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Positive Behavior Interventions and Supports: Effects of Check In-Check Out

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Abstract

This case study focuses on how a Tier II positive behavior intervention support impacts middle school students that require an additional behavior management intervention to support success accessing Tier I instruction in the general education classroom. The support studied for this case was the Check In/Check Out (CICO) intervention as implemented to a group of five boys. The Check in/ Check out (CICO) program was developed as a secondary-level, targeted behavioral intervention in a three-tier preventative model of behavior support and has received empirical support as an effective way to reduce problem behaviors (Crone, Horner, & Hawken, 2010). The student participants for this study were a group of five boys in eighth grade at a rural Connecticut school. The purpose of the study was to evaluate post-implementation, the fidelity of implementation and effectiveness of the CICO program to reduce problem behavior. Results indicate that the critical components of the program were not implemented with fidelity across the content areas. Research results were used to analyze the impact of the intervention on student behavior and student perceptions of the CICO. Review of data showed that the program was effective in reducing the number of office discipline referrals for students who participated. Further, the program was perceived as being effective and efficient by students overall. It is argued that the CICO program should be considered a viable targeted behavioral intervention with students for whom Tier I preventative measures are insufficient.

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Chapter 1 – Introduction

Background

As long as schools have existed, teachers and administrators have been searching for the best methods to interact with students and support their learning. Teachers, administrators, and school districts recognize additional pressure through the implementation of more recent educational laws and acts. In 1997, amendments to the Individuals with Disabilities Education Act (IDEA) were added and became law. These amendments brought forth new concepts, some of which provide direct connections to educating children with behaviors that do not follow behavioral norms and school rules. A few of the new amendments stated that students with Individualized Education Programs (IEPs) must receive consideration to address poor behavior choices (Sugai, 2000; Sugai, Simonsen & Horner, 2008; Warren, Jared, Bahaman-Edmonson, Turnbull, Sailor, Wickham, Griggs, Shelly, & Beech, 2006). Students with severe behaviors make up only one to five percent of a school's enrollment; however, they may account for more than fifty percent of the behavioral episodes seen throughout the school (Sugai, 2000).

Statement of the Problem

Educators have been challenged to establish methods that support students with IEPs and those who exhibit outbursts of severe behavior to be fully included and academically successful in a general education classroom. Schools across the country can lack the resources or time to identify and utilize methods to successfully meet the needs of all students. Although sufficient support may exist in schools, it may not carry over to other environments where a student displays problem behavior (Bambara, Nonnemacher, & Kern 2009; Sadler & Sugai, 2009). Schools need policies and routines that align with research supported practices to state and share expectations for all students. Positive behavioral interventions and supports (PBIS) initiatives

were directly influenced by the IDEA amendments and seek to improve the way educators respond to elementary students' behavior (Bambara, Nonnemacher, & Kern 2009; Feinstein, 2003; Horner & Sugai, 2000; Luiselli, Putnam, & Sunderland, 2002; Sadler & Sugai, 2009). PBIS stems from years of research and discussions of behavior analysis (Sugai et al. 2000; Utley et al., 2002). PBIS "refers to the application of positive behavior interventions and systems to achieve socially important behavior change" (Sugai et al., 2000, p. 131). PBIS is an application of a behaviorally based systems approach to enhance the capacity of schools, families, and communities to design effective environments that improve the fit or link between research-validated practices and the environment in which teaching and learning occur (Sugai et al., 2000). Individuals who apply positive behavioral interventions and supports in schools are seeking environments that result in positive lifestyles for all students by focusing on positive behaviors and discouraging problem behaviors (Sugai et al., 2008). Educators pursue this environment through the use of a school-wide purpose, clear expectations, and detailed procedures for how to follow the expectations and procedures (Cohen, Kincaid, & Childs, 2007). These expectations and procedures stem from the creation and studies of positive behavioral interventions and supports. The overall goal of PBIS is to reinforce positive behavior rather than using the negative focus of the traditional method.

Purpose of the Study

The research reviewed indicated that there was a correlation between behavior self-management skills and academic access. The purpose for this study was to specifically look at how a PBIS Tier II intervention impacted middle school students that required additional behavior management support to be successful with accessing Tier I instruction. The study explored the following questions:

1. What are the impacts on student behavior when participating in PBIS Tier II supports?
2. What are student perceptions of PBIS Tier II supports?

The study focused on one single group of eighth grade students receiving Tier II intervention. The researcher aimed to make meaning from multiple modes of data collection about how the “Check In/Check Out” (CICO) intervention impacted the students’ ability to demonstrate engagement, preparedness, independence, and collaboration (EPIC) behaviors in the classroom, as well as their perceptions about the CICO program. This study aimed to look at the impact a Tier II CICO intervention may have on one group of eighth grade students at a single school. For this reason, the methodology selected for this research was a single case study. A case study allowed the researcher to collect multiple modes of data to track the progress of a group of eighth grade students, identified to participate in a Tier II behavior support intervention. Creswell (2012) maintained that a case study allowed a researcher to gain an in-depth understanding of the case through collecting numerous types of data. This methodology also allowed the researcher to examine the impact the CICO intervention had on a small group of eighth grade students during the beginning of the school year. The established components of Tier I PBIS for the middle school, where this study was conducted, that defined student behavior expectations were EPIC. The EPIC behavior expectations were embedded with characteristics and positive behaviors that were acknowledged in the classroom when demonstrated. These were the components of Tier II intervention that the researcher used the case study design to explore. Further, Yin (2003) indicated that a case study approach should be taken when you want to research contextual conditions because you believe they are relevant to the phenomena under study. In this particular

case, this study looked to understand how the CICO intervention is perceived by the eighth grade students.

Summary

The overall goal of PBIS is to change inappropriate behavior through reinforcement of positive behavior rather than punishment for negative behavior. PBIS is a system that, when implemented with fidelity, supports the positive behaviors of students through a tiered system of intervention, increasing supports as needed, to create opportunities for student success at school (Sugai & Horner, 2009). CICO is a Tier II intervention that offers individualized support for students by having specific check in and check out times with key adults throughout the day, to support student needs regarding a targeted behavior. A PBIS framework and implementation of the interventions and supports implemented within this framework can enhance the capacity of schools by offering students an environment in which teaching and learning can occur

In Chapter Two, the researcher will examine the literature, seeking varied connections between PBIS and the school environment. While the primary goal of PBIS is to prevent negative behaviors throughout the school, the literature review will indicate that another main area of focus for PBIS is to promote positive behaviors in the classroom. Chapter Two will discuss the three tiers of interventions as defined through a PBIS framework and the specific components of each. The researcher will also discuss the various elements that have been found to be key for successful implementation of PBIS within public school systems.

In Chapter Three, the research will be reviewed for a correlation between behavior self-management skills and academic access; therefore, this study will specifically be looking at how a PBIS Tier II intervention impacts middle school students that require additional behavior management support to be successful with accessing Tier I instruction. The study will focus on

one single group of eighth grade students receiving Tier II intervention, specifically CICO, in an attempt to identify what impacts participating in PBIS Tier II supports has on student behavior and what student perceptions are of PBIS Tier II supports. In order to analyze the impact of Tier II behavior support, the researcher will collect multiple measures of quantitative and qualitative data.

In Chapter Four, the researcher will provide the results for the case study. The research questions will be discussed and related to the collected data. Themes and evidence from the student surveys and the student's comments from their interviews will be analyzed. The data from the artifacts and documents will be shared and will tie together the themes. The themes will be discussed in relation to the existing literature. The discussions will include all of the data that has been presented.

In Chapter Five, the researcher's conclusions for this case study will be provided along with implications for future research and practice. The themes that include the student's attitudes and opinions will be explored, and suggestions for future research to review Tier II positive behavior and intervention supports will be presented.

Definition of Terms

Positive Behavior Interventions and Supports (PBIS). A proactive approach to establishing the behavioral supports and social culture needed for all students in a school to achieve social, emotional and academic success. Attention is focused on creating and sustaining primary (Tier I), secondary (Tier II), and tertiary (Tier III) systems of support that improve lifestyle results (personal, health, social, academic, recreational, family) for all youth by making targeted misbehavior less effective, efficient, and relevant, and desired behavior more functional.

Check In/Check Out Intervention (CICO). A program developed as a secondary level, targeted behavioral intervention in a three-tier preventative model of behavior support.

Individualized Education Plan (IEP). The legal document that defines a child's special education program. An IEP includes the disability under which the child qualifies for Special Education Services the services the team has determined the school will provide, his yearly goals and objectives and any accommodations that must be made to assist his learning.

Office Discipline Referral (ODR). A form a teacher or other school personnel writes up when they want the principal or school disciplinarian to deal with a student issue. A referral typically means that the issue is a serious issue, or it is an issue in which the teacher has tried to handle on without any success.

School Wide Information System (SWIS). A web-based information system that is used to collect student behavior data for decision making and is included in positive behavior interventions and supports applications.

