Attorney General identified serious behavior problems that continually are confronting our public schools and recommended various solutions (Chafouleas, Volpe, Gresham, & Cook, 2010; Romer & McIntosh, 2005). Discipline problems continue to be a frequent concern and disruptive behaviors in the classroom interfere with learning, compete with instruction, and make it less likely that students will master academic content goals.

Schools today face a number of challenges in educating students. In addition to the responsibility of effectively teaching academic subjects such as math, reading, science, the arts, and writing, educators must increasingly deal with nonacademic factors

that influence the instruction they provide. Among these factors, one of the most challenging is emotional and behavioral disorders.

It is estimated that approximately 10% of children and adolescents in the United States suffer from some form of mental illness that significantly impairs their ability to function in everyday settings (Lassen, Steele, & Sailor, 2006; Shaffer et al., 1996). Although not all students who present challenging behavior have a diagnosable emotional and behavioral problem, especially disruptive and aggressive behavior, these students certainly consume a great deal of teacher and school resources (Sugai & Horner, 1994).

In an effort to address behavioral issues that impede the learning process, school districts commonly look to whole-school intervention or discipline programs because they are thought to create optimal learning environments for all students including students who display greater social-emotional and behavioral needs. Whole-school discipline programs emphasize preventive intervention. Preventive intervention works with identifying pro-social student behaviors, establishing a system to positively reinforce those behaviors, and fostering cooperative "buy in" from all members of the school community.

School-wide behavioral supports have been highlighted in the literature to be one intervention a school team can choose to implement as a universal school wide support for all students (Safran & Oswald, 2003). In order for this type of program to be supported, the team needs multiple data sources which are accessible and reliable. For example, Gottfredson, Gottfredson, and Hybl (1993) implemented several school-wide changes in "treatment" middle schools that started with the revisions of their current middle school discipline policies along with the use of a computerized program that was

able to record discipline referrals made by teachers. Teachers were also trained to handle

disruptive behaviors by realigning classroom environments and using more effective

management behavior techniques.

Warren et al., (2006) implemented school-wide supports in an urban middle

school. Several outcome measures in addition to office discipline referrals were included

in the pre- and post-intervention years, including in-school conferences with students,

time-outs, in-school suspensions, short-term suspensions, and out-of school placements.

Overall, the data indicated a decrease in all aversive methods used, except out-of school

placements which remained the same.

Positive Behavior and Intervention Supports (PBiS) (Horner, Sugai, Todd, et al.

(2005); Sugai & Horner, 2006; Sugai, Horner, & Gresham, 2002) is one such whole-

school prevention framework that seeks to enhance the school's capacity to prevent

disruptive behavior by creating and sustaining primary (school-wide/universal),

secondary (targeted/selective), and tertiary (individual/indicated) systems of support.

PBiS is a proactive, positive approach to addressing a student's challenging behavior that

moved beyond the focus of reducing the behavior and focuses on improving the

surroundings for all students involved (Carr et al., 2002). PBiS uses specific strategies for

assessment and intervention to ensure interventions are technically sound and is also

process oriented, involving team organization and methods to promote active

involvement of stakeholders and the development of appropriate support plans (Bambara,

Gomez, Koger, Lohrmann-O'Rourke, & Xin, 2001; Snell, Voorhees, & Chen, 2005).

Positive behavior interventions and supports is a general term that refers to the

application of positive behavioral interventions and strategies to achieve socially

important behavior change; PBiS was developed initially as an alternative to aversive interventions used with students with significant disabilities who engaged in extreme forms of self-injury and aggression (Durand & Carr, 1992; Meyer & Evans, 1989). More recently, PBiS has been applied successfully with a wide range of students, across multiple environments (Carr et al., 1999; Horner, Albin, Sprague, & Todd, 2000), and extended from an intervention approach for individual students to an intervention approach for entire schools (Lewis, Colvin, & Sugai, 2000; Lewis, Sugai, & Colvin, 1998; Todd, Horner, Sugai, & Sprague, 1999).

PBiS is not a new intervention package or a new theory of behavior, but a behaviorally based framework approach to enhance the capacity of schools, families, and communities to design effective environments that improve the connection and link between research-validated practices and the environments in which teaching and learning occur. Attention is focused on creating and sustaining school environments that improve lifestyle results (personal, health, social, family, work, recreation, etc.) for all children and youth by making problem behavior less effective, efficient, and relevant and making desired behavior more functional. PBiS is school-wide proactive; systems level approach that makes it possible for schools to effectively and efficiently support student behavior.

In an effort to address challenging behaviors as well as low academic performance, Norris Middle School teachers and support staff decided to work together to implement Positive Behavior Interventions and Supports (PBiS) for all students and to more specifically address the needs of all students through the use of a tiered model of interventions.

Previous school practices included a model which often waited for a student to fail before providing support. PBiS utilizes a three-tiered model to behavior support to proactively address social behaviors of all students and prevent social and academic failure. The primary tier is designed to support all students across all settings in the school. When implemented effectively and accurately, schools can expect 74% of middle school students to respond to the primary tier of intervention. The secondary tier is designed to support the group of students who have not responded to the first tier of interventions, but do not pose a threat to themselves or others. Tertiary tier interventions are designed to help individual students who require additional support in order to benefit from tier one and two interventions. Tier three is also for those students whose behaviors are serious enough to require more immediate and intensive support (Simonsen, Sugai, & Negron, 2008).

PBiS specifically requests schools to follow four critical elements for implementation which are outcomes, data, practices, and systems. Outcomes are specific to the targeted group of students and often are proactive in nature to prevent behaviors from becoming chronic. Data is collected on behaviors to measure progress of the implementation toward the outlined outcomes which may include office discipline referrals, attendance records, and other measures of appropriate behavior. Practices focus on the intensity of the supports provided in the primary tier and the steps involved with increasing structure, more intensive social skills training, and delivery of more frequent reinforcement. Systems are established to guarantee the fidelity of the implementation of the adopted practices and that data are collected on a regular basis, reviewed, and used to make decisions.

Norris Middle School worked with each grade level several times a year to teach the students the expectations for PBiS within the school. Each grade level was provided instruction to explicitly teach students appropriate behavior in each one of the areas such as the cafeteria, restrooms, classrooms, media center, and exiting the building after school on what appropriate behaviors look like and how the three criteria (i.e., be safe, be respectful, be responsible) look in each one of these areas.

Norris Middle School is located in rural Nebraska and consists of grades 5-8. However, there are some scheduling differences between fifth-grade and grade six, seven, and eight. The daily schedule for the fifth- grade is a more traditional, elementary schedule. This study focused on sixth- grade students at Norris Middle School for the 2011-12 school year.

Problem Statement

In the past, school-wide discipline has focused mainly on reacting to student misbehavior by using punishment-based strategies such as taking away privileges, office referrals, suspensions, and expulsions. Research has shown that punishment, especially when it is used without positive strategies, is ineffective. The PBiS model advocates teaching, modeling, and reinforcing behavioral expectations and rewarding proactive, positive behaviors rather than waiting for misbehavior to occur before responding. The purpose of school-wide PBiS is to establish a climate where appropriate behavior is the norm (Scheffler & Aksamit, 2006).

Results from integrated studies show improved academic performance and reduced behavior problems (Stewart, Benner, Martella, & Marchand-Martella, 2007). An integrated system would be beneficial to both administrators and teachers as it would

save time, money, and has been shown to be effective. Walker, Ramsey, and Gresham (2003) noted, "The fact is, academic achievement and good behavior reinforce each other: Experiencing some success academically is related to decreases in acting out; conversely, learning positive behaviors is related to doing better academically" (p. 10).

Research in the area of causal relationships between behavior and achievement tends to be lacking, however speculation on why the relationship exists continues to encourage the question as to why "factors associated with learning and behavior . . . should be continued" (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008, p. 229). Implementation of PBiS has resulted in decreases in problem behavior and increases in academic achievement (Lewis & Sugai, 1999; Scheffler & Aksamit, 2006); reduction in office disciplinary referrals (Nelson, Martella & Marchand-Martella, 2002); and reduction of suspensions and expulsions (Sadler, 2000).

Academic engagement is an observable and measurable behavior that can be influenced by direct instructional approaches (for example, class-wide tutoring, and precision teaching) and positively focused interventions that reduce disruption, distraction, and negative behaviors in the classroom. The area of academic curricular modification considers many influences but one of the most relevant is training educators to increase the academic engagement of their students. Academic engagement may be defined as students displaying passive behaviors (for example, silent reading, listening to instruction) or active behaviors (for example, writing, delivering an oral report, asking questions) that are related directly to classroom instruction. When teachers are able to increase, strengthen, and maintain high levels of student academic engagement there is a

corresponding improvement in academic performance and achievement (DiPerna, Volpe, & Elliott, 2002; DuPaul, Ervin, Hook, & McGoey, 1998; Ota & DuPaul, 2002).

Purpose Statement

The purpose of this study was to examine the utilization of PBiS and its practices along with the impact of academic achievement and behavioral referrals for middle school students who were identified as at-risk. In the first, quantitative phase of the study, standardized assessment information as well as academic grades and student records were collected from the cumulative files of each student who have been identified to be at risk for academic and behavioral difficulty at Norris Middle School (grades 5-8).

As a part of the model of PBiS at Norris Middle School, Learning Intervention Team Time (LITT) was developed as one intervention process used within the implementation of PBiS. LITT consisted of common time during the day when all students had the opportunity to work with their teacher from any academic area to receive additional instruction or retake assessments. An explanatory sequential mixed methods design was used. This method involved collecting quantitative data first and then explaining the quantitative results with in-depth qualitative data. In the first, quantitative phase of the study, standardized assessment information as well as academic grades and student records were collected from the cumulative files of each student who have been identified to be at risk for academic and behavioral difficulty at Norris Middle School (grades 5-8). The second, qualitative phase was conducted after the quantitative results were obtained. In this exploratory follow-up, the researcher explored aspects of academic and behavioral interventions to help improve academic success of students at Norris Middle School. The reason for collecting both quantitative and qualitative data

was to corroborate results from the two forms of data to bring greater insight into the

problem than would be obtained by either type of data separately.

Research Questions and Objectives

The purpose of this study was to examine the utilization of PBiS and its practices

along with the impact of academic achievement and behavioral referrals for middle

school students who were identified as at-risk.

The following research questions were utilized to guide this study:

1. Do students who participated in the school wide PBIS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest NeSA-Reading test
   scores compared to their Spring 2012 ending sixth-grade posttest NeSA-
   Reading test scores?

2. Do students who participated in the school wide PBIS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest NeSA-Math test
   scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Math
   test scores?

3. Do students who participated in the school wide PBIS program lose, maintain,
   or improve their NWEA RIT test scores extended in time for Fall 2010
   beginning fifth-grade pretest, Spring 2011 ending fifth-grade posttest, Fall
   2011 beginning sixth-grade post-posttest, and Spring 2012 ending sixth-grade
   post-post-posttest?

4. Do students who participated in the school wide PBIS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest recorded office
   referral frequencies compared to their Spring 2012 ending sixth-grade posttest

recorded office referral frequencies? Are the teacher's perceptions of PBIS

and the practices utilized helping students improve academic performance?

Assumptions

Norris Middle School is a rural school district with about 650 students in grades

5-8. Norris has the benefit that 79% of the teachers for the district have their Master's

degree. Norris Middle School has strong parental support and also has strong team

leaders at each grade level to guide the leadership for implementation of PBiS. The PBiS

program has been in the development process at Norris Middle School for the last three

school years. Implementation of PBiS has had strong buy-in from the staff and students

which has developed a culture of understanding for the processes needed in order to help

the implementation be successful. The PBiS leadership team has done a great job with

helping the rest of the staff build the culture including keeping track of the progress of

punch cards each year on a TV monitor in the commons area where every student eats

lunch, signage throughout the building, creating lessons for teachers to use in their

classrooms, and working with students in regard to punch cards and any consequences

that may occur due to recurring behaviors. As a result, students are introduced to a better

use of school day and learning time.

Limitations

Norris Middle School did not have a uniform data tracking system in place during

the first year of PBiS implementation. Data was collected but the structure of school

wide information system (SWIS) was not implemented until after the study was started.

SWIS includes application for entering, organizing, managing, and reporting

Office Discipline Referrals (ODR) data for use in decision making by teachers,

administrators, and other staff. ODR data from SWIS are used to (a) assist in internal decision making about improving school discipline practices; (b) assist in support planning with individual students; (c) report discipline data to the district, state, and/or federal levels; and (d) aggregate and interpret ODR data across schools within and/or across districts and states.

Schools gain access to use SWIS for ODR data and reporting through training from a SWIS facilitator. The SWIS facilitator initially conducts a "readiness" review to determine if the ODR data-collection system within the school will result in interpretable information that can be entered and is consistent and reliable across all staff (Irvin et al., 2006).

Definition of Terms

For the purpose of clarification, the following terms are defined for this study:

Academic Performance Indicators—Assessments used by the school district that measure the academic areas of Reading and Math. Assessments consist of Nebraska State Accountability (NeSA) and the Measurements of Academic Performance (MAP) along with classroom formative and summative assessments.

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

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

Learning Intervention Team Time (LITT)—Middle school students in grades 6-8 have 43 minutes of LITT and 5th grade students have 20 minutes all at a common time.

The primary purpose for LITT is time for students to work on homework or contact teachers for instructional support. Student options for LITT include personal reading time, retaking tests, visiting with a teacher for the opportunity of re-teaching skills, accessing the library or computer labs, school assemblies or PBIS lessons. Each student is in the same LITT class for the school year and that teacher becomes the child's advocate and personal contact at school. LITT teachers assist students in tracking work progress and help to hold them accountable for effectively using their LITT time.

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

Rasch Unit (RIT)—The RIT Scale is a curriculum scale that uses individual item difficulty values to estimate student achievement. An advantage of the RIT scale is that it can relate the numbers on the scale directly to the difficulty of items on the tests. In addition, the RIT scale is an equal interval scale. Equal interval means that the difference between scores is the same regardless of whether a student is at the top, bottom, or middle of the RIT scale, and it has the same meaning regardless of grade level.

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

Positive Behavior Interventions and Supports (PBiS)—A broad range of systemic and individualized strategies for achieving important social & learning outcomes while preventing problem behavior with all students.

School wide information system (SWIS)—This system is web-based, designed to help school teachers and support staff to use office referral data to design school-wide and individual student interventions.

Standardized Achievement Tests—Achievement tests consist of the NeSA and MAP. The NeSA is administered one time per school year in grades 3-8 and 11 and the MAP assessment is administered three times during the school year in grades 2-11.

Students at Risk—For the purpose of this study, students at risk are identified from performance on the NeSA and MAP assessments along with formative and summative assessments in the classroom. A student who performs below proficiency on the NeSA, and/or performs below the 40%ile on the MAP will be identified as a student at risk.

Delimitations

The scope of this study may be narrowed by the following delimitations:

1. This study is confined only to Norris Middle School in rural Nebraska.

2. This study is confined to a single middle school engaged in PBiS and its practices for one school year.

3. This study is limited to data collections and interventions known and available in Nebraska at the time the study was conducted.

Significance of Study

One primary indicator schools use to gauge how well they are functioning is student performance on standardized achievement tests. Although there are many

complex and interactive factors that account for student academic scores on such tests, emerging research suggests that one such factor is student problem behavior (Scott, Nelson, & Liaupsin, 2001). Because disruptive behavior typically results in lost instructional time and, thus, compromised learning, interventions that recover and maximize instructional time by keeping students in class should produce improvements in academic areas. Horner, Sugai, Todd, et al. (2005) reported preliminary descriptive data suggesting a relationship between school-wide PBiS and changes in academic performance, noting the need for further analysis of this area.