Chapter 2 – Literature Review

Introduction

Teachers and administrators have been exploring various ways of interacting with students to support their learning and help prepare them to become life-long learners since schooling began. Traditionally, however, schools have employed reactive disciplinary policies to manage the classroom (Feinstein, 2003; Horner & Sugai, 2000). In the late 1990's, after a wave of school shootings, many schools increased these reactive, punitive policies (Feinstein, 2003). At the same time, research was being published that refuted punitive disciplinary procedures (Safran & Oswald, 2003). The argument was made that these reactive measures schools were taking could actually be counter-productive and increase the frequency and severity of these behaviors that they aimed to decrease. Safran and Oswald demonstrated that a movement had begun calling for a need for schools to utilize proactive and preventative approaches to manage negative student behaviors.

No one size fits all model exists to fix every challenge that arises in schools and classrooms across the country. However, certain practices have been shown more effective when applied with fidelity (Sugai, 2000). Positive behavioral interventions and supports (PBIS) initiatives seek to define, teach, and support appropriate student behaviors and to create a positive learning environment where problem behaviors are decreased and academic performance is increased. Practices are encouraged to be consistent throughout every area of the school to support the general student population. More detailed plans can be made for specific groups of students, and individualized student plans can be created once positive behavioral interventions and supports have been successfully implemented in the school (Carr, 2002).

The successful implementation of school-wide PBIS is required by the Office of Special Education Services within the US Department of Education, which oversees positive behavioral interventions and supports. The Individuals with Disabilities Act (1997) and No Child Left Behind (2001) put an emphasis on the use of scientifically based research to improve outcomes for students. From this emphasis, response to intervention (RTI) emerged. The purpose of RTI focused on screening and improved outcomes for students with learning disabilities, but later expanded to a general approach for improving instructional and intervention decision making for all students (Sugai & Horner, 2009). Research went on to describe a similar evolution of PBIS, only with a focus on the social culture within a school and behavior supports for students with behavior problems (Carr, 2002; Horner & Sugai, 2000; Luiselli, Putnam, Handler, & Feinberg, 2005). Research suggested that the RTI approach offers an exceptional framework of guiding principles for improved assessment and intervention decision making, and that PBIS is an example of the application of these principles to the challenge of creating systems for behavior support of all students in the classroom and school-wide (Sugai & Horner, 2009).

Various search engines and strategies were used to obtain a plethora of research articles regarding PBIS. Multiple database searches were conducted using *Google Scholar*, *Academic Search Premier*, and *Teacher Reference Center* to identify recent publications. Search terms were limited to publication dates ranging from 2000 through the present. The search was refined using “classroom behavior management” then with addition of “positive behavior interventions” in conjunction with PBIS. All identified documents were examined and those that were relevant were retrieved for inclusion in the review. Reference lists of retrieved documents were hand searched to identify additional publications.

The research in this review explored the connections between PBIS and the school. While the primary goal of PBIS is preventing negative behaviors throughout the school, the literature also indicated that another main area of focus is promoting positive behaviors in the classroom. Much of the literature discussed the three tiers of interventions and the specific components of each. The research also discussed what elements have been found to be key for successful implementation of PBIS within public school systems, including: ongoing supports needed to continue PBIS, the key elements of PBIS that have been determined effective specifically in relation to school discipline, academic performance, and home/school connections.

Tiers of Positive Behavioral Interventions and Supports

Since the theoretical rationales behind positive behavioral interventions and supports focused on what is best for the whole school as well as the individual, three different levels of support were created to provide guidance for everyone in the school. The primary tier or level was created for the entire student population and focuses upon establishing, teaching, and maintaining expectations throughout the school. The secondary tier focused on smaller groups of students who might need extra attention or support. Finally, the tertiary tier was established as a more intensive form of support for individual students who need it (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Ross & Horner, 2009; Walker, 2005). According to both Bradshaw et al. (2008) and Sugai, Simonsen, and Horner, (2008), approximately eighty to ninety percent of the student population were successful with the support received at the primary intervention level. An average of five to ten percent of a given student population receive additional support found in the key aspects of the secondary level. An even smaller one to five percent of students receive all three levels of support. These were students who had been unsuccessful with the school-wide or small group goals found in the first two tiers (Bradshaw et al., 2008; Sugai et al., 2008).

Primary Tier of PBIS

The primary prevention tier is where all schools implementing positive behavioral interventions and supports begin. This layer focuses on lowering the number of problem behaviors or situations. This tier is created through the establishment and maintenance of norms and effective behavior practices for all students. Goals are established for every area of the school so that students and staff are aware of the expectations (Tobin & Sugai, 2002). Often this is all of the support that is required for the majority of students in any given school (Sugai & Horner, 2009; Sugai et al., 2008).

Many studies have been completed that focus solely upon the primary tier of positive behavioral interventions and supports (Colvin & Fernandez, 2002; DePry & Sugai, 2002; Tobin, Lewis-Palmer, & Sugai, 2002). De Pry and Sugai (2002) completed a study at a rural elementary school of approximately 350 fourth through sixth graders. All students had been taught and encouraged to follow the main behavioral expectations throughout the school and in their classrooms. De Pry and Sugai's study focused on keeping track of minor incidents that violated the set expectations of the school. The teacher used pre-correction phrases, such as: "Thank you for keeping your voices at a zero volume in the halls." The teacher made these statements before a problem behavior was predicted to occur. These pre-correction phrases helped keep students' focus on their learning.

Teachers also used active supervision, which consisted of moving among students, interacting with them, reminding some of appropriate behavior, and positively reinforcing appropriate behaviors that were observed (Colvin & Fernandez, 2002; Tobin et al., 2002;). Multiple studies noted the number of behavioral issues decreased drastically once the teacher began pre-correcting students' behavior using the PBIS school-wide model (Sugai & Horner,

2002; Tobin et al., 2002). Luiselli and colleagues participated in two research studies that also utilized the primary tier of positive behavioral interventions and supports (Luiselli et al., 2005; Luiselli, Putnam, & Sunderland, 2002). Both of these studies monitored the incorporation of PBIS in public schools. All students at each school were taught the same behavior expectations. Teachers at each building helped create the expectations for the students, and everyone participated in teaching and reinforcing them as needed. Both of the studies by Luiselli and colleagues showed that the number of office discipline referrals and suspensions decreased as the PBIS interventions were utilized. Students' standardized test scores increased on average between the first year and the second year in the study of one urban school (Luiselli et al., 2005). Also, the Luiselli et al. (2002) study, showed an overall decrease in the number of detentions based on vandalism or substance abuse as a positive behavioral interventions and supports system was implemented and maintained in a rural middle school. Before implementing PBIS, the school dealt with a high number of cases of vandalism and substance abuse, which hindered positive behavior practices and academic performance.

Secondary Tier of PBIS

The secondary prevention tier is established after schools have successfully implemented and maintained the primary level for a few years. Interventions that are specific to a group of students are used in the secondary level (Sugai & Horner, 2009; Sugai et al., 2008; Tobin & Sugai, 2002). Once the secondary tier is put in place, it can be used to reduce the number of existing problems or situations by providing additional instructional and behavioral support for a smaller number of students who are "at risk" for failure or just need additional support and focus. Schools establish varied requirements to note a student as "at risk" and in need of additional interventions. These students may have difficulties interacting with their peers or following

instructions. The intervention can be as direct as identifying more minor behaviors, such as frequent outbursts or interruptions during learning, that escalate or have the potential to escalate into larger issues (Tobin & Sugai, 2002).

Several studies have been completed on small groups of students who have received interventions on the secondary level and also on the school-wide primary level (Safran, 2006; Sugai et al., 2008; Tobin & Sugai, 2002; Walker, 2005). Walker (2005) focused on students in first through sixth-grade who needed behavior interventions on the secondary tier. Students who needed this extra attention and focus were identified through a system called the Systematic Screening for Behavior Disorders (SSBD). Teachers filled out a detailed questionnaire/inventory of each child or group of children who they were recommending for further focus. These students were observed in the classroom and on the playground for a set period of time. These observations and the questionnaire/inventory provided details and information of how students performed behaviorally and socially in varied environments. As the teachers in this study participated and narrowed down the individuals who needed extra attention, they began making plans for the best methods to support this group of students. A small percentage, approximately two to five percent of the entire student population, was recommended for tier two interventions.

Tobin and Sugai (2002) also utilized the SSBD in their study that focused on younger elementary students who displayed tendencies of problem behaviors. Just as in the study by Walker (2005), teachers in this study were taught and given a description of characteristics of students who might display behaviors warranting a closer and deeper focus (Tobin & Sugai, 2002). Six students from each class who displayed a higher percentage of tendencies for behavior problems were listed. The students who were placed in the tracking group received not only the school-wide positive behavioral interventions and supports, but also additional behavior

education plans that focused upon certain skills and behavior goals. Students in this secondary level received attention and required “check-in/check-out” procedures to help them stay on task both behaviorally and academically. These secondary tier students also received support on self-control and social skills. They made the largest gains in cooperation, as compared to the population of students in the primary and tertiary levels at the school. Positive gains were also noted in lowering hyperactivity problem behaviors and increasing academic competence.

Tertiary Tier of PBIS

The tertiary prevention tier is used as an intervention after schools have successfully maintained and utilized both the primary and secondary tiers for an extended period of time. Similar to the secondary tier, the tertiary tier is created and used with students who are at the highest risk for undesirable behavior and academic performance. These students often come to school with pre-existing and well-established behavior issues (Tobin & Sugai, 2002). Level three is focused on reducing existing cases of complex and long-standing problem behaviors displayed by students who are at a high risk for social, behavioral, and emotional failure (Sugai & Horner, 2009). Individualized support plans are specially designed to help decrease the intensity, length, and/or frequency of problem issues. These students may have a detailed tertiary level plan that aligns with their individualized education program (IEP) or other support plan that is intensely focused on by an intervention team (Sugai & Horner, 2009; Sugai et al., 2008).

The study by Tobin and Sugai (2002) discussed above also focused on students and interventions for the tertiary level. Students in this portion of the study made positive gains in their average cooperation scores, which was a focus of many tertiary prevention level plans in this school’s PBIS program. Additional positive results included a decrease in the incidence of students bottling up or the internalizing and externalizing problem behaviors that cause students

participating in the tertiary tier to get off-task. Internalizing behaviors are behaviors that are potentially harmful to a student's emotional and behavioral tendencies. Examples of internalizing problem behaviors include fearfulness, depression, anxiousness, or negligence from peers. Externalizing behaviors are an individual's negative behaviors directed outward toward another individual or group. Examples of externalizing problem behaviors include aggression, disruption, and opposition. In addition to the decrease of these problem behaviors, tertiary groups also decreased hyperactivity and increased academic performance and competence. The Tobin and Sugai study established that positive behavior support was an effective preventive intervention for primary grade children demonstrating serious internalizing or externalizing behavior problems.

Key Elements of Positive Behavioral Interventions and Supports

Positive behavioral interventions and supports include many components. These components are required to help define, teach, and support appropriate student behaviors to create a positive learning environment. Steps to positive behavioral interventions and supports are discussed in research, along with data based decision making, and ongoing support for PBIS. Positive behavioral interventions and supports include several key features, including proactive approaches to teaching, implementing, and improving social behaviors of students (Sugai & Horner, 2002). First, it is necessary to communicate both the vision of PBIS and the school administrator's role in the communication process. Another step to PBIS includes the development of a leadership team and defining the role they will play in the creation and support of PBIS. A portion of the leadership team's responsibilities includes providing information on their decision-making process for students and other teachers.

Communicating the Vision of PBIS

A portion of the proactive and prevention approaches to PBIS stems from communicating the vision and outlines of the program to school staff. This communication could be completed in the form of presentations, round table discussions, and wall displays of information that have been gathered (Flannery, Guest, & Horner, 2010). The research of Bambara, Nonnemacher, and Kern (2009) stated the most common trend in their research was the need and importance of establishing a school culture in which everyone participating in the program had an understanding of the vision and implementation of PBIS. Without the communication and statement of this vision, staff members felt it was extremely difficult to carry out PBIS practices for even one student, let alone an entire school population of students. Bambara and colleagues also noted that communicating the vision of PBIS requires the support of staff and the school administrator.

There are research-based suggestions for the characteristics and methods that school administrators can use to help implement and sustain PBIS in their schools (Flannery et al., 2010). Some of these methods include having solid knowledge of PBIS and all of its factors, attending and participating in PBIS leadership team meetings, and monitoring the implementation of the program (Colvin, 2000; Handler, Rey, Connell, Their, Feinberg, & Putnam, 2007). Both Handler et al. (2007) and Sadler and Sugai (2009) documented that the administrator's attendance during the teachers' training and the beginning stages of implementation is crucial. The principal's attendance shows support from day one. It helps when the principal attends meetings when important key decisions for discipline policies and procedures are being made. Similarly, these researchers verified the administrator should be active in modeling various practices teachers are expected to implement with students. If a

rewards system is put in place, the administrator should be seen passing out rewards to students and using the common PBIS language (Handler et al., 2007).

Bambara et al. (2009) also stressed the importance of the administrator's support in their study. The administrator has a pivotal role in the acceptance and backing of PBIS and in ensuring staff members are able to follow through with the established expectations. The principal is a leader when promoting new practices and supporting the PBIS methods. All studies agreed that this included acting as a school cultural leader by displaying a strong belief in PBIS (Bambara et al., 2009; Handler, et al., 2007; Sadler & Sugai, 2009). Bambara et al. (2009) also noted that the participation of the building administrator in making decisions and acknowledging efforts made by the PBIS leadership team and staff was key. The rapport and appreciation of staff, parents, and other individuals was logged when the principal was available to listen to concerns and help make decisions. Finally, Bambara and colleagues stated it is crucial for the building principal to secure and provide resources needed for any PBIS activities and functions. This includes finances and opportunities for professional development and additional staff training (Sadler & Sugai, 2009). Teachers also noted one of the most important factors was the ability to have sufficient time in the school day for planning and regularly participating in PBIS leadership team meetings, which is provided through support from the principal (Bambara et al., 2009).

Development of a Leadership Team

Just as the leadership and support of an administrator has shown to be crucial in the implementation of PBIS, the development of a leadership team has also been noted as a vital component of the program (Colvin & Fernandez 2000; Handler et al., 2007; Sadler & Sugai 2009; Walker et al., 2005). Colvin and Fernandez (2000) documented that the most important

component of an effective PBIS model was the formation and production of a leadership team. The responsibilities of a leadership team include attending planning meetings, providing leadership at all stages in the implementation process, discussing and creating procedures and expectations for staff and students, and assisting with data collection and management. Teams are often composed of a variety of groups of professionals within a given school. Generally, six to 10 members make up a leadership team (Sadler & Sugai 2009; Walker et al., 2005). These teams often include the administrator, general classroom teachers, special education teachers, and the school counselor or psychologist (Colvin & Fernandez, 2000).

The PBIS leadership team plays a crucial role in making decisions for the staff and school. These decisions require time and commitment from each of the leadership team members in order to plan and develop expectations, procedures, and policies (Handler et al., 2007). A time commitment is also required as the leadership team shares and teaches the rest of the staff the PBIS expectations and norms for the school. However, before all of this can begin, the leadership team needs to be trained on key concepts. These key concepts include student development, discipline, and the PBIS theoretical approaches. The theoretical approaches encompass ways to change behavior, improve the school climate, and assist in the effectiveness of the program. As leadership team members become more familiar and confident in their understanding of the rationale behind PBIS, they can begin to establish and make decisions for the school (Bradshaw & Pas, 2011). These decisions are often made after team members have contacted other teachers, parents, and students for their input and thoughts behind the specific matters (Handler et al., 2007; Walker, 2005).

Data-Based Decision Making

Flannery, Guest, and Horner (2010) stated that one of the most effective tools when implementing PBIS is to frequently provide teachers and other individuals with data that reflect how they are following the model and if it is benefitting students. Collected data should be organized in such a way that they are useful for administrators, the leadership team, teachers, students, and the community. Data are collected continuously and summarized regularly, to be shared with teachers (Sugai & Horner, 2009). Many districts and PBIS schools utilize various data collecting programs, such as school wide information system (Safran, 2006; Walker, 2005). These programs allow members on the leadership team to take the data collected throughout the school and organize them in a systematic way. The leadership team collects and enters data, rather than office personnel, so that they might be more aware of the trends and possible situations in the school. The team takes the data from office discipline referrals and organizes information in various charts, tables, and graphs to share with teachers, school districts, and anyone else seeking to understand specific components of the information. Various topics of data can be created and shared with teachers, including the time of day specific behavior problems occur, the most common behavior problems occurring in the school, and the total number of problem behaviors over the course of a few months or even the entire school year. (Safran, 2006; Walker, 2005).

Utilizing Collected Data

As data are being collected and PBIS is implemented in a school, there will likely come a time when the leadership team may need to refer back to the collected data. An elementary school in research completed by Colvin and Fernandez (2000) remarked the leadership team regularly reviewed data entered in a system in order to look for patterns in problem behaviors.

Examples of patterns include trends in referrals, specific locations of those referrals, and patterns for individual students. The team then shared this information with the rest of the staff at faculty meetings and made an action plan to help guide and improve behaviors and actions.

Irvin et al. (2004) observed that the collection and review of data about office discipline referrals helped make decisions about students' behavior and how best to handle given situations. This office discipline referral (ODR) data, in turn, helped the leadership team determine and build the PBIS program (Irvin et al., 2006). Using a data collection program, Irvin et al. (2004) developed a written survey with five main categories to help collect data in their district. These categories included information about the school and ODR data entry at each location, the use of this data and reports, the usefulness of the information in making decisions, and the effects and ongoing needs as shown in the data. Irvin and colleagues studied the access and use of data reports, including how frequently teachers accessed the reports. Of the 22 elementary schools and 10 middle schools in their study, all had staff who accessed the collected data at least once each month. The main individuals accessing the data were the leadership team and the administrator; however, individual teachers and the counselor also accessed the reports each month (Irvin et al., 2006). Individuals surveyed in Irvin and colleagues' study noted their data collection provided efficiency and effectiveness in helping them make decisions in their schools. Overall, the staff surveyed at each school found the regular collection and interpretation of PBIS data to be helpful in guiding and supporting their students.