Chapter Two

Review of Literature

Introduction

A widely held belief in the field of education that forms the basis for PBiS and its practices is academic achievement and social behaviors are connected. Correlations considering the relationship between behavior and achievement derive strength in continuing efforts to diminish learning problems, especially for students at risk of experiencing school failure (Crews et al., 2007; Lassen et al., 2006; McIntosh, Horner, Chard, Boland, & Good, 2006; Stewart et al., 2007; Vaughn et al., 2009; Wehby, Falk, Barton-Arwood, Lane, & Cooley, 2003). It becomes difficult for students to learn when the student is spending more time in discipline-related interactions than in those related to learning academic content (Miles & Stipek, 2006).

School administrators, teachers and support staff have become increasingly frustrated with the impact of student behavior in their schools. Public perception has developed indicating student behavior is out of control. Isolated situations of violence (e.g., school shootings) contribute to the perception and therefore lead to the interpretation that schools lack discipline and control in schools (Rose & Gallup, 2005; Simonsen et al., 2008). In a 2004 survey, 75% of teachers noted they would spend more time teaching effectively if they had less student discipline and disruptive behaviors in their classrooms (Chafouleas et al., 2010). Teachers continually struggle with mastering classroom management strategies that are proactive, preventative, and relatively simple to implement within the classroom while provide minimal disruption to the classroom (Guardino & Fullerton, 2010). According to victim reports from the National Crime

Victimization Survey (National Center for Education Statistics (NCES), 2007),

approximately 1.5 million crimes were committed against students (ages 12-18) at school

in 2005. School crimes rates have fallen since 2000, however, the rate at school (57 per

1,000 students) remains higher than the rate while away from school (47 per 1,000;

NCES, 2007). Bullying and fighting typically are not counted in crime statistics and

remain even more pervasive. Teacher surveys also document the extent of the problems

that occur. Thirty-five percent of teachers reported that student behavior interferes with

their teaching (NCES, 2007).

Currently, there is a wide disparity in school discipline practices, ranging from

schools who implement zero tolerance and demand behavioral conformity and

compliance to those that stress student autonomy and independent decision making

(Stronach & Piper, 2008). Popular yet ineffective treatments are utilized in schools (see

Table 1) rather that implementing treatments which show effect sizes to be successful

(see Table 2). Discipline reform policies can range from systematic reinforcement of

positive behavior to automatic expulsion for a list of offenses that continues to expand

(American Psychological Association Zero Tolerance Task Force, 2008).

Relationship between the classroom environment, student behavior, and academic

engagement has been investigated by researchers (Guardino & Fullerton, 2010; Hood-

Smith & Leffingwell, 1983; Visser, 2001). A classroom that is well-organized allows the

teacher to have more positive interactions with students while reducing the probability of

challenging behaviors to occur (Nelson et al., 2002).

Table 1

Popular yet Ineffective Treatments are Utilized in Public School Settings

Treatment/Intervention	Effect Size
Punitive discipline	-.13 to +.06
Cognitive Strengths & weakness	.00
Referral to outside counseling	.00 to +.08
Meetings with the student	.00

Source: Cook et al. (2012)

Table 2

Underutilized Treatments that Work in a Public School Setting

Treatment	Effect Size
Applied Behavior Analysis	+1.00
Formative Evaluation + Graphing+ Reinforcement	+1.00
Direct Instruction & Problem Solving	+.70 to 1.50
Mentor-based support	+1.00
Positive Behavior Interventions and Supports	+.90
Social Skills Training.68	+.68
Group-based contingency	+.81
Token economy	>.50

Source: Kavale (2005); Cook et al. (2012)

School wide discipline programs emphasize preventive intervention. Several
studies have reported good results from whole-school discipline programs (Langland,
Palmer, & Sugai, 1998; Lewis, Sugai, & Colvin,1998; Luiselli, Putnam, & Handler,

2001), leading to several evidence – based and "best practice" recommendations (Walker et al., 1996). Researchers have reported that when *both* behavioral and instructional supports are provided improvement increases in academic performance are seen (Horner, Sugai & Vincent, 2005; Lewis & Sugai, 1999; Schaughency & Goodman, 2003; Sugai, 2003). Coupling powerful behavioral interventions and instructional strategies has been found to result in sustained gains in student achievement (Marzano, 1998; Marzano, Pickering, & Pollock, 2001). Horner and Sugai (2000) introduced a series of brief reports that include two-data based studies that indicate maintenance of outcomes can be maintained (Nakasato, 2000; Taylor-Greene & Kartub, 2000). Another longitudinal study by Luiselli, Putnam, and Sunderland (2002) further supports longitudinal evaluation of whole-school discipline practices indicating positive long-term results.

In addition to instructional supports, a widely held belief is PBiS and the practices linking academic achievement and social behavior are connected. The relationship between achievement and behavior demands continuing efforts to prevent learning problems, especially for students at risk for continued school failure (Algozzine, Wang, & Violette, 2011; Crews et al., 2007; Lassen et al., 2006; McIntosh, Horner, et al., 2006; Stewart et al., 2007; Vanderstaay, 2006; Vaughn et al., 2009; Wehby et al., 2003).

The universal level of the three-tiered model, referred to as School-wide Positive Behavioral Interventions and Supports (SWPBIS), is being widely disseminated by the U.S. Department of Education (Knoff, 2000) and several state departments of education (e.g., Illinois, North Carolina, Colorado, Maryland, Oregon). It is estimated that SWPBIS is currently implemented in more than 9,000 schools across the United States (Horner, 2009).

What is PBiS?

   In the past several years, Positive Behavior Interventions and Supports (PBiS) has

been used increasingly in schools as a means to shift from reactive strategies, such as

detention, suspension, and expulsion, as the primary response to problem behaviors to

more proactive and positive approaches that address the entire school as well as

individual students (Colvin & Fernandez, 2000; Elias, 1998; Mayer, 1995; Nakasato,

2000). In general, PBiS emphasizes the establishment of a positive and preventive

continuum of behavior support in which, for example, behaviorally defined expectations

are taught directly and formally acknowledged, data is used for decision making and

action planning, a function-based continuum of supports is established, and durable

outcomes and accurate intervention implementation are stressed (Sugai, Sprague et al.,

2000). PBiS is neither a curriculum nor a program of prescribed strategies. Rather, it can

be conceptualized as a framework under which systems identify predictable problems,

select logical strategies to improve outcomes, facilitate consistent implementation, and

use data to evaluate their success (Baker, 2005).

   Rather than focus primarily on reducing problem behaviors, PBiS is characterized

by the complete focus on systemic changes (e.g., community inclusion, expansion of

social relationships, improved family life, personal satisfaction) to improve interactions

in both the student's and family's life (Clarke, Worcester, Dunlap, Murray, & Bradley-

Klug, 2002).

   PBiS is a universal prevention strategy aimed to alter the school environment by

creating improved systems (e.g., discipline, reinforcement, data management) and

procedures (e.g., office referral, training, and leadership) that promote positive change in

staff behaviors, which subsequently alter student behaviors. The model draws on behavioral, social learning, and organizational behavioral principles (Lewis & Sugai, 1999), which were traditionally used with individual students but have been generalized and applied to an entire student body consistently across all school settings (Durand & Carr, 1992). PBiS uses specific strategies for assessment and intervention to ensure that interventions are technically sound. PBiS is also process oriented, involving team organization and methods to promote active involvement of stakeholders and the development of contextually appropriate support plans (Bambara et al., 2001).

PBiS is an intervention method that has shown promise. The traditional approach assumes the student's behavior is the only problem that needs to be changed. PBiS plans contain multiple facets of causality and include multiple strategies which alter environments, teach skills, and reinforce positive behavior rather than intervening on one, specific, challenging behavior (Ruef, Higgins, Glaeser, & Patnode, 1998).

For PBiS strategies to be accepted and implemented by school teachers and support staff on a long-term basis these strategies must effectively meet student and teacher needs (Ruef et al., 1998). A few studies have shown that when Functional Behavior Assessment (FBA) was blended with classroom friendly interventions, such as self-management, PBiS plans were effective with elementary-age children, both children with and without disabilities (Fantuzzo & Polite, 1990; Kern, Ringdahl, Hilt, & Sterling-Turner, 2001).

History of PBiS. June 4, 1997, amendments to the Individuals with Disabilities Education Act (IDEA) became law (P.L.105-17). These amendments introduced a number of new concepts, among them Positive Behavior Interventions and Supports

(PBiS). PBiS is not a new concept; however, the requirements are now in the context of IDEA which represents an important effort to improve the quality of behavioral support planning for students with disabilities.

PBiS was founded in the science of human behavior that links the behavioral, cognitive, bio-physical, developmental, and physical-environmental factors that influence how a person behaves (Baer, Wolf, & Risley, 1968; Wolery, Bailey, & Sugai, 1988; Sugai, Sprague et al., 2000).

The three-tiered model of Positive Behavioral intervention Supports (PBiS) is consistent with the Response to Intervention (RtI) continuum, as those students who are responsive within each tier require less support and resources through behavioral or academic intervention (Cheney, Flower, & Templeton, 2008). Both PBiS and RtI approaches incorporate effective practices for working with students' challenging behavior (Hawken, Vincent, & Schumann, 2008).

PBiS emphasizes the use of school-wide methods to increase productive behavior while decreasing the problem behaviors of all students at Tier 1, offers targeted interventions for at-risk students at Tier 2, and provides individualized, intensive services for students at Tier 3 (Horner & Sugai, 2005). Across the tiers, educators systematically teach and reinforce socially valued behaviors. Hawken, MacLeod, and Rawlings (2007) noted that behavior interventions must be efficient and cost effective for schools to consistently use them to enhance students in social outcomes.

Over the past 20 years, studies have concluded that the quality of students' relationships with school staff is connected to student outcomes (McPartland, 1994; Murray & Malmgren, 2005). Thus, the type of interpersonal relationships that teachers

and students develop and the types of school activities a student engages in are major

factors in a child's positive social development. In addition, children who have

interpersonal difficulties with their parents or guardians are likely to have behavioral

problems at school (Greenberg, Speltz, & DeKlyen, 1993; Pianta, Steinberg, & Rollins,

1995). Poor social relationships are related to classroom adjustment, academic

performance, and school failure (Anderson, Christenson, & Sinclair, 2004; Sinclair,

Christenson, Evelo, & Hurley, 1998). To counteract negative social and academic

problems, it is important to teach and reinforce desired social behavior to students in

prevention programs to decrease problematic behaviors in schools (Gottfredson &

Gottfredson, 2002; Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 2001; Sugai et al.,

2002).

Further studies have indicated improvements in student behavior and school

climate that are related to improvements in academic outcomes (Fleming et al., 2005;

Horner et al., 2008; McIntosh, Chard, Boland, & Horner, 2006; Nelson, Colvin, & Smith,

1996; Wentzel, 1993).

Components of PBiS. PBiS is "the application of positive behavior intervention

and supports to achieve socially important behavior change" (Sugai, Horner et al., 2000,

p. 133). Researchers have reported improvements in academic performance when both

behavioral and instructional supports are provided (Horner, Sugai, & Vincent, 2005;

Lewis & Sugai, 1999; Schaughency & Goodman, 2003; Scheffler & Aksamit, 2006;

Sugai, 2003). Providing powerful behavioral interventions and instructional strategies

has been found to result in sustained gains in student achievement (Marzano, 1998;

Marzano et al., 2001).

PBiS models have as a primary goal, the implementation of prevention practices that focus on the entire school population. The critical components include: (a) setting behavior expectations; (b) teaching critical interpersonal skills; (c) providing systematic positive reinforcement for meeting behavioral criteria; (d) monitoring intervention data through a consistent data collection and analysis process; (e) involving all teachers and support staff in the development of discipline practice; and (f) reducing and eliminating reactive, punitive, exclusionary strategies with support of a proactive, preventative, and skill-building technique (Horner & Sugai, 2000; Nelson, 1996; Walker et al., 1996).

School teams establish three to five positively stated school-wide expectations for student behavior (e.g., "Be respectful, responsible, and ready to learn"), which are posted in all classrooms and non-classroom settings and taught to all students. Lesson plans are developed by the school staff for teaching students the school-wide behavioral expectations at the beginning of the school year and at least once a month. A school-wide system is developed to reward students who exhibit the expected positive behaviors. School staff members establish and use a school-wide system for reinforcement that includes a tangible reinforcer (e.g., "high-five" or "gotcha") that is used consistently by all school staff in classroom and non-classroom settings and an agreed-upon system is created to respond to behavioral violations. Staff and administrators agree on what constitutes a classroom managed versus an office-managed discipline problem, and students across all classrooms receive consistent consequences for disciplinary infractions. A formal system is developed to collect, analyze, and use disciplinary data for data-based decision making. Schools often collect this information by using an online

database system to collect and report the office discipline data referrals, such as the School-wide Information Systems (SWIS) (May et al., 2008).

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

Elements of Implementation of PBiS. Implementation of PBiS at Norris Middle School specifically looked at the following elements to assure the fidelity of the PBiS practices:

Team Data Analysis and Decision Making—Data collection and analysis followed the guidelines and implemented structures consistent with SWIS for data collection and interpretation.

Data Based Decision Making—Each month during staff meetings data was reviewed and discussed from the previous month to determine locations and frequencies of behaviors. The PBiS leadership team would meet and share information in regards to

specific student behavior at each grade level. Grade level teams would meet with students individually to develop a plan for improving behavior.

Increasing Reinforcement of Good Behaviors—Students were provided with "punch cards" from their teachers when appropriate behaviors were observed. Once a student's "punch card" was filled, the student placed the card into a drop box in the media center for the opportunity to have their name drawn for prizes. The student's also earned rewards for "punch cards" turned in.

Teaching Behavior—Appropriate student behaviors were taught at the classroom level. Behavior was addressed for the following areas; classrooms, hallways, lunch room, media center, bus, and recess. The PBiS leadership team developed lessons and power points for each teacher to access for lessons taught in their classroom. The PBiS leadership team developed the lessons for consistency and fidelity with implementation. However, each teacher could use their own lesson as long as the content instructed was the same. After the students learned the expectations of PBiS, the next time lessons were taught the students were given the opportunity to teach the lesson in a mode of their choice. Some examples of different ways students prepared the lessons included power points, videos and skits.

Clearly Identified Expectations-Expectations were taught explicitly to every student through developed lesson plans. The expectations included; be safe, be respectful, and be responsible.

Tiered System of Interventions- Interventions were developed at the classroom and building level. If a student received a titan incident referral (TIR) form from the teacher, the next step was for the teacher and student to meet to discuss the behavior and

develop a plan if needed. If students received more than three TIR's in one quarter, the student would be referred to the grade level team to develop a plan of changing the behavior. If a student received five TIR's in one quarter then the student would meet with either the Principal or Assistant Principal to develop a plan and contact parents. Each behavior was determined to either be a minor or a major infraction as defined by our SWIS data program and was recorded. The teacher and student worked together to determine when parents needed to be notified.

School-wide Information System Description (SWIS)

SWIS is a system to collect and utilize Office Discipline Referrals (ODR) data. SWIS is a web-based computer application for entering, organizing, and reporting ODR data to help teachers, administrators, and other staff makes decisions from the recent collection of information. Data gathered from SWIS is used to (a) assist in making internal decisions about improving school discipline practices; (b) assist in supporting individual students; (c) report discipline data to the district, state, and/or federal level; and (d) aggregate and interpret ODR data across schools within and/or districts.

In order for schools to gain access to the use of SWIS for ODR data, the school contacts a local "SWIS facilitator." The role of the SWIS Facilitator is to conduct a "readiness" review of the school in order to determine if the ODR data-collection systems within the school are reliable and will result in data that is easily interpreted to make decisions. It is vital that all of the individuals responsible for writing ODR's are consistent in the way different behaviors are coded in order for the data to be reliable and valid for use. The SWIS facilitator trains a few individuals within the school to enter and retrieve ODR data. Once teachers and support staff are trained, the SWIS Facilitator

performs several follow up meetings to assure data being entered is consistent and that the school is implementing problem-solving protocol.

To gain access to ODR data and reports through SWIS, school administrators and staff must complete a 10-item readiness review with a local SWIS facilitator. The SWIS facilitator must determine the school (a) uses problem behavior categories that are observable, mutually exclusive, exhaustive, and consistent with SWIS; (b) has guidelines on which staff should be involved with different problem behaviors; (c) has administrative support and a team trained to use the process of ODR data for decision making; and (d) necessary hardware and software to run the SWIS program (Irvin et al., 2006).

Reports from the SWIS program are standardized and summarize the rates of ODRs for the whole school, classrooms, and/or individuals. The five major reports available to schools from the SWIS program include: (a) ODR per day per month for the whole school, (b) ODR per type of problem behavior, (c) ODR per student, (d) ODR per location in the school, and (e) ODR per time of day. Additional custom reports can be created to obtain further details about ODR rates (e.g., ODRs by classroom, gender, and/or student). Reports are also created to summarize ODRs at the "end-of year" to allow for historical comparisons.

PBiS provides schools the opportunity to not only set up a positive culture and expectations within the school community, but data is collected in a standardized format to provide useful information to staff and administrators identifying the time of day and locations of the behaviors that occur. Positive changes within the school community can

also help students to make improvements in the area of academic achievement and

behavioral referrals.

Chapter Three

Methodology

Introduction

Chapter three outlines the purpose of this research study, along with the research questions, objectives, and hypotheses. Research methodology is discussed, including information related to the interviews and surveys administered. Finally, important variables and their corresponding measurement and analysis are identified.

Purpose Statement

The purpose of this study was to examine the utilization of PBiS and its practices along with the impact of academic achievement and behavioral referrals for middle school students who were identified as at-risk. In the quantitative phase of the study, standardized assessment information as well as academic grades and student records were collected from the cumulative files of each student who have been identified to be at risk for academic and behavioral difficulty at a Norris Middle School (grades 5-8). The qualitative phase was conducted as a follow up to help explain the quantitative results. In this exploratory follow-up, the researcher explored aspects of academic and behavioral interventions to help improve academic success of students at Norris Middle School. The reason for collecting both quantitative and qualitative data was to corroborate results from the two forms of data to bring greater insight into the problem than would be obtained by either type of data separately.

The visual model of the procedures for explanatory sequential mixed methods design of this study is presented (see Figure 1). Data collection for the explanatory sequential design involves two distinct phases; phase one the quantitative phase is
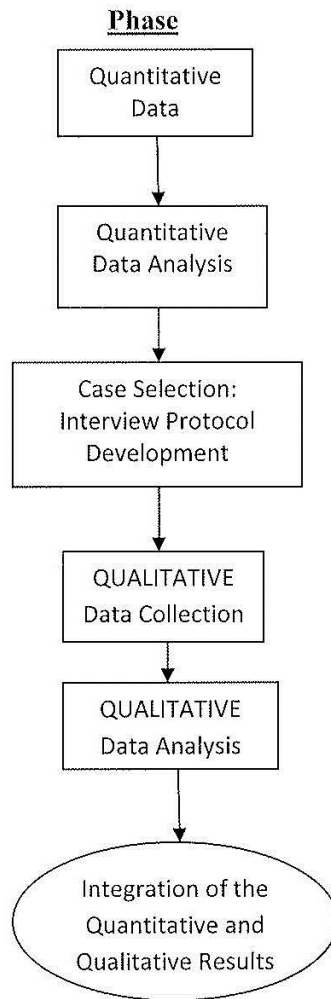
Phase

Figure 1. Mixed methods explanatory sequential design procedures.

conducted and then the second phase which is qualitative in design follows. The

qualitative data that is implemented during the second phase was implemented for the

purpose of explaining the initial results more in depth and to further understand the

quantitative results.

Research Questions

The purpose of this study was to examine the utilization of PBiS and its practices

along with the impact of academic achievement and behavioral referrals for middle

school students who were identified as at-risk. The following research questions were
utilized to guide this study:

1. Do students who participated in the school wide PBiS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest NeSA-Reading test
   scores compared to their Spring 2012 ending sixth-grade posttest NeSA-
   Reading test scores?

2. Do students who participated in the school wide PBiS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest NeSA-Math test
   scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Math
   test scores?

3. Do students who participated in the school wide PBiS program lose, maintain,
   or improve their NWEA RIT test scores extended in time for Fall 2010
   beginning fifth-grade pretest, Spring 2011 ending fifth-grade posttest, Fall
   2011 beginning sixth-grade post-posttest, and Spring 2012 ending sixth-grade
   post-post-posttest?

4. Do students who participated in the school wide PBiS program lose, maintain,
   or improve their Spring 2011 ending fifth-grade pretest recorded office
   referral frequencies compared to their Spring 2012 ending sixth-grade posttest
   recorded office referral frequencies? What are the teacher's perceptions of
   PBiS and the practices utilized in helping students improve academic
   performance?

Variables in Data Analysis

The research questions (a) "Does PBiS have a significant impact in academic performance?" and (b) "Does PBiS support a significant improvement in student behavior referrals?" were measured quantitatively by looking at the students who were identified as being at risk during the previous school year (2010-11) based on academic performance and behavior referrals as measured by PBiS referral forms consistent with Norris Middle School. Academic performance was measured by end of term grades, Measures of Academic Progress (MAP), and NESA assessment results.

Qualitative data was collected to answer the questions "Does PBiS help students to take ownership for their academic performance and improved behaviors?" and "Do teachers and support staff believe PBiS provides students with an opportunity to improve academic scores and decrease behavioral referrals?" Data was gathered by having students and staff complete an on-line survey.

Population and Sample

The study was conducted at Norris Middle School, a rural Midwestern school with enrollment of approximately 650 students in grades fifth through eighth. PBiS was implemented during the 2010-11 school year with some piloting taking place during the 2009-10 school year.

The population in this study included eighteen sixth-grade students who were identified as being at risk the 2010-11 school year during their fifth-grade year. Students were identified during the 2010-11 school year and data was collected at the end of the 2011-12 school years to determine if changes occurred in the area of academic performance and behavioral referrals. Criteria for selecting the students included:

(a) poor academic performance; (b) number of office referrals for behavior during the school year; (c) number of times the student has been placed on the RtI list because of work not turned in; and (d) drop in performance on standardized assessments. Students have been educated in all of the acronyms used through direct instruction provided on the components of PBiS. The terminology used such as PBiS, LITT, and RTI are all common terms used on a daily basis with all students at Norris Middle School.

Middle school staff and PBiS leadership team members were asked to complete an on-line survey (Appendix B & Appendix C) addressing the key elements of PBiS to determine if these areas have been communicated and what areas need to be continued to be developed along with considering if they have seen a difference in academic difficulties as well as behavioral referrals implementing LITT as part of a component of the PBIS framework at Norris Middle School.

Instrument

Quantitative collection of data focused on determining whether PBiS academic and behavioral supports and its practices such as Learning Intervention Team Time (LITT) had a significant impact on changes in academic performance and/or behavioral referrals. The primary technique for collecting the quantitative data consisted of collecting core subject area grades for the students when they were in the fifth-grade (2010-11 school year) along with behavioral referrals. After grades were collected, NeSA and MAP results were collected for the students' fifth grade year. Follow up data was collected at the end of sixth grade comparing NeSA and MAP results from fifth to sixth grade.

Qualitative data was collected through an interview consisting of a personal face-to-face interview from the students selected to be in the study, PBiS leadership team members and faculty of Norris Middle School. Interview questions for the students (Appendix A) consisted of seven questions that focused on the implementation of PBiS and if there were strategies that have helped them as students. Questions were open ended to provide respondents the opportunity to elaborate and follow up with information. Norris Middle School staff responded on-line to six different questions (Appendix B) focusing on the changes they have noticed since the implementation of PBiS. The Leadership team also answered nine questions (Appendix C) in regard to their role as part of the Leadership team working with implementation of PBiS. The qualitative approach provided additional valid results as to the perceptions of the new initiative of PBiS at Norris Middle School.

For the purpose of acquiring a deeper understanding, the students were interviewed by a neutral party. The primary researcher also serves as an administrator at Norris Middle School. Therefore, another staff member who is not an administrator in the building conducted the interviews with each one of the students individually. The staff at Norris Middle School as well as PBiS leadership team members participants were asked to complete an online survey to help with understanding the research questions with more depth (Appendix A and B).

Two different surveys were developed that were web-based and accessed through Google docs. One survey (Appendix B) was sent to all of the middle school teachers and another survey (Appendix C) was sent to the PBiS Leadership team. One of the advantages of the web-based surveys was participants' responses were automatically

stored in a database and easily transformed into numeric data through Google Docs and

Excel formats. The survey instrument was pilot tested on 10.0% of the randomly selected

participants representing current middle school teachers. The goal of the pilot study was

to validate the instrument and to test its reliability. Results of the pilot survey were used

to help establish stability and internal consistency reliability, face and content validity of

the survey. Based on the pilot test results the survey items did not need to be revised.

Survey Procedures

Twenty students were selected based on their grades, behavioral referrals and

performance on NeSA and MAP assessments. Once students were identified from the

indicators, the researcher contacted each student individually to request their participation

in the study. After the study was explained to each student, a packet was sent home with

the student that included an Assent Letter (Appendix D) for the student to sign and a

Informed Consent Letter (Appendix E) for their parent or guardian to sign. Students

were asked to return the consent forms within two days. An email was sent home the day

students were provided with the packet to let parents know to expect the information and

the reason for the research. Students were reminded after two days to return the packet

and follow up emails were sent to parents after seven days. Eighteen of 20 (90%) of the

students returned their assent and consent forms agreeing to be participants in the study.

Informed consent and/or parental permission were obtained prior to the interview.

Staff members and leadership team members were sent an email notification from

the researcher a week before the survey was available on the web. Participants were

informed about the importance of their input for the study. To those subjects who did not

respond by the set date (a) five days after distributing the survey URL, an email reminder

was sent out; (b) ten days later, the second e-mail reminder was sent; and (c) two weeks later, the third e-mail reminder was sent stating the importance of the participant's input for the study.

An informed consent form was posted on the web as an opening page of the survey (Appendix F). Participants clicked on the button on the site, saying "I agree to complete this survey," thus expressing their agreement to participate in the study and complete the survey. All ten (100%) of the leadership team responded to the survey and 20 (57%) of the 35 middle school staff members responded.

Quantitative Data Analysis

SPSS software was utilized to analyze the quantitative data. Quantitative data was analyzed using descriptive statistics from the survey items which is summarized in the text and reported in tabular form. A dependent *t* test was used to look at the relationship between academic and behavioral data prior to the implementation of PBiS and current performance.

The Mean and the Standard Deviation along with a Dependent *t* test were the primary measures to analyze research question 1 in determining the students who participated in the school wide PBiS program if their scores decreased, maintained, or increased for the Spring 2011 ending fifth-grade pretest NeSA-Reading test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Reading test scores.

Research question 2 was also analyzed utilizing the Mean, Standard Deviation and a Dependent *t* test to determine if students who participated in the PBiS program scores decreased, maintained, or increased for the Spring 2011 ending fifth-grade pretest

NeSA-Math test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Math test scores.

Mean and Standard Deviation followed by ANOVA and Tukey Honestly Significant Difference *Post Hoc* Test were utilized to analyze research question 3 to determine if students who participated in the school wide PBIS program lost, maintained, or improved their NWEA RIT test scores extended in time for Fall 2010 beginning fifth-grade pretest, Spring 2011 ending fifth-grade posttest, Fall 2011 beginning sixth-grade post-posttest, and Spring 2012 ending sixth-grade post-post-posttest.

The fourth research question was analyzed using the Mean, Standard Deviation and a Dependent *t* test to determine if students who participated in the school wide PBiS program lost, maintained, or improved their Spring 2011 ending fifth-grade pretest recorded office referral frequencies compared to their Spring 2012 ending sixth-grade posttest recorded office referral frequencies.

Qualitative Data Analysis

Surveys administered to the students, Leadership Team members and middle school staff members resulted in qualitative data. Each of these surveys were reviewed carefully and assigned descriptive codes. Memos regarding the researchers' thoughts and interpretations were attached to items, along with their codes, and they were assigned general themes or common threads (Creswell & Plano Clark, 2011). Qualitative data displays were used to present the themes that emerged from the data analysis. Displays were used to present categorical strategies which broke down the narrative data and rearranged the data to produce categories to show comparisons that helped lead to a better understanding of the problem (Teddlie & Tashakkori, 2009).

Merging the quantitative and qualitative data analysis required the researcher to determine whether the results from both the quantitative and qualitative data converged and if so how they converged. If the results from the two databases indicated they were divergent then the researcher analyzed the data further to reconcile the findings (Creswell & Plano Clark, 2011).

Research Permission and Ethical Considerations

Ethical issues were considered during each stage of the study. In compliance with the regulations of the Institutional Review Board (IRB), the permission for conducting the research was obtained. The Request for Review form was filed, providing information about the principal investigator, the project title and type, type of review requested, number and type of subjects. Application for research permission contained information describing the project and its significance, methods and procedures, participants, and research status.

An informed consent and consent form was developed. The forms provided information regarding the participants who were guaranteed certain rights, agreed to be involved in the study, and acknowledged their rights were protected. The consent form contained a statement providing permission for the minor subjects to participate in the study. A statement of informed consent was included with the web survey and participants clicked on the survey to agree to participate.

The anonymity of the participants was protected by making the survey anonymous on the web keeping all responses confidential. All study data, including electronic files, grades, academic performance, achievement data, and behavioral referrals were filed in a locked metal file cabinet in the researcher's office and will be

destroyed after a reasonable amount of time. Participants were informed that the

summary of the data would be disseminated to the professional community, but

information would be presented in a way that responses are not able to be traced back to

individuals.

Summary

Careful consideration was given to the design and implementation of this study in

order to increase reliability and validity. This was critical, as the information gained

from the students, leadership team, and staff members was utilized to examine the

relationship of Positive Behavior Interventions and Supports to improved academic

achievement and decreased behavioral referrals for middle school students identified as

being at-risk.

Chapter Four

Results

Purpose of the Study

The purpose of this study was to examine the utilization of PBiS and its practices along with the impact of academic achievement and behavioral referrals for middle school students who were identified as at-risk. As a part of the model of PBiS at Norris Middle School, Learning Intervention Team Time (LITT) has been developed as one intervention process used within the implementation of PBiS. LITT consists of a common time during the day when all students have the opportunity to work with their teacher from any academic area to receive additional instruction or retake assessments. An explanatory sequential mixed methods design was used for this study, and involved collecting quantitative data first and then explaining the quantitative results with in-depth qualitative data. In the quantitative phase of the study, standardized assessment information as well as academic grades and student records were collected from the cumulative files of each student who had been identified to be at risk for academic and behavioral difficulty at Norris Middle School (grades 5-8). The qualitative phase was conducted as a follow up to the quantitative results to help explain the quantitative results. In this exploratory follow-up, the researcher explored aspects of academic and behavioral interventions to help improve academic success of students at Norris Middle School. The reason for collecting both quantitative and qualitative data was to corroborate results from the two forms of data to bring greater insight into the problem than would be obtained by either type of data separately.

Implementation of the School Wide PBiS Program

A School-wide PBiS approach was adopted as a program at Norris Middle School to improve school climate. Norris Middle School is part of the Norris Public Schools a rural district in Nebraska. The district includes one elementary school, one middle school, and one high school with a total population of just over 2,100 students. Norris Middle School faculty was interested in implementation of PBiS after several meetings took place and it was clear that our school like others throughout the nation were in need of a new approach to discipline. Initial concerns were focused on increasing on-task and desirable behaviors among our students, declining resources, and the need for greater collaboration between content area educators and specialist teachers within the building. Teacher consensus also focused on the reality that PBiS could provide critical positive self-regulatory skills for all of our students, not just the students who presented the most intense behavioral issues. One of our main goals was to move away from discipline practices that revolved around punishment and exclusion and move toward a model that emphasized teaching and recognizing positive behavioral skills in order to continue to build a positive climate within our building.