The validity of office discipline referrals in conjunction with the effectiveness of PBIS has also been studied (Cohen et al., 2007; Irvin et al., 2006). Areas such as student and teacher perceptions, classroom management, and behaviors were discussed. The ODR data were noted to help guide educators on how to proceed with behavior concerns, such as aggression, vandalism,

and suspensions. One school observed that 50-80% of their referrals were coming from classrooms, so they decided to increase classroom management professional development for their teachers (Irvin et al., 2006). Another school noted fighting at recess was a behavior problem in need of further attention. The leadership team developed an intervention specifically for the problem and partially monitored its progress through data collection. The team noted an 80% reduction in the number of recess discipline referrals once they developed a plan of action and monitored its progress. The ODR data in this study helped both teachers and students maintain their understanding of PBIS to follow school-wide expectations and discipline policies.

After studying the validity of ODR data and connecting them with PBIS, Irvin et al. (2006) observed that office discipline referrals can be useful as information to consult and use to support decisions for individuals and groups of students. Other schools have used ODR data to help make changes to school action plans and identify weaker areas that need further attention and support. Overall, the information found ample validity in the usefulness of office discipline referral data in schools and in conjunction with positive behavioral interventions and supports. Data-based decisions utilize data from multiple areas and help educators plan how to implement practices and provide ongoing support in the future (Cohen, et al., 2007).

Ongoing Support for PBIS

Data-based decisions utilize data from multiple areas and help educators plan how to implement practices and provide ongoing support in the future. In this section, information about monitoring and maintaining PBIS will be discussed. Administrators, leadership teams, teachers, students, and the community that stay focused and continually keep up with school trends, training, and changes in demographics ensure a more successful PBIS school (Bradshaw et al., 2008). Staff and leadership team members need ongoing support from administrators and district

officials. They also need ongoing professional development in order to stay connected and up-to-date on PBIS information. This ongoing support is required in order to continue to define, teach, and support appropriate behaviors in a positive learning environment where academic performances can increase as well.

Provide Ongoing Support

In order to sustain the implementation of PBIS in a school, the administrator and leadership team must provide ongoing support for one another and the rest of the staff (Bradshaw et al., 2011; Flannery et al., 2010). They remarked that in order for the PBIS leadership team to be successful, they must have the support and empowerment of the principal. For example, arranging schedules to allow leadership team members to work together during common plan periods can strengthen the team and allow for ongoing success (Bradshaw et al., 2011). Leadership team members can also be broken down further into sub-teams that focus on specific areas of need, thereby lessening the load of the group as a whole. This also brings in more individuals to the development and implementation of the program (Bradshaw et al., 2011; Flannery et al., 2010).

Part of this ongoing support provided by the administrator and leadership team comes from acknowledging accomplishments made by teachers and students (Bradshaw et al., 2011; Bradshaw et al., 2012). Students receive attention as educators praise and positively encourage them for their actions throughout each school day; however, the administrator and leadership team must make an effort to acknowledge the work and success of staff members as well (Flannery et al., 2010). Successful administrators establish formal methods and plans to recognize the triumphs of staff members such as simple thank-you cards to public announcements made to all staff members. Other schools ask staff to submit the name of a colleague who has surpassed the expected requirements (Bradshaw et al., 2011). Whatever the

method, the importance of building up staff members who participate in the multiyear establishment and sustainment of PBIS was noted as significant.

Ongoing PBIS Professional Development.

An additional component of the ongoing implementation of PBIS is professional development and support for professional practice. Bambara et al. (2009) surveyed a group of staff members about this topic, and 92% of them stated adequate and ongoing development opportunities and continued support for professional practice were essential in order to successfully implement and maintain PBIS. A lack of professional development and training can hinder or act as a barrier to the successful implementation of the program (Bambara et al., 2009; Bradshaw et al., 2011). Bambara et al. (2009) remarked that school personnel need to know the basic procedures and components of PBIS, as well as the knowledge and skills of behavioral analysis, data collection, behavioral objectives, and other PBIS strategies. Collecting data and properly filling out discipline paperwork was seen as an especially weak area. Therefore, Bambara and colleagues' research pointed out the crucial need for providing support that is ongoing and specific to the needs of the school and teachers.

Research indicated that school districts and leadership teams must provide ongoing opportunities for teachers to attend skill-building workshops (Bambara et al., 2009; Bradshaw et al., 2011; Hershfeldt, Pell, Sechrest, & Bradshaw, 2012). Workshops related to data collection and prevention strategies were especially recommended. Teachers have identified several areas that they wanted to be put into place for support. These areas included structured meetings that occur regularly, ways to promote solid interpersonal relationships, ways to celebrate success of staff members, and opportunities for teachers to communicate and work with one another outside regularly scheduled team meetings (Bambara et al., 2009; Hershfeldt et al., 2012). Teachers also

focused on the need for a strong leadership team coach with experience in PBIS, teamwork skills, and skills to motivate staff members (Bradshaw et al., 2011; Hershfeldt et al., 2012).

Effectiveness of Positive Behavioral Interventions and Supports

Various studies showing the effectiveness of positive behavioral interventions and supports have been conducted. In this section the effectiveness of PBIS in accordance with school discipline problems and academic performance are described. Interactions with home and school (including attendance data) will also be discussed.

PBIS in Relation to School Discipline and Academic Performance

Positive behavioral interventions and supports and school discipline closely align with one another. Multiple studies discuss how the two parallel and work together to increase academic learning and decrease discipline issues (De Pry & Sugai, 2002; Feinstein, 2003; Lassen, Steele, & Sailor, 2006; Reinke, Herman, & Stormont, 2013; Warren, Bohanon-Edmonson, Turnbull, Sailor, Wickham, Griggs, & Beech, 2008). Throughout these studies, specific factors are found to be consistent across grades and ages regarding actions and strategies that support positive behavior management, in turn effecting and promoting academic success. Active supervision and pre-correction are both effective strategies for positive behavior support (De Pry & Sugai, 2002; Reinke, et al., 2013). When a teacher identified appropriate behavior, taught students what was expected of them, and then used pre-corrections as needed, the result was a decrease in the number of behavioral incidents (De Pry & Sugai, 2002; Feinstein, 2003, Reinke et al, 2013; Warren et al., 2008). The number of problem behaviors can be decreased if a teacher is trained and utilizes active supervision and pre-correction strategies. These strategies may be further strengthened as the teacher proactively reminds and reteaches students the

expectations and remains consistent in his or her usage of pre-corrections and PBIS language (De Pry & Sugai, 2002; Reinke, et al., 2013; Warren et al., 2008).

Higher levels of praise generate higher levels of positive behavior and promote student achievement (De Pry & Sugai, 2002; Feinstein, 2003; Lassen et al., 2006). Students that followed the set expectations and were rewarded on a regular basis (including every hour, day, or month) showed an increase in positive behavior (De Pry & Sugai, 2002; Feinstein, 2003; Warren et al., 2008). The demonstrated behaviors included participating in class, working without being prompted by a teacher, interacting well with others, and holding oneself accountable for behavior choices (Feinstein, 2003; Warren et al., 2008). These behaviors also contribute to increased student achievement (De Pry & Sugai, 2002; Feinstein, 2003, Warren et al., 2008; Reinke et al., 2013). When given an alternative, students were able to substitute inappropriate behavior for appropriate behavior in order to be rewarded. Students were given the option to make different choices and exceed expectations in class (De Pry & Sugai, 2002; Feinstein, 2003; Lassen et al., 2006; Reinke et al., 2013; Warren et al., 2008). Positive behavioral supports made a difference with overall behavior and the change was immediate for daily student behavior (De Pry & Sugai, 2002; Feinstein, 2003; Reinke et al., 2013; Warren et al., 2008). Overall school climate and whole school behaviors saw results after a year of implementation of a PBIS framework (De Pry & Sugai, 2002; Feinstein, 2003; Lassen et al., 2006).

When behavior is addressed at a minor level and high expectations are consistently and explicitly taught, there was a large reduction in the average number of office discipline referrals (Feinstein, 2003; Lassen et al., 2006; Reinke et al., 2013). Just as positive behavioral interventions and supports seek to decrease problem behaviors with positive support and guidance of students, it also focuses upon increasing academic performance for every individual

in the school. As PBIS has been implemented and studied over the years, data has been collected to determine the effectiveness of the program. The findings showed a drastic increase in expectations defined, taught, monitored, and evaluated issues (De Pry & Sugai, 2002; Lassen et al., 2006; Reinke et al., 2013). The results also reflected a significant increase in leadership and an ongoing reward system in the building. Academically, standardized reading and math test scores increased in schools implementing PBIS (Lassen et al., 2006; Reinke et al., 2013). These standardized scores were compared with the number of ODRs a student received, and it was documented that students with fewer ODRs scored higher on standardized math and reading tests (Lassen et al., 2006; Reinke et al., 2013; Warren, 2008). Lassen et al. (2006) commented that students receive more instruction time when they have fewer office discipline referrals and have a higher chance of receiving positive feedback and support from teachers. They estimated at least twenty minutes of classroom instruction time was lost for each ODR, as the student traveled to the office, discussed the problem behavior, and returned to the classroom. By implementing PBIS, Lassen et al. estimated that 659 hours of classroom instruction time were restored as the number of ODRs decreased. This averages out to eighty-two eight-hour school days for over 600 students. Research supports that PBIS is an effective framework for reducing student problem behaviors and positively impacting academic performance, likely due to the increased amount of time students spent in the classroom.