Norris Middle School faculty started the process of adoption of PBiS by developing a team of teachers to take the lead in guiding the entire staff through implementation. We found that students were pleasantly surprised to receive acknowledgement for "doing the right thing." Our PBiS team worked with teachers to develop lessons for each one of the targeted areas of school expectations and included students in the process to help develop lessons to present to the student body. Some of

our students developed power point presentations, video clips and posters to share with the entire student body.

Norris Middle School faculty also began collecting data on office referrals to support a systematic way of using the data to help decrease referrals and also identify the reasons for the behavior. Norris Middle School utilized the School Wide Information System (SWIS) which is a online data collection program that helps identify behaviors as well as where the behaviors are occurring and how often.

Research Questions and Results

The following four research questions were utilized to guide this study. Tables corresponding to each research question are noted below.

Research question #1. Do students who participated in the school wide PBIS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest NeSA-Reading test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Reading test scores?

Research question #1 results. Table 3 displays the NeSA-Reading test scores of students ($N = 18$) who participated in the school wide PBIS program. Dependent t test result for pretest compared to posttest NeSA-Reading performance level scores for students who participated in the school wide PBiS program are displayed in Table 4. As found in Table 4 the null hypothesis was rejected in the direction of students' improved reading scores where the pretest ending fifth-grade $M = 78.17$ ($SD = 13.75$) and the posttest ending sixth-grade $M = 92.61$ ($SD = 21.09$) and $t(16) = 3.50, p = .001$, $ES = 0.828$. During participation in the yearlong school wide PBiS program students

Table 3

NeSA-Reading Test Scores of Students Who Participated in the School Wide PBiS

Program

	NeSA-Reading Test Scores	
Student Number	Ending Fifth-Grade Spring 2011	Ending Sixth-Grade Spring 2012
1.	104	111
2.	72	79
3.	80	125
4.	72	98
5.	61	98
6.	68	76
7.	100	120
8.	80	98
9.	76	68
10.	68	98
11.	100	125
12.	57	79
13.	80	61
14.	84	72
15.	84	95
16.	80	116
17.	57	61
18.	84	87
M =	78.17	92.61
SD =	13.75	21.09

Table 4

Dependent t Test Result for Pretest Compared to Posttest NeSA-Reading Performance

Level Scores for Students Who Participated in the School Wide PBiS Program

	NeSA-Reading Test Scores						
	Pretest Ending Fifth-Grade Spring 2011		Posttest Ending Sixth-Grade Spring 2012				
Source	*M*	*SD*	*M*	*SD*	*ES*	*t*	*p*
Reading	78.17	(13.75)	92.61	(21.09)	0.828	3.50	.001***

***p* = .001.

experienced a NeSA-Reading posttest mean score improvement of +14.44 scaled score points resulting in a nomenclature change over time from unsatisfactory performance (below standards) to satisfactory performance (meets standards) (see Tables 3 and 4).

Research question #2. Do students who participated in the school wide PBIS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest NeSA-Math test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Math test scores?

Research question #2 results. Table 5 displays the NeSA-Math test scores of students ($N = 18$) who participated in the school wide PBiS program. Dependent *t* test result for pretest compared to posttest NeSA-Math performance level scores for students who participated in the school wide PBiS program are displayed in Table 6. As found in Table 6 the null hypothesis was not rejected in the direction of students' decreasing math scores where the pretest ending fifth-grade $M = 96.06$ ($SD = 17.85$) and the posttest

Table 5

NeSA-Math Test Scores of Students Who Participated in the School Wide PBiS Program

	NeSA-Math Test Scores	
Student Number	Ending Fifth-Grade Spring 2011	Ending Sixth-Grade Spring 2012
1.	84	92
2.	106	133
3.	87	109
4.	87	65
5.	113	100
6.	102	72
7.	82	103
8.	118	89
9.	102	77
10.	90	79
11.	79	133
12.	128	100
13.	99	72
14.	76	61
15.	87	79
16.	134	77
17.	76	87
18.	79	84
$M =$	96.06	89.06
$SD =$	17.85	20.53

Table 6

Dependent t Test Result for Pretest Compared to Posttest NeSA-Math Performance Level

Scores for Students Who Participated in the School Wide PBiS Program

	NeSA-Math Test Scores						
	Pretest Ending Fifth-Grade Spring 2011		Posttest Ending Sixth-Grade Spring 2012				
Source	*M*	*SD*	*M*	*SD*	*ES*	*t*	*p*
Math	96.06	(17.85)	89.56	(20.53)	-0.338	-1.03	.16[†]

[†]ns.

ending sixth-grade $M = 89.56$ ($SD = 20.53$) and $t(16) = -1.03$, $p = .16$, $ES = -0.338$.

During participation in the yearlong school wide PBiS program students experienced a

NeSA-Math posttest mean score deterioration of -6.50 scaled score points resulting in

nomenclature stability over time of satisfactory performance (meets standards) (see

Tables 5 and 6).

Research question #3. Do students who participated in the school wide PBiS

program lose, maintain, or improve their NWEA RIT test scores extended in time for Fall

2010 beginning fifth-grade pretest, Spring 2011 ending fifth-grade posttest, Fall 2011

beginning sixth-grade post-posttest, and Spring 2012 ending sixth-grade post-post-

posttest?

Research question #3 results. Table 7 displays the NWEA RIT reading test

scores extended in time for students ($N = 18$) who participated in the school wide PBIS

program. Analysis of Variance results for NWEA RIT reading test scores design

Table 7

NWEA RIT Reading Test Scores Extended in Time for Students Who Participated in the

School Wide PBiS Program

Student Number	NWEA RIT Reading Test Scores			
	Beginning Fifth-Grade Fall 2010	Ending Fifth-Grade Spring 2011	Beginning Sixth-Grade Fall 2011	Ending Sixth-Grade Spring 2012
1.	216	213	216	217
2.	213	209	213	214
3.	193	202	201	203
4.	205	201	213	205
5.	212	202	202	226
6.	192	196	193	206
7.	212	213	219	226
8.	218	201	221	218
9.	217	195	217	205
10.	211	206	216	215
11.	201	207	211	216
12.	209	203	215	208
13.	210	226	199	226
14.	198	204	202	215
15.	205	195	196	204
16.	208	205	207	230
17.	215	207	216	222
18.	206	218	219	231
M =	207.83	205.72	209.78	216.50
SD =	7.73	8.01	8.77	9.15

extended in time for students who participated in the school wide PBiS program are displayed in Table 8. As found in Table 8 the null hypothesis was rejected in the direction of students' improved reading scores where Fall 2010 Beginning fifth-grade $M = 207.83$ ($SD = 7.73$), Spring 2011 Ending fifth-grade $M = 205.72$ ($SD = 8.01$), Fall 2011 Beginning sixth-grade $M = 209.78$ ($SD = 8.77$), Spring 2012 Ending sixth-grade $M = 216.50$ ($SD = 9.15$), and $F(3, 68) = 9.38$, $p = .0001$. Because a statistically significant main effect was observed Tukey Honestly Significant Difference *post hoc* contrast analyses were conducted with the following results: Fall of 2010 verses Spring of 2011 non-significant; Fall of 2010 verses Fall of 2011 non-significant; Fall of 2010 verses Spring of 2012 $p < .01$; Spring of 2011 verses Fall of 2011 non-significant; Spring of 2011 verses Spring of 2012 $p < .01$; Fall of 2011 verses Spring of 2012 $p < .05$. All *post hoc* contrast analyses with the Spring of 2012 ending sixth-grade post-post-posttest NWEA RIT reading test scores were significantly different. During participation in the yearlong school wide PBiS program students experienced a final NWEA RIT improvement of +8.67 RIT score points resulting in nomenclature stability over time of grade level performance (see Tables 7 and 8).

  Research question #4. Do students who participated in the school wide PBiS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest recorded office referral frequencies compared to their Spring 2012 ending sixth-grade posttest recorded office referral frequencies?

Table 8

Analysis of Variance Results for NWEA RIT Reading Test Scores Design Extended in

Time for Students Who Participated in the School Wide PBiS Program

Source of Variation	Sum of Squares	Mean Square	df	F	p
Between Groups	1175.15	391.72	3	9.38	.0001***
Within Groups	4835.72	41.75	68		
Total	6010.87		71		

Date of Test Result	Mean *(SD)*
Fall 2010 Beginning Fifth-Grade	207.83 (7.73)
Spring 2011 Ending Fifth-Grade	205.72 (8.01)
Fall 2011 Beginning Sixth-Grade	209.78 (8.77)
Spring 2012 Ending Sixth-Grade	216.50 (9.15)

***p = .0001.

Tukey Honestly Significant Difference *Post Hoc* Test

Fall of 2010 verses Spring of 2011 non-significant
Fall of 2010 verses Fall of 2011 non-significant
Fall of 2010 verses Spring of 2012 $p < .01$
Spring of 2011 verses Fall of 2011 non-significant
Spring of 2011 verses Spring of 2012 $p < .01$
Fall of 2011 verses Spring of 2012 $p < .05$

Research question #4 results. Table 9 displays the office referral frequencies of

students ($N = 18$) who participated in the school wide PBiS program. Dependent *t* test

results for pretest compared to posttest office referral frequencies of students who

participated in the school wide PBiS program are displayed in Table 10. As found in

Table 10 the null hypothesis was not rejected in the direction of students' improved

posttest office referral frequencies where the pretest ending fifth-grade $M = 2.00$

($SD = 2.28$) and the posttest ending sixth-grade $M = 1.67$ ($SD = 2.83$) and $t(16) = -0.69$,

Table 9

Office Referral Frequencies of Students Who Participated in the School Wide PBiS

Program

Ending Student Number	Office Referrals Levels	
	Ending Fifth-Grade Spring 2011	Ending Sixth-Grade Spring 2012
1.	6	4
2.	3	2
3.	0	0
4.	1	0
5.	0	0
6.	0	0
7.	0	0
8.	0	0
9.	6	9
10.	2	0
11.	2	8
12.	2	0
13.	6	4
14.	0	0
15.	5	2
16.	0	0
17.	2	1
18.	1	0
M =	2.00	1.67
SD =	2.28	2.83

Table 10

Dependent t Test Results for Pretest Compared to Posttest Office Referral Frequencies of

Students Who Participated in the School Wide PBiS Program

	Office Referral Frequencies						
	Pretest Ending Fifth-Grade Spring 2011		Posttest Ending Sixth-Grade Spring 2012				
Source	*M*	*SD*	*M*	*SD*	*ES*	*t*	*p*
Referrals	2.00	(2.28)	1.67	(2.83)	-0.012	-0.69	.25[†]

Note: Negative *t* results is in the direction of fewer office referral frequencies.
[†]ns.

$p = .25$, $ES = -0.012$. During participation in the yearlong school wide PBiS program

students experienced an office referral frequencies mean posttest improvement of -0.33

fewer referrals indicating the stabilizing effect of the school wide PBiS program on

behavior leading to office referrals (see Tables 9 and 10).

Qualitative Results

    Themes. Student qualitative data was collected through personal face-to-face

interviews and responses to seven questions about their participation in and

understanding of PBiS. PBiS leadership team members' qualitative data was collected

through completion of a Google Docs questionnaire about PBiS leadership practices and

outcomes.

    Student questions, student responses, and researchers' comment. Students

($N = 18$) were asked to respond to seven questions. Following are the questions and

students' thematic responses:

Student question #1. "What are the key expectations of PBiS at Norris Middle School?"

Students' responses to question #1. All students (100%) were able to identify the three key expectations of PBiS: (a) be respectful, (b) be responsible and (c) be safe.

Researcher's comment to question #1. All students were able to identify and report the three key expectations of PBiS at Norris Middle School. Students have been explicitly taught the expectations along with lessons that show examples of how to demonstrate the expectations. Being able to identify the expectations was a reinforcement of the implementation of the PBiS practices and acknowledgment that students are aware of the processes involved.

Student question #2. "What changes have you noticed at Norris Middle School as a result of implementation of school wide PBiS?"

Students' responses to question #2. Four of the 18 (22%) of the students responded indicating that each person has the opportunity to earn punch card that allows them to receive awards. Ten students of the 18 interviewed (56%) shared information related to students being safer and more responsible while at school. Answers included students are having better behavior, less running down the halls, students are being nicer, walking on the right side of the hall, being more respectful, and getting their homework completed on time. Four of the 18 (22%) indicated that either there is nothing that has changed or that they could not think of anything during the interview.

Researcher's comment to question #2. Norris Middle School students were able to identify changes that they have not only observed with their own behaviors but the behaviors of other students within the school. Student's noticing the changes among their

peers and themselves with the implementation of PBiS is motivation to continue with the implementation and to continue to improve the model within the school.

Student question #3. "What are some things you like about PBiS?"

Students' responses to question #3. Fourteen of the 18 (78%) students responded in a manner that indicated they like that students are able to get rewards for doing good things or getting punch cards. Specific answers included:

- When you get enough punches you get to go to the gym, you get punch cards and they give you rewards, we have assemblies and get punch cards, you get prizes when you do good things which encourage you to do more good things.

- Students get punch cards and then get to do fun stuff. I've seen a major growth between the good kids and bad kids at Norris.

- We get punch cards and then get things; teachers hand out awards to students.

- Teachers give awards and give the clown to teachers. You get a reward if you are being good and if the teachers pick you.

- I like it when we get to go to the gym and stuff because it is fun.

- I like it when we get to have a field days and stuff.

Three (17%) students discussed things that they have learned from PBiS such as; "PBiS teaches kids to not bully and to be good, I have learned a few new things, and I like how it is safe and no one gets hurt." One student was not able to identify anything that they liked about the PBiS implementation.

Researcher's comment to question #3. Overall, students were able to not only identify that they liked the fact they were provided the opportunity to earn punch cards but that the punch cards were the way to earn extra items such as field day, gym time, etc. PBiS is designed to provide students with positive feedback and opportunities to work

towards opportunities that they may not have worked for previously. All but one student identified a positive change that PBiS has brought to Norris Middle School.

Student question #4. "What are some things you would wish you could change about PBiS?"

Students' responses to question #4. Twelve of the 18 (67%) students interviewed indicated that they wouldn't change anything about PBiS. Four of the students (22%) reported they would like teachers to take more opportunities to distribute more punch cards and two students indicated that they would like to have more assemblies.

Researcher's comment to question #4. The majority of the students reported that there is nothing they would change with the current practice of PBiS at Norris Middle School. A few of the students identified that they would like teachers to give out punch cards more often or make it easier for students to earn a punch card. Currently, an assembly is held each month to recognize students for their positive behaviors and provide the opportunity for students to earn the Titan Award that is acquired by teacher nomination from observations of behaviors.

Student question #5. "Tell me what LITT time does for students to help them to be successful."

Students' responses to question #5. Every student interviewed (100%) responded with a general theme that LITT provides students with additional time to get their homework done. Students also indentified that when they are able to get their homework completed on time then this helps them to avoid getting a "late" for the class or receive a Titan Incident Referral (TIR) for not being responsible. A couple of the students also

identified the additional opportunity to ask teachers for help with either understanding an assignment or the homework assignment.

Researcher's comment to question #5. Student responses in regard to LITT time was interesting to read because the researcher was not sure if the students had a true understanding of what LITT time was designed to help students with during the day. LITT has been a positive change in the middle school schedule to allow students an additional opportunity for assistance from teachers either when they don't understand an assignment or need to make up work due to an absence.

Student question #6. "What is the RtI list? Do teachers use the list to utilize help for students?"