PBIS and Connections between Home and School.

Just as the implementation of the positive behavioral interventions and supports program has reflected positive gains in behavior and academics, there have also been changes observed in attendance and the interactions between the school, home, and the community at large. A study by Bambara et al. (2009) included a smaller group of parents who served as advocates and

supporters of a larger group of parents as they figured out methods to support their children both educationally and behaviorally at home. The involvement of parents and students in the implementation of PBIS in this school district was one of the main components focused upon. Participants in the study commented that parents help provide insight into student behavior and provide other important information required to create the proper support for the student. Parental involvement was also viewed as critical to the connections and consistency of practices between home and school. Bambara et al. remarked that the teachers supported families, which in turn allowed the parents to support their own children more effectively. Luiselli, Putnam, and Sunderland (2002) saw an increase in student attendance over a four-year period, once PBIS had been established. The researchers remarked this increase in attendance stemmed from better support of students and parents, which was a focus of this school district and study as well.

Summary

Positive behavioral interventions and supports programs were established as a result of amendments passed under the Individuals with Disabilities Education Act (1997). These amendments created new requirements, including the requirement for educators to provide support for students with behaviors that do not follow school district and behavioral norms. PBIS initiatives were created to change and improve the way educators respond to primarily elementary students' behaviors. In the initial stages of implementation, a PBIS leadership team is established and sets the expectations for students and teachers throughout the school. Classroom teachers teach the expectations throughout the school and all teachers and staff support them. The leadership team also collects data when problems arise and notes strengths and weaknesses in multiple areas of the school.

A PBIS framework, which includes three levels or “tiers” of intervention, requires the support of the school administrator, leadership team, teachers, and additional staff. Students are taught the school-wide expectations in the primary tier. Small groups of students who need additional guidance are supported in the secondary tier. Students who are most challenged academically and/or behaviorally are supported individually in the tertiary tier.

Multiple studies have been completed on the behavioral and academic support PBIS provided for teachers and students. These studies reflected increased standardized test scores, decreased office discipline referrals, and fewer outbursts of problem behaviors. Warren et al. (2008) summarized the information found in the overall research with the following statement:

The school-wide application of positive behavior support is an effective alternative to the reactive, punishment-oriented approaches historically used by many schools. Educators who make use of proactive PBS strategies are in compliance with established IDEA guidelines. They are more likely to achieve safer, more disciplined schools and produce teachers who focus more of their time on teaching rather than managing student misbehavior. (p. 10)

Research illustrated the effectiveness of PBIS and its ability to define, teach, and support appropriate student behaviors to create a positive learning environment where problem behavior is decreased and academic performance is increased.

Chapter Three – Methodology

Research Design

The research reviewed indicated that there was a correlation between behavior self-management skills and academic access. The purpose for this study was to specifically look at how a PBIS Tier II intervention impacted middle school students that require additional behavior management support to be successful with accessing Tier I instruction. The study explored the following questions:

1. What are the impacts on student behavior when participating in PBIS Tier II supports?
2. What are student perceptions of PBIS Tier II supports?

The study focused on one single group of eighth grade students receiving Tier II intervention. The researcher aimed to make meaning from multiple modes of data collection about how the “Check In/Check Out” (CICO) intervention impacted the students’ ability to demonstrate engagement, preparedness, independence, and collaboration (EPIC behaviors) in the classroom, as well as their perceptions about the CICO program.

The research reviewed indicated that there was a correlation between behavior self-management skills and academic access. This study looked at the impact a Tier II CICO intervention had on one group of eighth grade students at a single school. For this reason, the methodology selected for this research was a single case study.

Methodology

A case study allowed the researcher to collect multiple modes of data to track the progress of a group of eighth grade students, identified to participate in a Tier II behavior support intervention. Creswell (2012) maintained that a case study allows a researcher to gain an in-

depth understanding of the case through collecting numerous types of data. This methodology also allowed the researcher to examine the impact the CICO intervention had on a small group of eighth grade students during the beginning of the school year. The established components of Tier I PBIS for the middle school, where this study was conducted, that define student behavior expectations were EPIC. The EPIC behavior expectations were embedded with characteristics and positive behaviors that were acknowledged in the classroom when demonstrated. These were the components of Tier II intervention that the researcher used the case study design to explore. Further, Yin (2003) indicated that a case study approach should be taken when you want to research contextual conditions because you believe they are relevant to the phenomena under study. In this particular case, this study sought to understand how the CICO intervention was perceived by the eighth grade students.

The researcher used the case study methodology because the intent was to learn about the effect the CICO intervention had on student work completion and lost instructional time. Loss of instructional time effects access to Tier I instruction and academic support for class work and assignments. According to Creswell (2003), a constructivist approach allows the researcher to make meaning from their selected experiences. A case study supported work within a constructivist theoretical framework, thereby allowing the researcher to use personal perspective when analyzing the multiple pieces of data from the small group and to construct the effect CICO had on those students. Being able to drill down in to student behavior and seek to understand the impact of the CICO support system was a subjective process and relied on the experiences of the participants in and out of school. Additionally, Yin (2003) defined three different types of case studies: explanatory, exploratory, and descriptive. An exploratory case study allows the researcher to investigate contextual conditions and distinct phenomena that do

not have a single set of outcomes. This study was defined as an exploratory case study because it was designed to explore PBIS Tier II supports using only one program for a small group, and it may have had a varied set of outcomes. This was a single case study because it looked at one group of students in one setting (i.e., 8th graders). It was the intention of this researcher to make generalizations about the impact CICO had on 8th grade students requiring Tier II behavior supported through a case study design model.

The Case

This single case study was conducted in the rural town of Sterling, Connecticut in the PreK-8 setting of Sterling Community School. The participants were a small group of thirteen and fourteen year old eighth grade students. The school contained approximately 55 eighth graders. According to the School Wide Information System (SWIS) data for the 2014-15 school year, more than 20% of seventh graders received multiple office discipline referrals and required Tier II positive behavior supports with in the first eight weeks of school. The small group of students chosen to participate in this case study were those that had received three or more office referrals in seventh grade and were referred for additional support at the end of the previous school year.

Data Collection Methods

For the purpose of this case study, the researcher collected multiple measures of quantitative and qualitative data in order to further analyze the impact of Tier II behavior support. The data collection methods that were utilized are outlined in Table 1.

Table 1.	
<i>Data Collection Methods</i>	
Research Question	Method(s)

1. What are the impacts on student behavior when participating in PBIS Tier II supports?	<ul style="list-style-type: none"> • Artifacts and documents • Survey (teachers)
2. What are student perceptions of PBIS Tier II supports?	<ul style="list-style-type: none"> • Interview • Pre and Post Survey (student participants)

Each of these methods of data collection is described individually in the following sub-sections.

Artifacts and Documents

This research study looked at the effect the CICO intervention had on student work completion and lost instructional time for academic classes. Creswell (2012) stated that the researcher should be able to identify the types of documents that will aid in answering the qualitative research questions. Further, Sandelowski (2000) suggested that whatever is observed while in the field, should be documented and described in order to identify common key findings. Collected student work samples and intervention documents helped the researcher describe the impact the intervention had on the students participating in the case study. Finally, Devers and Frankel (2000) stated, “when the study is more exploratory or attempting to discover and/or explore theories and concepts, a very open-ended protocol is appropriate to consider” (p. 336). Since the purpose of this research study was to explore the impact of the CICO strategy as a Tier II intervention, Devers and Frankel suggestion that documents and artifacts be collected as needed throughout the study was applied.

There were specific documents that proved useful when interpreting the impact of the CICO strategy. To address the first research question, the researcher collected various artifacts such as CICO cards, office discipline referrals, and SWIS data reports. These artifacts provided evidence as to fidelity of participation and execution of the intervention and the amount of

instructional time that the student was receiving. It was the goal to track student progress on student work completion over the course of time the intervention was being applied. The artifacts collected allowed for a more comprehensive analysis to be done in terms of the impact of the behavior support and intervention. Other pieces of documentation that were collected were student academic progress reports at mid-point of the first trimester. The advantage of using visual documents within this case study was that the images will provided real-life documentation of a student's behavior as well as fidelity of participation with the plan by student, teacher, and parent/adult versus simply relying on observational notes, student work and word of mouth subjective input that the general population may not understand or be privy to (Creswell, 2012).