Students' responses to question #6. More than half of the students interviewed, 67%, indicated the RtI list is something you get put on when you do not get your work completed because you have been gone or have a late assignment. Five of the students reported the RtI list is something teachers use to help hold students accountable and make sure their work is completed. One of the student's said, "RtI list is something you get and sometimes you can leave the room and sometimes not." The other two areas identified were that the RtI list was something you can ask your teachers about an assignment or get help.

Researcher's comment to question #6. The RtI list is a way teachers have to keep track of student's assignments all on one spreadsheet. It is designed to help students to be successful and not a way of punishing students. The information is compiled on a Google spreadsheet which works great because any teacher can update the spreadsheet at any time and it is instantly changed for everyone who is viewing the document. Each

teacher is to use the RtI list during their LITT class to have students check to make sure if they are missing assignments or need to take a test. One of the student's commented that the RtI list is not used for punishment but to help a student which is how all students and teachers should perceive the process.

Student question #7. "What are some things your teachers do to help students get their work done in the classroom?"

Students' responses to question #7. Eight students (44%) reported that the teachers help students to get their work done and teachers will walk around the classroom to answer questions that a student may have in regard to an assignment. Other responses include students are able to get one on one help from teachers without having to stay after school and teachers have more opportunities to explain answers to questions that students may not understand. One student responded, "The teacher will put music on and it helps us to concentrate. She will also tell people to be quiet so that students can get their work done."

Researcher's comment to question #7. All of the students responded in a positive nature to the question in regard to their teacher helping not only them but other students complete their work. It was obvious that the students who were interviewed perceived working with the teachers as a positive way to help get their work completed. The students who were interviewed were students who had more difficulty than most other students getting their work completed and the answers to this question reinforced the reason why the implementation of PBiS is a positive change in the Norris culture.

Leadership team questions, leadership team responses, and researchers'

comments. Leadership Team members (*N* = 10) were asked to respond to nine

questions. Following are the questions and leadership teams' thematic responses.

Leadership team question #1. "What is your role as a member of the leadership

team for implementation of Positive Behavior and Intervention Supports (PBiS)?"

Leadership team answer to question #1. One of the first responses was, "I am the

PBiS guy. I lead assemblies, record completed punch cards. My class sends

congratulation emails and certificates and we post totals on the video screen as well."

The other team members indicated that they help with assemblies, ideas to make PBiS

work at Norris Middle School, and attend monthly meetings. The leadership team

consists of eight teachers, middle school principal, office assistant, and the middle school

assistant principal.

Researcher's comment to question #1. The first question was asked to help the

reader gain a better picture of who is involved with the leadership team. Members were

helpful with listing the different roles they are responsible for on the team.

Leadership team question #2. "Please share the expectations of PBiS."

Leadership team answers to question #2. The entire leadership team (100%) were

able to cite the expectations of PBiS which consists of be safe, be responsible, and be

respectful. Examples of other respondent's comments included:

- Be safe, be responsible, and be respectful are the three pillars of the school from classrooms to the buses; Students are to follow the rules and also be good friends to the other students at Norris Middle School.

- All teachers will follow the guidelines of prominently posting their classroom expectations, teaching those expectations, reviewing and rewarding those students that meet or exceed those expectations on a regular basis. A teacher

is not to dwell on the negatives but instead focus on the positives that a
student displays.

- PBiS is a school-wide system that provides a proactive approach for teaching
kids school expectations, provides the opportunity to re-teach and role model
the correct expectations, and supports students who have behavior problems
through a data driven manner.

- Be safe, be responsible, and be respectful to help take negative behaviors and
discuss them with the student to improve upon the entire school, student by
student.

Researcher's comment to question #2. The members of the leadership team

expanded upon the key expectations of PBiS. All of members identified the key

components and several of them went on to talk about different ways in which those three

key expectations are reinforced within the school.

Leadership team question #3. "Please share the major changes that have

occurred in the middle school as a result of the implementation of school-wide PBiS."

Leadership team answers to question #3. Four of the members of the leadership

team (40%) indicated the biggest change they have noticed include documentation of

behaviors and recognition of positive behaviors. A few of the members shared the

following:

- We have seen a lot more emphasis put on positive behavior rather than always
focusing on the negative behaviors. Also more teachers are trying to reward
students that are behaving in a positive manner rather than always focusing on
the negative.

- Late work is not tracked and not punitive, instead the issue is discussed and
students are given the opportunity to work on during LITT class. We also
have monthly assemblies and those did not take place prior to implementation;
Our school is using TIR data to show student infractions through School Wide
Intervention System (SWIS), school wide behavior lessons teach expectations,
classroom matrix for teachers are used to clearly post expectations along with
code of conduct and school wide acknowledgements with punch cards and
school wide assemblies.

- A majority of students have taken ownership of the taught behaviors and appreciate being recognized for their positive behavior; Handing out punch cards for behaviors recognized by staff. Also, organized a group to focus and address needed issues in the building. The data collection is also a process that was not available previously.

Researcher's comment to question #3. Leadership team members all (100%) identified positive changes that have been observed with the implementation of PBiS. Rewards for positive behaviors and teachers using punch cards were the most common themes identified.

Leadership team question #4. "As part of the implementation of PBiS, describe the greatest successes that have resulted."

Leadership team answers to question #4. Themes identified by the leadership team consisted of getting more people to focus on the positive behaviors along with the punch cards and excitement that has been observed among the students at the monthly PBiS assemblies. Examples of respondent's comments included:

- For one, I feel staff has more of a focused attention on recognizing those behaviors which are positive. Yes, we hand out punch cards, but the words and actions by staff to students is what make the true difference.

- I appreciate the recognizing of students and staff for excellence at assemblies. Too many times our society is afraid of identifying individuals for great things and fear of making others upset. This is great to see in our school!"

- Each and every year students seem to become more acclimated to PBiS and what is stands for. Also, I have liked the way that the students have taken ownership of PBiS.

- First year of PBiS we were able to achieve a school-wide celebration for the students earning 1000 punch cards.

Researcher's comment to question #4. Leadership team members all had positive responses to the impact of PBiS and the successes that have occurred as a result of implementation. Students have taken ownership for the program as well as teachers who

are a part of helping guide the implementation of PBiS. Information shared reinforces

implementation needs time to happen in order to assure effectiveness.

Leadership team question #5. "What challenges have existed with the

implementation of PBiS?"

Leadership team answers to question #5. Each of the members of the Leadership

team expressed concerns with some of the aspects of implementation. Most of the

concerns focused around getting all teachers to buy into the process of PBiS. Some of

the responses included:

- Flexibility between all grades. I think this will improve next year.

- I think the biggest challenge is to get all staff to buy in. I know on my team alone some teachers haven't given out a punch card.

- Teachers feeling like there are no consequences for negative behaviors especially with the students who don't ever change their behaviors.

- Getting all teachers to buy in and follow the philosophy and expectations.

- Supporting students that continue to have mediocre behavior problems, support teachers that struggle with students in tier 2, and find productive ways to use the data.

- One is staff not using the rewards/punch cards to decrease unwanted behavior rather they use it to keep rewarding those students who are already displaying the behaviors desirable. Some of this is okay and have seen an improvement each year.

- There is always a challenge to making issues relevant and engaging to middle school students.

Researcher's comment to question #5. Responses for question 5 revealed areas

continuing to need to be improved to help the staff at Norris Middle School to improve

the implementation of PBiS. Areas of concern identified included consistent

consequences for students who continue to not follow the rules and expectations of the

school. Currently, administration is working with the staff to identify additional strategies to work with students as well as ways to work with students on a consistent basis. Teachers have been informed that when a student is sent to the office as a result of their behavior each administrator will address the behavior and impose a consequence if needed and as appropriate for the behavior. Each behavior will be dealt with on an individual basis.

Leadership team question #6. "Share your thoughts on what impact PBiS has had for students both with disabilities and no disabilities in regard to behavior and academics."

Leadership team answers to question #6. Three of the ten (30%) leadership team members reported changes that indicated teachers being able to recognize students for doing the right thing and more students being recognized that previously were not recognized for their positive behaviors because the student followed the rules and did not get into trouble. One of the members responded," There is now a communication process for teachers to positively approach students that have issues or infractions in the building. With the 3 TIR/5TIR system parents have a process for handling behaviors of the child. In addition, the positive acknowledgement process is open for all students. Anyone can be recognized with punch cards for doing something well." Another positive shared was that now students and staff were having conversations about the behaviors that were happening and what steps can be done in order to have the behavior to not occur again. However, 5 of the 10 (50%) of the leadership identified areas that need to continue to be developed and 2 of the 10 (20%) did not respond. Responses from the leadership team expressing concern included:

- Impact none. PBiS is an equal opportunity employer and rewards everyone.

- To be honest, I am not yet sure if it has really made a major impact on students in whole. I feel we need to keep addressing what we are doing. What is not helping to accomplish the overall goal and what we NEED to do. A program isn't worth having if it doesn't achieve what it is meant to do. I am not certain we can say that at this time.

Researcher's comment to question #6. The percentages of negative responses were more prevalent than the positive responses. Many of the negative comments revolved around the topic of not seeing marked changes for students. PBiS is a process that takes 3-5 years to implement in a successful manner. Norris Middle School is in second full year of implementation and therefore continued areas of improvement should be expected.

Leadership team question #7. "What behavioral and academic interventions have been implemented and what results have you experienced?"

Leadership team answers to question #7. Seven of the ten (70%) team members indicated that the Response to Intervention (RtI) list has been a positive intervention to help students with academics. Examples of leadership team responses included:

- Use of the RtI on certain days to assist students in getting the correct work completed.

- I have seen better behavior in the hallway and our RtI list is the lowest it has been.

- Having the RtI list has been helpful so teachers know who owes what assignments and who needs to redo assignments.

- The RtI list has been a great way for teachers to help students keep track of work they need to complete.

- Students are more accountable for their assignments because of the RtI list.

Researcher's comment to question #7. Positive responses in regard to the RtI list were the most common theme among interventions that have been implemented to help students to be successful in the classroom. Additional comments included thoughts that study skills class that some students are involved with is a positive intervention and having students in math and reading enrichment classes have helped with success.

Leadership team question #8. **"**What other behavior and academic interventions would you want to see implemented?"

Leadership team answers to question #8. The responses to this question had many different responses with different themes that could be identified. Leadership team responses included:

- Some sort of banquet of special recognition for kids that are never on the RtI list or have not received any Titan Incident Referrals (TIR's)

- I would like to see a PBiS store for the older grades. We have started this in the 7th grade and are letting them buy items with their punch cards at the end of each quarter.

- Somehow we need to make sure there is communication from the office to the teachers about what consequences are being used with students who are repeat offenders.

- A more set plan for behavioral interventions. We seem to have academics pretty much handled with RtI, LITT, and such but no course of action for repeated offenses for behavior other that the TIR forms.

- A clearer cut path for providing behavioral interventions for students in Tier 2.

- A broader and more defined behavior skills program for the small amount of students that need more intensive behavior lessons beyond which PBiS provides.

- Some staff does this, while others not so much, but really the punch card itself does not serve to the fullest affect. We have to talk to the students and have those conversations of the actions that they did and why it was such a great thing to see. Also, with TIR's the major factor is the discussion and from my

experiences and observations not all if many have those talks to the fullest impact.

Researcher's comment to question #8. A common theme continuing to surface throughout the interviews is the development of the process and procedures for PBiS needs to continue with growth and development for staff and students. PBiS is not a set program that a school buys and implements but rather it is a systematic approach designed to be implemented in a building wide manner appropriate for each individual building.

Leadership team question #9. "Are there things not included in this interview that you feel are important to the implementation of PBiS at Norris Middle School?"

Leadership team answers to question #9. Seven of the ten (70%) of the leadership team members indicated there was nothing that was not included in the interview that they felt was importation for the implementation of PBiS at Norris Middle School. Three of the members responded with the following statements:

- Set time on professional development days for teams to meet.

- There needs to be time provided to the staff to demonstrate and model how to effectively implement interventions. Also, staff buy-in has increased, but there is still resistance to why PBiS is an effective system. Several staff members are not using the process because they either forget about it or don't see it as effective. There needs to be more of a process to hold staff members accountable to teach the school-wide lessons, use of TIR process, and find an acknowledgement system that works for everyone.

- If a program is not achieving the desired effects, then we must change how we are doing it, or change what we are doing. I have discussed PBiS with other districts that have either used it or are using it, and they will share that several went away from it to another program as they also felt it did not accomplish what the overall goals were and the original purpose of these types of programs.

Middle school staff questions, middle school staff responses, and researcher's comment. Norris Middle School staff ($N = 20$) were asked to respond to an online survey. The staff that responded consisted of 15 (75%) general education teachers, 4 (20%) special education teachers and 1 (5%) elective teacher. Fifteen (75%) were female while 5 (25%) of the responders were male. Years of employment consisted of 2 (10%) 1-3 years; 6 (30%) had been employed 4-6 years; 5 (25%) 7-10 years; and 7 (35%) more than 10 years with the Norris school district.

Middle School staff question #1. "Describe the common language that is in place and used by all staff in settings to define and work with all students."

Middle School staff answers to question #1. A majority of the middle school staff 18 out of 20 (90%) responded the common language that is used by all staff in settings to define and work with all students is that students are suppose to display behavior that is safe, responsible, and respectful. One of the staff members indicated that she did not know the language and the other teacher indicated teachers co-teach in all of their core areas that allow teachers to focus on students above and below grade level. Although this practice has been implemented at Norris Middle School it was not the information that was being sought. Other responses included:

- Students are to show respect, responsibility, and safety in all areas at school to all people. Teachers use the language of respect when discussing classroom expectations, recess expectations, filling out incident reports with students, and in lesson plans to name a few. Teachers expect students to understand the language of respect and there are respect posters in classrooms and in the hallways throughout the school. This also ties into our mission statement in the middle school "learn from the past, build on the future, learn today."

- We use the terms safe, responsible, and respectful when discussing procedures and when a student has had an infraction.

- We have a common language so that as students move from one room to the next and from one grade level to the next, they understand the expectations of be safe, be respectful, be responsible.

- The language used at Norris is common throughout the grade levels especially in PBiS. With school-wide assemblies and lessons, all students at Norris Middle School hear the same vocabulary and see the expectations that are related to positive behavior in the school.

Researchers' comment. Middle School staff were aware of the language that the student's were taught and how to use the language in all areas of the school. A common language was expressed indicating that with the common language it was easier for students and staff to share expectations for Norris Middle School.

Middle School staff question #2. "What are the behavioral expectations at Norris Middle School?"

Middle School staff answers to question #2. All of the staff members (100%) who responded to the survey ($N = 20$) indicated the behavioral expectations include being safe, respectful, and responsible. A few of the staff members elaborated their responses which include:

- The main behavioral expectation is that students do not interrupt the learning environment for other students. Each teacher has specific classroom expectations listed and hanging in their classroom. These classroom expectations are all centered on being respectful, responsible, and safe.

- Respect, responsibility, and safety in all the locations of the school (recess, gym, bus, hallway, lockers, restrooms, cafeteria, and classrooms).

- The behavior expectations are to follow the code of conduct in being safe, respectful, and responsible in the six locations.

Researcher's comment. Behavioral expectations were shared by all the staff members that were interviewed. Teachers again shared that with the common language

and expectations in all areas of Norris Middle school implementation of the PBiS

program is simplified and understood.

Middle School staff question #3. "Do you feel that staff receives regular

feedback on student behavior patterns? Please explain."

Middle School staff answers to question #3. Eighteen of the 20 (90%) of the

staff responses included information stating that data is shared with them to help with

feedback on student behavior patterns. Staff indicated that data is shared at monthly staff

meetings where graphs and charts show the different patterns of student referrals.

Comments were shared that even though the data is distributed there could be additional

guidance in the next steps of how to address the data. Additional responses included:

- We receive regular updates on the student behavior patterns at our monthly staff meetings and also individual student results are shared with our grade level team. This information helps us to better understand the time, place, and possible reason why the students are not being successful in various situations and what we can do to help them.