Surveys

The quantitative method of data collection for both research questions was through two commonly accepted survey measures within the PBIS community. This method was chosen because it will allow the researcher to measure student achievement, assess individual students' abilities, and begin forming a picture of their strengths and weaknesses (Creswell, 2012). Yin (2003) indicated that surveys are useful within a case study design to provide structured responses to many questions. Further, according to Marshall and Rossman (1999) surveys can be useful tools in obtaining data about characteristics, attitudes, and beliefs about the participants, and for making inferences about a group of participants.

The first survey, the Intervention Rating Profile 15 (IRP-15), was given to teachers as an assessment of the effects CICO had on participating students as well as their perceptions. The survey given to the teachers was used to assess their perceptions of student academic success as it relates to the implementation of the behavior support. As stated by Witt and Elliott (1985), the

IRP-15 was developed to specifically assess teacher's perceptions of classroom interventions. Teachers were asked to answer questions that specifically gauge student performance during the intervention time frame as well as open-ended questions that allowed for teacher comments and insights. The second is the Children's Intervention Rating Profile (CIRP), a pre- and post-survey for students regarding perceptions of program effectiveness that was also developed by Witt and Elliott. These surveys were given to the participating students to assess student growth before and after the behavior support and add to the comprehensive analysis of the program. Finally, the results of both surveys added data for an overall review of the fidelity of implementation of the support.

Interviews

The third method of research used for this study was semi-structured interview. The use of a semi-structured interview was important due to the fact that the interviews took place with adolescents. Eder and Fingerson (2001) indicated that during interviews with adolescents, it is important that the method provide "the most natural way for them to communicate social knowledge to others" (p. 183). The use of a semi-structured interview guide allowed for a natural flow to the interaction (Patton, 2002), asking them follow-up questions based upon their own words, while ensuring that the questions were answered by the end of the brief interview.

The interview consisted of three basic questions. Primarily, students were asked what they liked about CICO, what they disliked, and what would they change about the program. Secondary questions were developed and used to elicit student responses that were complete in description regarding the effect participating in the intervention had on school work and behavior. Semi-structured interviews allowed the interviewer to discuss the effects of the CICO support in greater breath than a more structured interview.

Data Analysis Methods

For the purpose of this case study, two methods of data analysis were utilized. When looking at the qualitative data that was collected, the constant comparative data analysis method was applied to identify emerging trends. For the quantitative data, descriptive statistics generated from the intervention forms and documents were collected. Both methods of analysis enabled the researcher to answer both research questions and draw conclusions from the case study. As stated by Lipton and Wellman (2013), by examining the multiple data points through an organized visual format, the researcher will gain insight from several angles on the question under study.

Constant Comparative Analysis

In order to generate themes from the qualitative data collected, the constant comparative method was chosen to examine the data over time, and constantly compare the data to determine the effect of the CICO intervention. Creswell (2012) stated that this method of data analysis “eliminates redundancy and develops evidence for categories” (p. 434). Creswell also stated that the constant comparative method allowed the researcher to develop categories of information from specific to broad which will allow the researcher to generate themes and draw conclusions. Since the data was in the form of interviews and intervention logs, the constant comparative method allowed for a systematic approach of data analysis. Ruona (2005) described that analyzing qualitative data requires patterns to be discovered through immersion in your data. Finally, as Ruona suggested, the constant comparative method allowed the researcher to begin looking through the data from the first piece collected to begin identifying emerging trends.

In this case study, intervention logs and forms were collected daily and interviews were conducted with the CICO participants. The researcher used the four-stage process Ruona (2005)

suggested when performing the research project. Before analysis began, all of the data was prepared for review in a format that was easy to work with and understood, organized, backed up and stored. Ruona maintained that these systems needed to be rigorously maintained throughout the research project. Next, while preparing the data, the researcher familiarized themselves with the data. This stage of the process involves immersing in the data much more deeply. This familiarization time allows the researcher to actively engage with the data. During this stage the researcher noted interesting and potentially significant data that was used as the analysis progresses. According to Creswell (2002), the familiarization time also helped the researcher get a general sense of the information and reflect on its overall meaning. The next step was coding the data. Coding is the first step we take toward organizing information in to meaningful categories (Ruona, 2005). Coding is used to discover and conceptualize the data. Finally, the data was generalized and theories were generated.

Descriptive Statistics

The method of analysis for the quantitative data was descriptive statistics. Descriptive statistics are numbers used to describe or summarize a larger body of numbers (Kubiszyn & Borich, 2013). Quantitative results are intended for comparison between students, groups of students, schools, districts, states, or provinces and nations. They are expressed and described using STANDARD NINE (i.e., stanines), quartiles, norm-curve equivalents, means, median and modes (Lipton & Wellman, 2012). Descriptive statistics allowed the researcher to summarize the overall trends or tendencies in the data, provide an understanding of how varied scores might be and provide insight into where one score stands in comparison with others (Creswell, 2012).

For this case study, the researcher gathered various documents generated by and relevant to a CICO intervention and support. These documents will include CICO cards, office discipline

referrals, and SWIS data reports. The descriptive statistics method was operationalized to aid with the analysis of the totals and trends for all of these various documents. The CICO cards were used to calculate the mean for the demonstration of EPIC behaviors of each student as well as the whole group. Also, descriptive statistics allowed the researcher to analyze the frequency and range of these behaviors when reviewing ODR's and SWIS reports, in addition to the intervention forms.

Reliability and Validity

To ensure the reliability and validity of the data collection methods, multiple steps were taken to secure that the collected data and results were of high quality and dependable. Creswell (2012) described the process of validating research as a way to determine the accuracy and credibility of results by using various strategies. The reliability and validity of this study was ensured by the use of existing instruments, pilot testing and triangulation.

The first step to assure reliability and validity was through the use of existing instruments. Creswell (2012) stated that use of an instrument by other researchers may provide some evidence about whether the questions on the instrument provide good and consistent measures. The IRP-15 that was completed by the teachers involved with the CICO intervention was found to have a reliability of 0.98 (Witt & Martens, 1985). The student survey being used, the CIRP, was initially used by Witt and Martens (1985). However, the CIRP was in experimental form at that time. More recent research has found the CIRP to have an internal consistency of 0.75 to 0.89 (Carter, 2007).

For this case study, the researcher developed an interview protocol and conducted an interview with each CICO participant at the end of the intervention cycle. To ensure reliability and validity of the interview results, after the protocol had been developed, the researcher pilot

tested the protocol with a representative sample of non-participants. Pilot testing helped determine that the individuals in the sample were capable of understanding the questions (Creswell, 2012). Based on pilot testing feedback, the researcher revised the interview protocol before using them with the students in the study.

When exploring data, triangulation was an effective method for increasing reliability and validity. Using multiple data sources compensates for the deficits in individual tools and provides a more comprehensive picture of the topic under study (Lipton & Wellman, 2012). Throughout the data analysis process, themes will be generated through coding and triangulating the data will allow the researcher to find evidence that supports each theme and result constructed (Creswell, 2012). Triangulation pulls together all the data sources and improves the accuracy of the information. Triangulating the data is most powerful when the various sources are diverse and varied (Lipton & Wellman, 2012). Qualitative measures (such as student and teacher surveys) will enhance quantitative measures (such as office referrals and CICO card scores). Triangulation allowed the researcher to create a more complete assessment of the issue being researched.

Summary

This study analyzed how a PBIS Tier II intervention impacts middle school students that require additional behavior management support to be successful with accessing Tier I instruction. The researcher used the case study methodology to learn about the effect the CICO intervention has on student work completion and lost instructional time. For the purpose of this case study, the researcher collected multiple measures of quantitative and qualitative data in order to further analyze the impact of Tier II behavior support. The methods for data collection was through artifacts, documents, surveys, and interviews. The two methods of analysis that

were used are descriptive statistics and a constant comparative analysis. The researcher ensured the reliability and validity of the data collection methods through the use of existing instruments, pilot testing and triangulation. The researcher aimed to make meaning from multiple modes of data collection about how the CICO intervention impacted the students' ability to demonstrate appropriate classroom behavior.

Chapter 4 – Results and Discussion

Within a well-structured PBIS framework, Tier II interventions are built in for students who need additional behavioral support to increase their opportunities to be successful within the general education classroom. In this case, the support studied was the CICO intervention implemented to support a group of five eighth grade boys. The research results were used to analyze what impact CICO would have on student behavior and what student perceptions were of the intervention. The results are described below.

Research Question 1: What are the impacts on student behavior when participating in PBIS Tier II supports?

The data for this question revealed that, overall, participation in the CICO intervention has positive effects on student behavior. Two significant themes were evident when reviewing the research data in relationship to question one. First, data revealed a decrease in targeted behaviors while participating in CICO. Secondly, data showed that students participating in CICO were increasingly more productive in their general education classrooms over the course of the observed interval.