- Data is sent out each month to be reviewed by each grade level team. This information tells where the problem areas are and who is having the most difficulty.

- Discussions at team meetings help promote collaboration on both good behavior and poor behavior in the classroom. Talking about the behaviors and finding a way to evaluate and handle poor behavior is a great way to see the patterns of behavior.

Researcher's comment. Feedback for student behaviors is a part of the PBiS

implementation staff expressed as wanting to continue to have monthly updates at faculty

meetings as well as the ability to work with their teams to continue to focus on behaviors

that student's continue to display that are not appropriate.

Middle School staff question #4. "As a staff member, how do you perceive the

implementation of PBiS?"

Middle School staff answers to question #4. Norris Middle School staff

responded in a positive way to this question. Seventeen out of 20 (85%) indicated that

they felt the PBiS implementation has overall been a positive addition to the middle

school. Responses included that PBiS is a well-developed, positive support to reinforce

and monitor student behavior. Students who require additional guidance to help make

choices to be respectful, responsible, and safe are able to get additional encouragement.

Additional comments included:

- I view it as a common step to encourage a common language throughout the school and in various classrooms. Students appreciate knowing what the expectations are for behavior. It's great to have a school-wide system for rewarding positive behaviors.

- PBiS is a very positive way to reinforce students for their behavior. Our 5th grade students worked very hard this year to earn "punch cards" so it was truly a success for us!

- The best part is to "catch" a student who would not normally get a "pat on the back" for good behavior and help them out by giving a task to do and the opportunity to earn rewards.

- I love it…it is great taking the approach of catching students doing something good and not focusing on the negative.

- PBiS is a great way to create a school environment based on consistent expectations.

Researcher's comment. Implementation of PBiS has been viewed by the staff as a

positive step to improving the culture at Norris Middle school. Helping students to make

positive choices with their behavior has been a way to reinforce the implementation of

PBiS.

Middle school staff question #5. "How do other staff members perceive the

implementation of PBiS?"

Middle school staff answers to question #5. Perceptions of how other staff perceive the implementation of PBiS was more varied. Twelve out of 20 (60%) of the staff indicated PBiS was being perceived in a positive manner and implementing the steps the way they were intended. Three out of 20 (15%) felt that some of the staff were negative about the implementation and 5 out of 20 (25%) of the staff were not clear on how the staff perceive the implementation of PBiS. Perceptions of implementation included:

- Most staff members view it as a positive system. A few seem to complain and perhaps do not understand how important it is for students to have consistent expectations. It seems these folks want to do their own thing.

- Successful implementation depends on how positive the attitude of the teacher is.

- I feel that all staff are on the same page of what PBiS is designed to do and realize the importance of promoting positive behavior at Norris.

- As with all things there are always going to be a negative Nellie, but we can't stop progress because of them!

Researcher's comment. Perceptions of how other staff perceive the implementation of PBiS showed more of a discrepancy than the other questions that were asked. Sixty percent of the staff indicated PBiS is being perceived in a positive manner. However, the other 40% of the staff indicated that they either were negative about the implementation or unsure how other staff felt. Continued professional development needs to be a focus in the future to help staff with further understanding and implementation of PBiS.

Middle school staff question #6. "What role does PBiS play in the lives of students that helps them want to succeed or contribute to their success?"

Middle school staff answers to question #6. All but one staff member who completed the survey 19 out of 20 (95%) indicated that the role of PBiS has been a positive change in the lives of students to help them succeed. Responses included:

- Students love getting the rewards, such as going to the front of the lunch line. Sometimes I think students that have problems with behavior don't always know how to earn positive punches so need continual modeling on what is needed to earn a positive punch.

- PBiS plays a big role in the lives of our students. The lessons were very well planned out this past year. The student learned from the weekly themes shared during our LITT time.

- Even if we only reach a few students to begin with, that can snowball and more can see the positive impact that is taking place through this program with their peers so they want to be a part of the positive aspect of PBiS.

- Students feel good when they get a punch card. I try to give punch cards out to all students. Sometimes it is hard to get to all the students. I know a few teachers who have given it to a whole class and I think this is a great idea.

- PBiS provides an opportunity for students to be acknowledged for their positive behaviors. It is quick and easy to do. The different levels of items/privileges earned provide small goals to reach.

- PBiS helps all students to feel successful in something, which builds more confidence.

- When a student is recognized for their efforts it keeps motivating them to be successful.

- If you explain why they received the punch card they seem to work harder.

- PBiS helps form positive learning communities that can help students thrive in the classroom environment.

- PBiS creates an environment in which the students are taught the behaviors and thus they know what exactly is expected of them in order to be successful.

- Having consistent expectations and meeting those expectations helps them to succeed.

Researcher's comment. Although, 60% of staff perceived the implementation of PBiS as a positive step for working with students, 95% of the staff indicated the implementation of PBiS has been a positive change at Norris Middle School to help students to succeed. Again, the results reported by Norris Middle School staff supports further reasons to continue professional development with staff to foster understanding of PBiS.

Researcher's comment to Norris Middle School staff questions. Responses from staff in regard to the implementation of PBiS identified areas the staff feel positively about the process along with areas that need to continue to improve. Staff reported they were confident students were aware of the three expectations which are to be safe, respectful, and responsible as well as many positives that have occurred with the implementation. However, concerns were identified by staff indicating the importance of getting all staff buy-in for the success of the program. Staff members suggested continued staff development in order to help the staff build their knowledge and use of data to help make decisions and changes needing to be implemented.

Chapter Five

Summary and Discussion

Chapter Five begins by reviewing this study's research statement and methodology. This review is follow by a summary and discussion of the research results. The discussion section begins with a discussion of each research question, followed by assumptions and limitations. This discussion is followed by the conclusion.

Research Statement

The purpose of this study was to examine the utilization of PBiS and its practices along with the impact of academic achievement and behavioral referrals for middle school students who were identified as at-risk. As a part of the model of PBiS at Norris Middle School, LITT has been developed as one intervention process used within the implementation of PBiS. LITT consists of a common time during the day when all students have the opportunity to work with their teacher from any academic area to receive additional instruction or retake assessments. An explanatory sequential mixed methods design was used for this study, and involved collecting quantitative data first and then explaining the quantitative results with in-depth qualitative data. In the first, quantitative phase of the study, standardized assessment information as well as academic grades and student records were collected from the cumulative files of each student who have been identified to be at risk for academic and behavioral difficulty at Norris Middle School (grades 5-8). The second, qualitative phase was conducted as a follow up to the quantitative results to help explain the quantitative results. In this exploratory follow-up, the researcher explored aspects of academic and behavioral interventions to help improve academic success of students at Norris Middle School. The reason for collecting both

quantitative and qualitative data was to corroborate results from the two forms of data to bring greater insight into the problem than would be obtained by either type of data separately.

The following four research questions were utilized to guide this study:

1. Do students who participated in the school wide PBiS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest NeSA-Reading test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Reading test scores?

2. Do students who participated in the school wide PBiS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest NeSA-Math test scores compared to their Spring 2012 ending sixth-grade posttest NeSA-Math test scores?

3. Do students who participated in the school wide PBiS program lose, maintain, or improve their NWEA RIT test scores extended in time for Fall 2010 beginning fifth-grade pretest, Spring 2011 ending fifth-grade posttest, Fall 2011 beginning sixth-grade post-posttest, and Spring 2012 ending sixth-grade post-post-posttest?

4. Do students who participated in the school wide PBiS program lose, maintain, or improve their Spring 2011 ending fifth-grade pretest recorded office referral frequencies compared to their Spring 2012 ending sixth-grade posttest recorded office referral frequencies?

Review of Methodology

As detailed in Chapter Three, this researcher interviewed sixth- grade students who were identified as being at risk the 2010-11 school year during their fifth- grade year. Students were identified during the 2010-11 school year and data was collected at the end of the 2011-12 school year to determine if changes occurred in the area of academic performance and behavioral referrals. Criteria for selecting the students included: (a) poor academic performance; (b) number of office referrals for behavior during the school year; (c) number of times the student has been placed on the RtI list because of work not turned in; and (d) drop in performance on standardized assessments. Students were educated in all of the acronyms used in the program through direct instruction provided on the components of PBiS. The terminology used such as PBiS, LITT, and RtI are all common terms used on a daily basis with all students at Norris Middle School.

Norris Middle School staff as well as PBiS Leadership team members were asked to complete an on-line survey addressing the key elements of PBiS to determine if these areas have been addressed and what areas need to be continued to be developed along with addressing if they have seen a difference in academic difficulties as well as behavioral referrals implementing LITT as part of a component of the PBiS framework at Norris Middle School.

The mean was the primary measure of central tendency and the standard deviation was the primary measure of variability. Inferential statistical analyses were conducted utilizing dependent t tests, for within group achievement and engagement analyses. A single classification Analysis of Variance (ANOVA) with Tukey Honestly Significant

Difference *Post Hoc* contrast analyses was utilized for the within group reading scores

extended in time analysis. The Qualitative survey data were manually coded and

analyzed for themes.

Summary of Results

  Quantitative data. Overall, the students ($N = 18$) who participated in the study

showed an improvement in their overall NeSA-Reading performance scores. The reading

scores at the beginning of their fifth- grade year show $M = 78.17$ (SD $= 13.75$) and

$t(16) = 3.50, p = .001, ES= 0.828$ with a mean score improvement for all students of

14.44 scaled score points which resulted in students being reported as students who were

below standards to meeting the standards.

  NeSA-Math scores revealed a decreasing performance level for students who

participated in the study ($N = 18$) . Pretest results had $M = 96.06$ (SD$= 17.85$) and the

posttest ending sixth-grade $M= 89.56$ (SD $= 20.53$) and $t(16)= -1.03, p=.16, ES= -0.338$

  NWEA RIT reading test scores improved from Fall 2010 Beginning fifth-grade

with scores $M = 207.83$ ($SD = 7.73$), while Spring 2011 Ending fifth-grade $M = 205.72$

($SD = 8.01$), followed by Fall 2011 Beginning sixth-grade $M = 209.78$ ($SD = 8.77$), and

Spring 2012 Ending sixth-grade $M = 216.50$ ($SD = 9.15$), and $F(3, 68) = 9.38, p = .0001$.

Tukey Honestly Significant Difference *post hoc* contrast analyses were conducted with

the following areas showing significant results: Fall of 2010 verses Spring of 2012

$p < .01$; Spring of 2011 verses Spring of 2012 $p < .01$; Fall of 2011 verses Spring of 2012

$p < .05$. During participation in the yearlong school wide PBiS program students

experienced a final NWEA RIT improvement of +8.67 RIT score points resulting in

nomenclature stability over time of grade level performance.

Dependent *t* test results for pretest compared to posttest office referral frequencies of students who participated in the school wide PBiS improved posttest office referral frequencies for the pretest ending fifth-grade *M* = 2.00 (*SD* = 2.28) and the posttest ending sixth-grade *M* = 1.67 (*SD* = 2.83) and *t*(16) = -0.69, *p* = .25, *ES* = -0.012. During participation in the yearlong school wide PBiS program students experienced an office referral frequencies mean posttest improvement of -0.33 fewer referrals indicating the stabilizing effect of the school wide PBiS program on behavior leading to office referrals.

Qualitative data. Themes were identified from interviews with students, PBiS leadership team, and Norris Middle School staff members. Two main themes identified included (a) identification of PBiS key expectations, and (b) changes in student behavior due to the implementation of PBiS.

All students and members of the leadership team were able to identify the three key expectations of PBiS while 18 out of 20 (90%) of the Middle School identified the components.

Both students and leadership team members were asked about changes they have noticed at Norris Middle School since the implementation of PBiS. Twenty-two percent of the students responded that each student has the opportunity to earn punch cards and 56% of the students reported they felt students were being safer and more responsible at school and another 22% reported that they have not noticed any changes they could think of during the interview.

Leadership team members (40%) reported the major changes they have observed included documentation and recognition of positive behaviors. Other emphasis included late work is no longer punitive but the focus is on how to get the work completed and

working with the student. Both students and Leadership team members reported positive behaviors and changes occurring. Students reported that they observed peers taking additional ownership and reporting students being safer and more responsible. Leadership team members also indicated students taking more responsibility for work and behaviors.

Norris Middle School staff members (95%) indicated the role of PBiS has been a positive change in the lives of students to help them succeed. Staff members reported students appreciate getting "punch cards" and will work hard to earn positive from their teachers. Staff members shared PBiS has helped to form a positive learning environment and therefore has helped students thrive with their learning.

Discussion of the Results

Results from both the qualitative and quantitative parts of the study showed positive changes in behaviors and achievement results for students involved in the study.

Motivational difficulties of poorly achieving students have generally been contributed to one's self-efficacy and perceptions of confidence. Learned helplessness tends to lead to a negative belief system that can in turn further diminish a student's expectations, efforts, and problem solving abilities (Licht & Kistner, 1986). However, theories related to student attributions have indicated that a students' metacognitive knowledge of task demands and appropriate learning strategies also impacts student motivation (Borkowski, Johnston, & Reid, 1987).

Students who believe in themselves and can self-regulate their emotions as taught through PBiS may also as a result do better academically because they are more available

to learning and place greater trust in themselves, their peers, the learning process, and their teachers. Success then also fosters the potential for even greater success.

Reading scores on both the NeSA-R and NWEA assessment improved across time. Leadership team members, Norris Middle School staff members and students all indicated implementation of PBiS has helped with positive changes with students at Norris Middle School. Students as well as staff members reported positive changes with students and how they treated other students within the building along with taking ownership for their behaviors and making better choices.

Implications for Further Research

Several research suggestions have been provided throughout this discussion, including research focused on the effectiveness of PBiS in schools and the implications of academic performance as well as behavior changes within the educational community.

Replication of this study should be conducted using the definition of elements from Chapter 2. Replication in larger schools with a greater number of students would be beneficial along with a greater variance in demographics. Decreased number of behavior referrals was looked at as part of this study and was not found to be significant. Therefore, further research should be conducted with a larger number of students who have higher number of behavioral referrals to determine changes from the implementation of PBiS.

Conclusion

The results of this research study indicated that not only students but Norris Middle School staff members and PBiS leadership team members supported the implementation of PBiS. Norris Middle School staff members recommended that even

though they have seen positive changes in the climate and with students at Norris Middle

School there is a continued need for professional development in order to strengthen the

implementation of PBiS. Norris Middle School staff members suggested additional

support and ways to provide staff members with consequences of behavior.

Achievement scores indicated implementation of PBiS, and including LITT as

part of that process, can have a positive impact over time for increased assessment

results. Students reported an overall positive experience with LITT period reporting the

time during LITT class benefits students to get work completed and provides a way for

students to avoid having late homework. Students also reported LITT provides a time

when they can work with their teachers to get additional help and re-take assessments if

needed. LITT is reported by the students as an important component of PBiS in

providing students with the means to make positive changes in their achievement.

Further Research

Several research suggestions have been provided throughout this discussion,

including research focused on the effectiveness of PBiS in secondary schools, the use of

LITT as part of a problem solving model within educational settings to identify and

provide additional supports for students to receive assistance from teachers and provide

additional time to complete work on time.

In addition, the results of this study should be replicated in additional middle

schools settings and states. It would be particularly interesting to compare these results

in different school settings. The study should also be replicated with other stakeholders

such as different socioeconomic status and students who displayed more significant

behavioral referrals.

References

Algozzine, B., Wang, C., & Violette, A. S. (2011). Reexamining the relationship between academic achievement and social behavior. *Journal of Positive Behavior Interventions, 13*(1), 3-16.

American Psychological Association Zero Tolerance Task Force. (2008). Are zero tolerance policies effective in the schools? An evidentiary review and recommendations. *American Psychologist, 63,* 852-862.