Decreased Problem Behavior

Office discipline referrals (ODRs) were collected to compare the rates of problem behaviors before and during participation in the CICO program. All students participating in the study have archival records of ODRs in SWIS. ODRs were chosen as the outcome measure for problem behavior because they are readily available, represent agreed upon problem behaviors and definitions in the local context, and are sensitive measures of behavior change (Irvin, Tobin, Sprague, Sugai, & Vincent, 2004). Further, Tobin, Lewis-Palmer, and Sugai (2002) assessed the reliability of SWIS ODRs by measuring the agreement between information entered into the

SWIS system and the information contained on paper ODRs. They found an overall average agreement of 86.6% between the two and 95.9% agreement for the behavior information on the ODRs. Little other reliability evidence currently exists for ODRs as a measure of student behavior. Irvin et al. (2004) pointed out that the generation of ODRs represented the involvement of several individuals (i.e., teacher, student, and administrator). Thus, a portion of the measured behavior in ODRs likely reflects some idiosyncratic contributions of each individual. However, Irvin et al. further note that ODRs have been used successfully in numerous program evaluations and are generally the best available archival behavioral data in schools.

CICO is designed to support students who are motivated by the need for adult attention (Bradshaw et al., 2011; Flannery et al., 2010; Sugai et al., 2008). Lack of adult attention or negative attention from adults has been found to be a primary motivator for some children's behavior in school (Flannery et al., 2010). In the classroom, the need for adult attention often manifests through disruption and noncompliance with teacher instructions (Sugai et al., 2008). This cohort of students has a common behavior goal of reducing classroom disruptions and increasing compliance with classroom instructions, typical behaviors for students requiring Tier II behavior supports. Another contingency for participating with CICO is receiving three or more ODR's. Three ODR's is the established baseline with the CICO module of SWIS. In accordance with ODR data for the 2014-15 school year, each of these students had been identified at the end of the last school year as requiring additional support. One objective of the CICO program was to reduce ODR's for participants for the 2015-16 school year as compared to 2014-15. Students that are enrolled in an intervention earn fewer ODR's because their needs are being met (Sugai et al., 2008). At the beginning of the research period, these students had each already received two or more ODR's. A comparison of SWIS data for the first twelve weeks of 2014-15 school year

with the first twelve of 2015-16 showed a 60% decrease in major discipline referrals for this group. Individually, only one student had as many discipline referrals for the same time last year. This student was also not primarily motivated by adult attention as evidenced by the Forced Choice Reinforcement survey done with him. Everyone else has decreased their ODR's by 50% as compared to the same time last year. This supports research conclusions that CICO can, when implemented for students motivated by adult attention, aid in the decrease of disruptive classroom behavior and noncompliance, resulting in fewer office discipline referrals (Flannery et al., 2010). These students were not part of a structured intervention program for the same time period last year.

This decrease in problematic behavior is also evidenced when reviewing the scores on the daily CICO cards. Repeated, consistent, class by class, teacher to student feedback is the cornerstone of CICO and integral to student success for the program (Bradshaw et al., 2011). The CICO card is the vehicle for this one to one feedback (Crone, Horner, & Hawken, 2010). Each student has been able to meet their daily goal 80% of the time for following adult instructions. This is a common goal among this group. As part of following instructions, the students are increasing their EPIC classroom behaviors, with following instructions being embedded in independent and collaborative classroom expectations. When the expectations for CICO are embedded in the Tier I school wide behavior framework, student success and program fidelity increase (Sugai et al., 2007). This behavioral support was not available at the same time in 2014-15 school year although the EPIC framework was part of the middle school Tier I behavior supports. All students are familiar with the EPIC expectations, but this year received additional supports to meet those expectations through the CICO framework. When developing a CICO

intervention, it is significant to individualize the program to meet the needs of the school and its student population (Sugai et al., 2008).

The CICO card is also the primary component of the home school connection with this program (Crone et al 2010). Parent participation has a direct effect on student motivation and self-efficacy (Bradshaw et al., 2011; Flannery et al., 2010). With the parent component of the CICO card, there was notable variability with student participation. Four of five participants did not seek a parent signature on their card from the beginning of the observation cycle even when prompted with a “bonus” for signed and returned point cards. The student that did participate with the parent portion of the CICO program had a reward that was tied to home. Since the CICO program has a strong home/school connection component and one of the tenets of the program is parental participation (Flannery et al., 2010), not having daily parental feedback and participation negates a key component to the program success. It was unclear why students were not taking the point cards home, but this may be an aspect of the program that requires more review and systematic training in the future in order to increase fidelity of implementation. Some varying feelings expressed by students during the interview portion of the research may also shed light on underlying beliefs students had regarding the need (or not) for parental participation and involvement. When interpreting the effects of the program on student behavior, then, it is important to note that this feature of the program was not consistently implemented.

Increased Productivity

With the increase in classroom instruction time that comes with being in the classroom instead of the principal’s office, productivity can be supported by the teacher and increase (Flannery et al., 2010). Each of these students has been able to decrease the amount of lost instructional time for themselves by maintaining their behaviors in the general education setting

and spending more time receiving direct instruction from the teachers. The average instructional time that a student loses for an office discipline referral was 20 minutes (Scott & Hunter, 2001). In the first 12 weeks of the 2014-15 school year, this cohort of students had received 36 office discipline referrals. This totaled 7200 minutes in lost instructional time. These students began the 2015-16 school year with participation in the CICO program and in the first twelve weeks of school received 16 ODR's collectively, totaling 3200 minutes in lost instructional time. This additional instructional time had direct effect on student grades for the beginning of this year as evidenced by the first set of progress reports for these students. Although there has been a conversion to standards based grading, each of these students were able to maintain developing and mastery grades with no content failures.

In addition to the home school connection purpose, the CICO card serves as a communication tool for teachers and students (Crone et al., 2010). Direct and repeated adult feedback throughout the day is documented with the CICO card when used with fidelity. The daily CICO cards documented the only continued problem area for work completion was with homework. This problem was also reflected in the teacher surveys. During this research, there is a repeated and continued concern by teachers regarding homework completion when being defined as an EPIC student. Doing one's homework or at a minimum, seeking the help of an adult for any lack of understanding are expectations with being engaged, prepared, independent and/or collaborative for this research. Disconnect for the student and bringing the card home to be signed would seem to have some correlation. In multiple studies, students that do not have a fluid, three-way connection between themselves, school, and home are less likely to be successful with CICO as their only tiered support (Bradshaw et al., 2010; Crone et al., 2010). The disconnect for this group with making efforts to have the CICO card signed by home could

be that students that do not do their homework certainly do not want to bring a paper to a parent to be signed that says they are not doing their homework. The documentation on the CICO card or any home school connection is less likely to be honored by a student if it will reflect them in a negative light (Crone et al., 2010).

Research Question 2: What are student perceptions of PBIS Tier II supports?

Students were surveyed and interviewed to assess their perceptions of the CICO intervention structure and the support offered with the intervention. Student input provides authentic student perspective when developing and reviewing the program (Crone et al., 2010; Sugai et al., 2007). To do this, students were given the CIRP pre and post survey, and four students volunteered to be interviewed. Offering multiple and varied opportunities for feedback broadens the perspective of program administrators to student needs (Crone et al., 2010). The surveys and interview questions explored student attitudes regarding the program. Having an in depth knowledge of student feelings can support development of an effective program (Flannery et al., 2010). The survey and interview answers highlighted two points of consensus for all students involved with the study. All of the boys felt that the intervention was a fair way of addressing their needs. Secondly, they all agreed that the intervention was useful for them and could be helpful for other students with the same behavioral challenges, specifically reducing disruptions and increasing educational access. Both of these perspectives were significant. The belief that the program is fair and authentic, according to the student's perspective, has been determined to increase student success with the program (Crone et al., 2010). Additionally, because the students perceived the support to be valuable to them, they were more apt to positively respond the intervention.

Fairness

The pre- and post-surveys done by the students indicated that this group highly valued fairness. The first question of the survey asks if the intervention used to deal with the behavior is fair. The pre-survey results showed the student average score as 2.8 on the scale, falling between sort of agree (i.e., 2) and don't agree or disagree (i.e., 3) when believing the intervention being used was fair. For these students, fair is defined as what is appropriate for the individual, not always the group. This is a highly valued concept among this cohort as they have been often perceived as the "problem" students who don't follow the rules because "nothing is fair." With the post survey, all students in the study answered with a 2 (i.e., sort of agree) finding consensus that the CICO program was overall a fair way to deal with the problem being addressed.

Having that fact in hand, when interviewing the boys, the researcher adjusted the initial question to specifically ask, "What was fair about CICO?" Two of the interviewees talked about liking EPIC on the CICO card and all interviewees made reference to EPIC being the same behaviors for everybody. One student defined CICO as extra EPIC help. Having consensus among the participants strengthens the need for support with a program that is perceived as fair. The expectation of fairness by this group must be built in to have a well-executed intervention promoting student effort with positive results (Sugai et al., 2007). This builds self-efficacy for the EPIC behaviors expected school wide. EPIC is the middle school PBIS platform across grades 5-8 at the school in this study. Having the check-in and check-out scoring be based on support for behaviors modeling EPIC expectations that overarch the entire student body, allows for fairness to be gauged by the participating students in a format they are familiar with and can be compared to their grade-level peers. Bradshaw studies note that familiarity with the intervention framework and embedded school wide expectations are perceived as fair (Bradshaw et al., 2008; Bradshaw et al., 2011).