Anderson, A. R., Christenson, S. L., & Sinclair, M. F. (2004). Check & connect: The importance of relationships for promoting school engagement. *Journal of School Psychology, 42,* 95-113.

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis, 1,* 91-97.

Baker, C. K. (2005). The PBIS triangle: Does it fit as a heuristic? *Journal of Positive Behavior Interventions, 7*(2), 120-123.

Bambara, L. M., Gomez, O., Koger, F., Lohrmann-O'Rourke, S., & Xin, Y. P. (2001). More than techniques: Team members' perspectives on implementing positive supports for adults with severe challenging behaviors. *Journal of the Association for Persons with Severe Handicaps*, *26*, 213–228.

Borkowski, J. G., Johnston, M. D., & Reid, M. K. (1987). Metacognition, motivation, and controlled performance. In S. Ceci (Ed.), *Handbook of cognitive, social, and neurological aspects of learning disabilities* (2nd ed., pp. 147-174). Hillsdale, NJ: Erlbaum.

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effect of school wide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions, 12*(3), 133-148.

Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A., Sailor,W., et al. (2002). Positive behavior support: Evolution of an applied science. *Journal of Positive Behavior Interventions*, *4*, 4–16.

Carr, E. G., Horner, R. H., Turnbull, A. P., Marquis, J. G., Magito-McLaughlin, D., McAtee, M. L., et al. (1999). *Positive behavior support for people with developmental disabilities: A research synthesis*. American Association on Mental Retardation Monograph Series. Washington, DC: American Association on Mental Retardation.

Chafouleas, S. M., Volpe, R. J., Gresham, F. M., & Cook, C. R. (2010). School-based behavioral assessment within problem-solving models: Current status and furture directions. *School Psychology Review, 39*(3), 343-349.

Cheney, D., Flower, A. L., & Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional or behavioral disorders. *Journal of Special Education, 42*, 108–126.

Clarke, S., & Dunlap, G. (2008). A descriptive analysis of intervention research published in the journal of positive behavior interventions: 1999 through 2005. *Journal of Positive Behavior Interventions, 10*(1), 67-71.

Clarke, S., Worcester, J., Dunlap, G., Murray, M., & Bradley-Klug, K. (2002). Using multiple measures to evaluate positive behavior support: A case example. *Journal of Positive Behavior Interventions*, *4*, 131–145.

Colvin, G., & Fernandez, E. (2000). Sustaining effective behavior support systems in an elementary school. *Journal of Positive Behavioral Interventions*, *2*(4), 251–253.

Cook, C. R., Roy, M. G., Wright, D. B., Kraemer, B., Wallace, M. D., Dart, E., Collins, T., & Restori, A. (2012). Exploring the link among behavior intervention plans, treatment integrity, and student outcomes under natural educational conditions. *Journal of Special Education, 46*(1), 3-16.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Crews, S. D., Bender, H., Cook, C. R., Gresham, F. M., Kern, L., & Vanderwood, M. (2007). Risk and protective factors of emotional and/or behavioral disorders in children and adolescents: A mega-analytic synthesis. *Behavioral Disorders*, *32*, 64-77.

DiPerna, J. C., Volpe, R. J., & Elliott, S. N. (2002). A model of academic enablers and elementary reading/language arts achievement. *School Psychology Review*, *31*, 298–312.

DuPaul, G. J., Ervin, R., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom performance. *Journal of Applied Behavior Analysis*, *31*, 579–592.

Durand, M. V., & Carr, E. G. (1992). An analysis of maintenance following functional communication training. *Journal of Applied Behavior Analysis*, *25*, 777-794.

Elias, M. J. (1998). Resolving conflict and preventing violence, school failure and

      dropout, and related behavior problems. *NASSP Bulletin*, *82*(596), 1–6.

Fantuzzo, J. W., & Polite, K. (1990). School-based, behavioral self-management: A

      review and analysis. *School Psychology Quarterly, 5,* 180-198.

Fleming, C. B., Haggerty, K. P., Catalano, R. F., Harachi, T. W., Mazza, J. J., & Gruman,

      D. H. (2005). Do social and behavioral characteristics targeted by preventive

      interventions   predict standardized test scores and grades? *Journal of School*

      Health, 75, 342–350.

Gottfredson, D. C., & Gottfredson, G. D. (2002). Quality of school-based prevention

      programs: Results from a national survey. *Journal of Research in Crime and*

      Delinquency, *39*, 3-35.

Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent

      behavior: A multi-year, multischool study. *American Educational Research*

      Journal, 30(1), 179-215.

Greenberg, M., Speltz, M., & DeKlyen, M. (1993). The role of attachment in the early

      development of disruptive behavior. *Development and Psychopathology, 5,*

      191–213.

Guardino, C. A., & Fullerton, E. (2010). Changing behaviors by changing the classroom

      environment. *TEACHING Exceptional Children, 42*(6), 8-13

Hawken, L. S., MacLeod, S. K., & Rawlings, L. (2007). Effects of the behavior education

      program (BEP) on office discipline referrals of elementary school students.

      Journal of Positive Behavior Interventions, 9, 94–101.

Hawken, L. S., Vincent, C. G., & Schumann, J. (2008). Response to intervention for

    social behavior: Challenges and opportunities *Journal of Emotional and*

    Behavioral Disorders, 16, 213–225.

Hawkins, J. D., Guo, J., Hill, K., Battin-Pearson, S., & Abbott, R. (2001). Long-term

    effects of the Seattle Social Development Interventions on school bonding

    trajectories. *Applied Developmental Science, 5,* 225–236.

Hood-Smith, N. E., & Leffingwell, R. J. (1983). The impact of physical space alternation

    on disruptive classroom behavior: A case study. *Education, 104,*

    224-231.

Horner, R. (2009, March 26). *Extending the science, values and vision of positive*

    behavior support. Presented at the Sixth International Conference on Positive

    Behavior Support, Jacksonville, FL.

Horner, R. H., Albin, R. A., Sprague, J. R., & Todd, A. W. (2000). Positive behavior

    support. In M. E. Snell & F. Brown (Eds.), *Instruction of students with severe*

    disabilities (5th ed., pp. 207-243). Upper Saddle River, NJ: Prentice Hall.

Horner, R. H., & Sugai, G. (2000). School-wide behavior support: An emerging initiative

    (special issue). *Journal of Positive Behavioral Interventions*, *2*, 231–232.

Horner, R. H., & Sugai, G. (2005). School-wide positive behavior support: An

    alternative approach to discipline in schools. In L. Bambara & L. Kern (Eds.),

    Positive behavior support (pp. 359–390). New York: Guilford.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A., &

    Esperanza, J. (2008). A randomized control trial assessing school-wide positive

behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3), 133-144.

Horner, R. H., Sugai, G., Todd, A. W., & Lewis-Palmer, T. (2005). School-wide positive behavior support. In L. Bambara & L. Kern (Eds.), *Individualized supports of students with problem behavior plans* (pp. 359-390). New York: Guilford.

Horner, R., Sugai, G., & Vincent, C. (2005). Impact*: Feature issue on Fostering Success in School and Beyond for Students with Emotional/Behavioral Disorders, 18*(2). Minneapolis: University of Minnesota Institute on Community Integration.

Irvin, L. K., Horner, R. H., Ingram, K., Todd, A. W., Sugai, G., Sampson, N. K., & Boland, J. B. (2006). Using office discipline referral data for decision making about student behavior in elementary and middle schools. *Journal of Positive Behavior Interventions, 8*(1), 10-23.

Instrument reliability. (2001). Retrieved July 10, 2001, from http://www.windsor.igs.net/~nhodgins/instrument_reliability.html

Kavale, K. A. (2005). Identifying specific learning disability: Is responsiveness to intervention the answer? *Journal of Learning Disabilities, 38*(6), 553-562.

Kern, L., Ringdahl, J. E., Hilt, A., & Sterling-Turner, H. E. (2001). Linking self-management procedures to functional analysis results. *Behavioral Disorders, 26*(3), 214-226.

Knoff, H. M. (2000). Organizational development and strategic planning for the millennium: A blueprint toward effective school discipline, school safety, and crisis prevention. *Psychology in the Schools*, *37*, 17-32.

Langland, S., Palmer, T., & Sugai, G. (1998). Teaching respect in the classroom: An

  instructional approach. *Journal of Behavioral Education, 8,* 245-262.

Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of school-wide

  positive behavior support to academic achievement in an urban middle school.

  Psychology in the Schools, 43(6), 701-712.

Lewis, T. J., Colvin, G., & Sugai, G. (2000). The effects of precorrection and active

  supervision on the recess behavior of elementary students. *Education and

  Treatment of Children, 23*(2), 109-121.

Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to

  proactive school-wide management. *Focus on Exceptional Children, 31*, 1–23.

Lewis, T. J., Sugai, G., & Colvin, G. (1998). Reducing problem behavior through a

  school-wide system of effective behavior support: Investigation of a school-wide

  social skills training program and contextual interventions. *School Psychology

  Review, 27,* 446-459.

Licht, B. G., & Kistner, J. A. (1986). Motivational problems of learning-disabled

  children: Individual differences and their implications for treatment. In J. K.

  Torgesen & B. W. L. Wong (Eds.), *Psychological and educational perspectives

  on learning disabilities* (pp. 225-255). Orlando: Academic Press.

Luiselli, J. K., Putnam, R. F., & Handler, M. W. (2001). Improving discipline practices

  in public schools: Description of a whole-school and district-wide model of

  behavior analysis consultation. *The Behavior Analyst Today, 2,* 18-27.

Luiselli, J. K., Putnam, R. F., & Sunderland, M. (2002). Longitudinal evaluation of behavior support intervention in a public middle school. *Journal of Positive Behavior Interventions, 4*(3), 182-188.

Marzano, R. J. (1998). *A theory-based meta-analysis of research on instruction*. Aurora, CO: Mid-Continental Regional Educational Laboratory.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

May, S., Ard, W. I., Todd, A. W., Horner, R. H., Glascow, A., Sugai, G., et al. (2008). *School-wide information systems.* Eugene, OR: University of Oregon, Educational and Community Supports.

Mayer, G. R. (1995). Preventing antisocial behavior in schools. *Journal of Applied Behavior Analysis, 28*(4), 467-478.

McIntosh, K., Chard, D. J., Boland, J. B., & Horner, R. H. (2006). Demonstration of combined efforts in school-wide academic and behavioral systems and incidence of reading and behavior challenges in early elementary grades. *Journal of Positive Behavioral Interventions, 8*, 146–154.

McIntosh, K., Horner, R. H., Chard, D. J., Boland, J. B., & Good, R. H. (2006). The use of reading and behavior screening measures to predict non-response to School-wide Positive Behavior Support: A longitudinal analysis. *School Psychology Review*, *35*, 275-291.

McPartland, J. M. (1994). Dropout prevention in theory and practice. In R. J. Rossi (Ed.), *Schools and students at risk* (pp.255–276). New York: Teachers College Press.

Meyer, L. H., & Evans, I. M. (1989). Nonaversive *intervention for behavior problems: A manual for home and community.* Baltimore: Brookes.

Miles, S. B., & Stipek, D. (2006). Contemporaneous and longitudinal associations between social behavior and literacy achievement in a sample of low-income elementary school children. *Child Development*, *77*, 103-117.

Murray, C., & Malmgren, K. (2005). Implementing a teacher-student relationship program in a high-poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of School Psychology, 43,* 137-152.

Nakasato, J. (2000). Data-based decision making in Hawaii's behavior support effort. *Journal of Positive Behavior Interventions, 2,* 247-251.

National Center for Education Statistics. (2007). *Indicators of school crime and safety: 2007.* Retrieved on March 6, 2012, from http://nces.ed.gov/programs/crimeindicators/crimeindicators2007/ind_03.asp

Nelson, J. R. (1996). Designing schools to meet the needs of students who exhibit disruptive behavior. *Journal of Emotional and Behavioral Disorders, 4,* 147-161.

Nelson, J. R., Colvin, G., & Smith, D. J. (1996). The effects of setting clear standards on students' social behavior in common areas of the school. *The Journal of At-Risk Issues, 3*(1), 10-19.

Nelson, J. R., Martella, R. C., & Marchand-Martella, N. E. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing

problem behaviors. *Journal of Emotional and Behavioral Disorders, 10,* 136–149.

Ota, K. R., & DuPaul, G. J. (2002). Task engagement and mathematics performance in children with attention deficit hyperactivity disorder: Effects of supplemental computer instruction. *School Psychology Quarterly*, *17*, 242–257.

Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher–child relationships and deflections in children's classroom adjustment. *Development and Psychopathology, 7,* 297–312.

Romer, D., & McIntosh, M. (2005). The roles and perspectives of school mental health professionals in promoting adolescent mental health. In D. Evans, E. Foa, R. Gur, H. Hendin, C. O'Brien, M. Seligman, & B. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: What we know and what we don't know* (pp. 598-615). New York: Oxford University Press.

Rose, L. C., & Gallup, A. M. (2005, September). 37th annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools. *Kappan*, 451-59.

Ruef, M. B., Higgins, G., Glaeser, B. J. C., & Patnode, M. (1998). Positive behavior support: Strategies for teachers. *Intervention in School and Clinic, 34*(1), 21-32.

Sadler, C. (2000). Effective behavior support implementation at the district level: Tigard-Tualatin school district. *Journal of Positive Behavior Interventions,* 2(4), 241-243.

Safran, S. P., & Oswald, K. (2003). Positive behavior interventions and supports: Can schools reshape disciplinary practices? *Council of Exceptional Children, 69*(3), 361-373.

Schaughency, E., & Goodman, S. (2003). *Schools link assessment to behavior intervention.*: *Focus on Results.* Office of Special Education and Early Intervention Services, Michigan Department of Education.

Scheffler, M. L., & Aksamit, D. A. (2006). *Every child succeeds: Executive report*: *Nebraska State Improvement Grant: 1999-2006.* Lincoln, NE: Nebraska Department of Education.

Scott, T. M., Nelson, C. M., & Liaupsin, C. J. (2001). Effective instruction: The forgotten component in preventing school violence. *Education and Treatment of Children, 24*, 309–322.

Shaffer, D., Fisher, P., Dulcan, M. K., Davies, M., Piacentini, J., Schwab-Stone, M. E., et al. (1996). The NIMH diagnostic interview schedule for children version 2.3 (DISC 2.3): Description, acceptability, prevalence rates, and performance in the MECA study. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 865–877.

Simonsen, B., Sugai, G., & Negron, M. (2008). School-wide positive behavior interventions and supports: Primary systems and practices. *TEACHING Exceptional Children,40*(6), 32-40.

Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for high-risk youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children, 65,* 7–21.

Snell, M. E., Voorhees, M. D., & Chen, L. Y. (2005). Team involvement in assessment-based interventions with problem behavior. *Journal of Positive Behavior Interventions, 7*(3), 140-142.

Stewart, R. M., Benner, G. J., Martella, R. C., & Marchand-Martella, N. E. (2007).

   Three-tier models of reading and behavior. *Journal of Positive Behavior*

   Interventions, 9(4), 239-253.

Stronach, I., & Piper, H. (2008). Can liberal education make a comeback? The case of

   "relational touch" at Summerhill School. *American Educational Research*

   Journal, 45, 6-37.

Sugai, G. (2003). Commentary: Establishing efficient and durable systems of school-

   based support. *School Psychology Review, 32*(4), 530-535.

Sugai, G., & Horner, R. H. (1994). Including students with severe behavior problems in

   general education settings: Assumptions, challenges, and solutions. In J. Marr,

   G. Sugai, & G. Tindal (Eds.), The Oregon conference monograph (pp. 102–120).

   Eugene: University of Oregon.

Sugai, G., & Horner, R. (2006). A promising approach for expanding and sustaining

   school-wide positive behavior support. *School Psychology Review*, *35*, 245-259.

Sugai, G., Horner, R., & Gresham, F. (2002). Behaviorally effective school

   environments. In M. Shinn, H. Walker, & G. Stoner (Eds.), *Interventions for*

   academic and behavior problems II: Prevention and remedial approaches

   (pp. 315-350). Bethesda, MD: National Association of School Psychologists.

Sugai, G., Sprague, J. R., Horner, R. H., & Walker, H. M. (2000). Preventing school

   violence: The use of office discipline referrals to assess and monitor school-wide

   discipline interventions. *Journal of Emotional and Behavioral Disorders, 8*(2),

   94-101.

Sutherland, K. S., Lewis-Palmer, T., Stichter, J., & Morgan, P. L. (2008). Examining the
influence of teacher behavior and classroom context on the behavioral and
academic outcomes for students with emotional or behavioral disorders. *Journal
of Special Education*, *41*, 223-233.

Taylor-Greene, S. J., & Kartub, D. T. (2000). Durable implementation of school-wide
behavior support: The high five program. *Journal of Positive Behavior
Interventions, 2,* 233-235.

Teddlie, C., & Tashakkori A. (2009). *Foundations of mixed methods research.*
Thousand Oaks, CA: Sage.

Todd, A. W., Horner, R. H., Sugai, G., & Sprague, J. R. (1999). Effective behavior
support: Strengthening school-wide systems through a team-based approach.
Effective School Practices, 17, 23–37.

Vanderstaay, S. L. (2006). Learning from longitudinal research in criminology and the
health sciences. *Reading Research Quarterly*, *41*, 328-350.

Vaughn, S., Wanzek, J., Murray, C. S., Sammacca, N., Linan-Thompson, S., &
Woodruff, A. L. (2009). Response to early reading intervention: Examining
higher and lower responders. *Exceptional Children*, *75*, 165-183.

Visser, J. (2001). Aspects of physical provision for pupils with emotional and behavioral
difficulties. *Support for Learning, 16*(2), 64-68.

Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Spreague, J. R., Bricker, D., &
Kaufman, M. J. (1996). Integrated approached to preventing antisocial behavior
patterns among school-age children and youth. *Journal of Behavioral and
Emotional Disorders, 4,* 193-256.

Walker, H. M., Ramsey, E., & Gresham, F. M. (2003). Heading off disruptive behavior: How early intervention can reduce defiant behavior and win back teaching time. *American Educator, 26*(4), 6–45.

Warren, J. S., Edmonson, H. M., Turnbull, A. P., Sailor, W., Wickham, D., Griggs, S. E., & Beech, S.E.   (2006). School-wide positive behavior support: Addressing behavior problems that impede student learning.   *Educational Psychology Review, 18,*187-198.

Wehby, J. H., Falk, K. B., Barton-Arwood, S., Lane, K. L., & Cooley, C. (2003). The impact of comprehensive reading instruction on the academic and social behavior of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, *11*, 225-238.

Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*, 357–364.

Wolery, M. R., Bailey, D. B., Jr., & Sugai, G. M. (1988). *Effective teaching: Principles and procedures of applied behavior analysis with exceptional students.* Boston: Allyn & Bacon.

Appendix A

Interview Questions for Norris Middle School Students

Interview Questions for Norris Middle School Students

Please answer the following questions to the best of your ability.

1. What are the key expectations of PBiS at Norris Middle School?

2. What changes have you noticed at Norris Middle School as a result of the implementation of the school wide PBiS?

3. What are some things that you like about PBiS?

4. What are some things that you wish you could change about PBiS?

5. Tell me what LITT time does for students to help them to be successful.

6. What is the RtI list? Do teachers use the list to utilize help for students?

7. What are some things your teachers do to help students get their work done and be successful in the classroom?

8. Are there things not included in this interview that you feel are important to the implementation of PBiS at Norris Middle School?

Appendix B

Survey for Norris Middle School Staff

Survey for Norris Middle School staff

Please indicate (x) your position and your years of employment at Norris School District.

Position:

_____ principal   assistant principal _____

_____general education teacher   counselor _____

_____special education teacher   paraeducator _____

_____speech pathologist   other _____

Gender

_____Male   _____Female

Years of employment with Norris School District:

____ 1-3

____ 4-6

____ 7-10

_____ More than 10

1. Describe the common language that is in place and used by all staff in all settings to define and work with all students.

2. What are the behavioral expectations at Norris Middle School?

3. Do you feel that staff receives regular feedback on student behavior patterns? Please explain.

4. As a staff member, how do you perceive the PBiS program?

5. How do other staff members perceive the PBiS program?

6. What role does PBiS play in the lives of students that helps them want to succeed (or contributes to their success)?

Appendix C

Survey for Norris Middle School PBiS Leadership Team

Survey Questions for PBiS Leadership Team

<u>Questions:</u>

1. What is your role as a member of the leadership team for implementation of Positive Behavior and intervention Supports (PBiS)?

2. Please share the key expectations of PBiS.

3. Please share the major changes that have occurred in your building as a result of implementation of school-wide (PBiS)?

4. As part of the implementation of PBiS, describe the greatest successes that have resulted.

5. What challenges have existed with the implementation of PBiS?

6. Share your thoughts on what impact PBiS has had for students both with disabilities and no disabilities in regards to behavior and academics.

7. What behavioral and academic interventions have been implemented and what results have you experienced? (LITT, RTI list etc)

8. What other behavior and academic interventions would you want to see implemented?

9. Are there things not included in this interview that you feel are important to the implementation of PBiS at Norris Middle School?

Appendix D

Assent Letter

Interview for Staff and Students

Positive Behavior Interventions and Supports

<u>**Introduction**</u>

First of all, thank you for your willingness to participate in this interview process. This interview is structured to help gather information about the school wide positive behavior and intervention supports (PBiS) and the educational and/or behavioral interventions that have been put in place to help ensure all students will be successful at Norris Middle School.

To ensure the integrity of this interview, our discussion will be audio recorded in order for a verbatim transcript to be developed and identify the important aspects of our conversation. The audio files will be destroyed once the transcript is developed. To assure the reliability of this interview, I will provide you with a copy of the verbatim transcript so that you have an opportunity to make any changes that may be necessary.

Confidentiality of this interview is very important. Your identity will not be disclosed anywhere in the verbatim transcript or in any report of results. If at any time you wish to stop the interview, please ask.

(Informed Consent presented)

Informed consent is required for us to continue with the interview process. Please take a moment to read through the information and ask any questions that you may have. Once you are comfortable with the information, please sign and date the bottom of the page and we will continue with the interview.

Appendix E

Informed Consent

University of Nebraska Lincoln

COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Educational Administration

IRB # xxxxxxxxx

Participant Informed Consent Form

The Relationship of implementation of Learning Intervention Team Time as part of Positive Behavior Supports to improve Academic Achievement

Purpose:
This research project will look at the impact of student achievement from implementing Learning Intervention Team Time (LITT) as part of Positive Behavior Intervention Supports (PBiS). You must be 19 years of age or older to participate. You are invited to participate in this study because you are a Norris Middle School certified staff member.

Procedures, Benefits, and Risks:
You will be asked to complete a short on-line survey and take part in a short interview that will take 15-30 minutes to complete. Both the on-line survey and interview will take place at Norris Middle School. There are no direct benefits provided to you as a research participant. There are no known risks or discomforts associated with this research.

Confidentiality:
Any information obtained during this study which could identify you will be kept strictly confidential. The data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for 5 years after the study is complete. The information obtained in this study may be published in educational journals or presented at educational meetings but the data will be reported as aggregated data.

Compensation:
You will receive no compensation for this project.

Opportunity to Ask Questions:
You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

Freedom:
Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy:
You are voluntarily making a decision whether or not to participate in this research study. Your signature certifies that you have decided to participate having read and understood the information presented. You will be given a copy of this consent form to keep.

Signature of Participant:

_____   _____
Signature of Research Participant   Date

Name and Phone number of investigator(s)

Brenda Tracy, EdS, Principal Investigator   Cell: (402) 416-3328
Larry Dlugosh, EdD. Secondary Investigator   Office (402) 472-0975

141 Teachers College Hall / P.O. Box 880360/Lincoln, NE 68588-0360 / (402) 472-3726 / FAX (402) 472-4300

Appendix F

Student Assent Form

UNIVERSITY OF
Nebraska
Lincoln

COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Educational Administration

Student Assent Form

Dear _____,

Hi! My name is Mrs. Tracy. I am interested in looking at the impact of student achievement from implementing Learning Intervention Team Time (LITT) as part of Positive Behavior Intervention Supports (PBiS). I am interested in looking at the impact at Norris Middle school, and would like your help. I would like to know your opinion about LITT and the difference LITT has made with helping you complete your work and improve your grades. I would like to invite you to be a part of a research study that I am working on that will help me know if specific interventions could help other middle school students earn better grades.

During your LITT time, you will get to work with Dr. Torri Lienemann, District Learning Coordinator, for a short while participating in an interview and completing a short survey. The entire process will take around 30-40 minutes. Your classroom teachers will let you know when Dr. Lienemann will be meeting with you.

Does this sound like something that you would like to do? If so, sign the bottom of this letter and return it to the middle school office. If you have any questions let me know. If, at anytime, you would like to stop working on this research study, you can. In no way will your grades be affected by whether you choose to participate in research study with me or not.

I am excited about working with you as part of the research study and hope to see you soon!

Brenda Tracy   and   Larry Dlugosh
University of Nebraska Lincoln   University of Nebraska Lincoln

_____   _____
        Participant signature   date

141 Teachers College Hall / P.O. Box 880360/Lincoln, NE 68588-0360 / (402) 472-3726 / FAX (402) 472-4300

Appendix G

Parent Informed Consent

University of Nebraska–Lincoln

COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Educational Administration

March 22, 2012

Dear Parent(s),

The University of Nebraska-Lincoln, in cooperation with Norris Public Schools is conducting a study to examine the benefits of providing Learning Intervention Team Time (LITT) as part of Positive Behavior Supports to determine academic and behavior effects for students. My name is Brenda Tracy and I will be conducting this study at Norris Middle School.

Norris Middle School began to implement Positive Behavior Supports during the 2010-2011 school year to provide students and staff with the opportunity to make positive choices about behaviors while attending school at Norris. An additional component that was implemented was allowing students to be a part of Learning Intervention Team Time (LITT) which is a common access period for students to get additional help with academics. The goal of this study is to identify students who not only have difficulties with academics but were also identified as having characteristics that they may be struggling in other areas such as completing work, following directions, or turning work in on time. If you give consent for your child to participate in this study they will be interviewed asking questions about what they appreciate about LITT time and ways LITT could be improved to help students. As part of the research, I will be accessing state and local assessment data that your student has completed as well as behavioral documentation that has been kept as part of our Positive Behavior Intervention and Supports (PBiS) program.

IRB# 20120612559EP
Date Approved: 06/06/2012
Valid Until: 06/05/2013

All information collected in this study is completely confidential. Your child's name, your name, and the school's name will not be used in any report or presentation of the results of this study. Participation in the study poses no known risk to your child and will in no way have any negative effect on his/her grades. You may withdraw your child from participation in this study at any time you decide that it is not in your (or your child's) best interest to continue.

All procedures will be explained to your student as they are outlined in the attached Informed Consent Form. In order for your child to participate in this study, the attached Informed Consent Form must be signed and dated by you. Your child must also provide their assent in order to participate in the interview. Any questions you have about this study can be answered by contacting me at 402-416-3328

.

Thank you for your time,

Brenda Tracy
or
Dr. Larry Dlugosh—402-472-0975

IRB# 20120612559EP
Date Approved: 06/06/2012
Valid Until: 06/05/2013

Informed Consent Form

Identification of Project:
 The Relationship of Positive Behavior Supports to Academic Achievement

Purpose of the Research:
This research project will investigate the effectiveness of Learning Intervention Team Time(LITT) for academic improvement as part of Positive Behavior Supports for students who have at risk characteristics.

Procedure:
Students were selected based on their academic performance indicators on standardized assessments along with office referrals. State and local assessment data, grades, as well as behavioral documentation that has been kept as part of our Positive Behavior Intervention and Supports (PBiS) program will be collected and used in analyzing data.

Students who meet the requirements of the study they will take part in a 1:1 interview or on-line survey asking questions about what has helped them as a student and what changes can be made to make the process better. Each participant will be asked to take part in a interview that will last 15-20 minutes and fill out a brief survey (5-10 minutes) on the computer. Students participating will not miss instructional time but will be asked to complete these two tasks during LITT time at the end of the day at Norris Middle School.

.
Risks and/or Discomforts
Participation in the study poses no known risk to participants, as all assessment and instructional practices are part of normal instructional practices used in classrooms. Participation in the study will in no way pose a negative impact on the student's grades.

Benefits
The potential benefits of this study for student participants are possible improvements in strategies implemented to assist students in different academic areas.

Confidentiality

Any information gathered during this study, which may identify your student, will be kept strictly confidential. All data will be anonymously recorded for analysis to protect the participants from identification. Any qualitative or descriptive data used in professional articles or publications will be done using pseudonyms. Individual data reported will use a pseudonym.

_____   _____
parent/guardian initial   date

Compensation

There will be no compensation for participating in this research.

Opportunity to Ask Questions:

You may ask questions before, during or after this experiment by contacting Brenda Tracy (402-416-3328 . If you have any questions concerning your rights as a research subject that have not been answered by the investigator or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965.

Freedom to Withdraw:

You are free to decide not to participate in this study or to withdraw from the study at any time without affecting your relationship with the investigator, Norris Middle School, and the University of Nebraska-Lincoln. Your decision will not result in any loss of benefits to which you are otherwise entitled.

Appendix H

Teacher Informed Consent

UNIVERSITY OF
Nebraska
Lincoln

COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Educational Administration

Teacher Informed Consent

Dear _____,

Hi! I am interested in looking at the impact of student achievement from implementing Learning Intervention Team Time (LITT) as part of Positive Behavior Intervention Supports (PBiS). I want to investigate the influence at Norris Middle school, and would like your help. I would like to know your opinion about LITT and the difference LITT has made with helping students complete their work and improve grades. By working on this special project with me, you will help me know if this type of intervention could help other middle school students earn better grades and improve academic performance.

If you agree to be a part of the study, I will ask you to complete a short on-line survey and take part in a short interview with Dr. Torri Lienemann that will take approximately 15-30 minutes to complete.

If you are willing to be a part of this study please sign the bottom of this letter and return it to the middle school office. If you have any questions let me know. If, at anytime, you would like to stop working on this special project, you can.

Thank you for your help with this project!

Brenda Tracy   and   Larry Dlugosh
University of Nebraska Lincoln   University of Nebraska Lincoln

_____   _____
            Teacher signature   date

141 Teachers College Hall / P.O. Box 880360/Lincoln, NE 68588-0360 / (402) 472-3726 / FAX (402) 472-4300

Appendix I

Letter of Approval

NORRIS PUBLIC SCHOOLS

Norris School District #160 (www.norris160.org)   North Central Accredited

25211 South 68th Street   Firth Nebraska 68358   (402) 791 – 0000   FAX: (402) 791 - 0025
Dr. John Skretta, Superintendent   john.skretta@nsdtitans.org

June 13, 2012

Brenda Tracy
University of Nebraska-Lincoln
Educational Administration Department
Lincoln, NE 68583-0732

The Norris School District (SD #160) hereby authorizes researcher Brenda Tracy to conduct research for her study:

The Relationship of implementation of Positive Behavior Interventions and Supports to improve Academic Achievement

IRB Approval #: **20120612559EP**

The district authorizes the researcher Mrs. Tracy to explicitly and overtly identify the Norris School District and our respective school sites, school buildings, and campus name as deemed necessary or desirable for her in the completion and write-up of her study.

The Norris District has a long history of cooperative research partnerships for academic purposes and embraces the overt identification of the campus as a research site as an act of transparency.

Sincerely,

Dr. Skretta
Superintendent