Through the myriad of answers, the most poignant was the most succinct.

Mrs. A, “So, I looked at the surveys and I noticed you felt that CICO was a fair way to support you. Actually, your opinion of the program improved. What do you think was fair about CICO?”

Student, “It’s made for me but it helps everything.”

The “everything” was defined with the answer from another student. When probed to describe what made CICO fair, the student responded that, “even though it’s extra for me it’s fair too because we used EPIC.”

The second interview question simply asked if there was anything students found to be unfair about CICO. Four out of five students thought it was unfair that their parents were involved with the program. One student was satisfied with parental participation which was reinforced by having his reward tied in directly to a privilege at home. The four students that were against parental involvement all voiced some manner of discontentment with it being a requirement. One student’s response encapsulated the underlying feeling for all the boys when we talked:

Mrs. A, “Is there anything that you do not think is fair about CICO?”

Student, “Yeah, my mother has to sign the paper. Why do you have to tell her anything?

She can’t help me at school.”

Even after the various conversations, a specific clear reason cannot be determined as to why four out of five students could not successfully complete the parent connection piece with taking home the sheet for signing. However, Crone, et al. (2010) already established that the documentation on the CICO card or any home school connection is less likely to be honored by a student if it will reflect them in a negative light. Teacher documentation reporting negative

behavior on the CICO card may prohibit student participation with the home school connection piece as it pertains to the CICO card specifically. Home school connection procedures may be adjusted and modified to accommodate individual need when required (Bradshaw et al., 2011).

Usefulness

The student survey asked input regarding the usefulness of the program for the individual student as perceived for self and others through questions four and seven respectively. Question four asks students if there are better ways to handle this problem. Initially, the participating students rated this usefulness to self an average of 3.7 on the survey Likert scale putting the overall perception on the disagree side of the scale. The post survey scores indicated that student opinion moved to the middle of the scale with an average score of 3. Students overall opinion changed over time and with experience regarding effectiveness and relevance to their success. This overall adolescent perception is supported by studies that have shown that students must feel that efforts and supports are authentic to the task and need for them to experience successful outcomes from the effort (Sugai, 2000).

This change in opinion was also evident with question seven, when addressing whether the usefulness of the intervention would help other children with this problem, as perceived by the students surveyed. On average, the participants scored a 2 (i.e., sort of agreed) by the end of the CICO cycle, indicating an overall satisfaction with the intervention being worthy of implementation with their peers. Perceptions of others has shown to be significant for adolescents requiring Tier II supports (Bradshaw et al., 2011). Being a middle school teacher, the researcher was familiar with the hierarchy of adolescent needs as part of the academic and social fabric in school. When building the CICO program for a student, it is important to identify and present incentives and rewards that the student wants to earn for demonstration of positive

behaviors and achievement of goals (Sugai et al., 2007). Multiple studies support using this type of behavior management framework because it allows for the development of student driven success using student choice and input (Bambura et al., 2009; Bradshaw et al., 2008). The student must believe that the program can directly benefit them (Sugai et al., 2007). It must be useful. Initially, that may be in the form of incentives and rewards, which students have input with choosing and developing. Thus, the CICO program, which is similar in design to some behavioral interventions commonly employed in schools, such as behavioral contracts and token economies can offer a Tier II intervention framework that can support success with eight graders as demonstrated with this group. When using token economies and student driven reward menus in conjunction with the CICO framework, students are able to be successful (Sugai, 2000).

When answering question six on the survey, students initially rated their like of the intervention used at the middle of the scale but by the end of the first cycle, students were in consensus, all rating the question a 2 (i.e., sort of agreeing). Typically, students start out complacent about the possibility of positive outcomes from participation with an intervention (Bradshaw et al., 2011). The increase with student favorability over time Liking the intervention had as much to do with how it made the student appear to his peers as it did with making the student successful during the school day. The need for peer acceptance is supported by the two studies conducted by Bradshaw and colleagues (Bradshaw et al., 2008; Bradshaw et al., 2011). Buy-in to the intervention increases when participation with the intervention elevates the student's status among peers (Sugai & Horner, 2009). In this case, students were successful with the aspects of CICO that they found useful and relevant and feasible.

Question two on the student survey asked students to rate whether a parent/teacher was too hard or mean. Student perceptions of adult authority can manifest through interactions and

behaviors with those adults (Crone et al., 2011). Pre-survey results showed students had an average rating of 3.6 or somewhere between not agreeing or disagreeing and sort of disagreeing. In the post survey, student results move to a 2.6 rating, implying that over the time of the intervention students felt that teachers and or parents were harder than at the outset. It is unclear as to who the students perceived as too hard or mean, parents or teachers. One indication was discovered during the interviewing. This perception may be part of the reason resulting in an inability to have students successfully implement the home connection portion of the intervention with the daily parental signing of the CICO card. After being asked why the researcher had to notify parents of student participation with the CICO program, the interview went as follows:

Mrs. A: “We have to inform parents when we are adding support services in your school day.”

Student: “That’s stupid. She doesn’t care. That’s why I don’t bring the paper home. I can’t get those extra points. They’re useless.”

This student was unable to benefit from the home school connection aspect of the CICO card. His perspective as to the relevance or usefulness was driven by his personal disconnect with home. Alternatives to the CICO card as the primary home school connection piece must be explored for individualization according to student need (Bradshaw et al., 2011).

The intent of CICO, as with PBIS in general, is to build self-efficacy. If the student does not think the program is useful to them, they will not be invested (Bradshaw et al., 2011; Crone et al., 2010; Sugai et al., 2007). Overall, student perceptions of the CICO intervention were positive and productive in this study. Students indicated through the surveys and interviews that they found the intervention to be beneficial to their ability to be successful in the general

education classroom, fair as compared to supports for their peers, and useful for themselves and others.

Summary

The results of this research were used to analyze the impact a PBIS Tier II support, specifically CICO, had on student behavior as well as how the participating students perceived the intervention. Research question one discussed the impact the CICO intervention had on the students that participated in the CICO intervention. Data revealed a decrease with problem behaviors and an increase with work productivity. Research question two investigated student perceptions of the intervention. Generally, students found the intervention to be fair and useful to their success in the general education classroom. Unexpectedly, data indicated students felt that the intervention had negative effects on their social standing rather than the positive effects they had initially envisioned. Overall, the research indicated CICO had a positive effect on student behavior in the general education classroom and supported a decrease in disruption and an increase with instructional time resulting in increased work completion.

Chapter Five – Conclusions and Implications

Conclusions

In chapter four, the researcher described the results and themes that the data supported to answer the two research questions. The first research question “what are the impacts on student behavior when participating in Positive Behavior Interventions and Supports Tier II supports?” was analyzed using data generated from School Wide Information Systems and Check-In Check-Out. The second question, “what are student perceptions of PBIS Tier II supports?” was asked of the eighth grade students in my case study. The data revealed positive effects for students participating in the PBIS Tier II CICO intervention with increased instructional time, fewer Office Discipline Referrals and an overall perception of fairness and usefulness in regards to the intervention and the results from participation.

The researcher used the case study methodology to support an understanding of the effects a PBIS Tier II intervention had on student success in the general education classroom. The case study focused on how participation in the CICO intervention increased time for instruction, reduced lost class time, and reinforced positive perceptions for participating students. The literature provided an understanding of the PBIS framework and the issues with developing a Tier II support within the framework. The case study questions were developed from the literature and were used to support a better understanding of a Tier II support effects student behavior. My research questions supported a deeper understanding of the students experience participating with CICO and how participation increased success in the general education classroom. The research case study was conducted with five eighth grade boys in a K-8 school in a rural town in the quiet corner of Connecticut.

The data that was reviewed and analyzed to address research question one, “what are the impacts on student behavior when participating in PBIS Tier II supports?” were office discipline referrals and daily point cards for CICO. The student success was evident by a reduction of office discipline referrals for the observed time. Fewer referrals amounted to less time out of class thereby increasing instructional time for these students. The daily point cards revealed that students were able to increase success within the general education classroom for behaviors defined as Engaged Prepared Independent Collaborative with only homework completion continuing to be inconsistent. The parent daily signature step was inconsistently applied. The evidence reviewed through the artifacts and documents supported a decline in office referrals and an increase with instructional time for these students. Both of these findings are positive impacts and serve to answer research question one.

The second research question was queried using surveys and individual interviews. The pre and post survey results established fairness of the CICO program, as developed at this school and implemented for this group of boys, and usefulness for success for themselves and others as the primary opinions of the group with an increase of approval over time. The belief that the intervention was fair and useful for them allowed for students to feel invested and put forth effort. The only resistance was with the parent signature piece, as found with the daily point cards. The interviews further supported these opinions. The students positively expressed a belief that the intervention was fair and useful. The students had buy-in to the program because they specifically were invested in establishing their reward menu for success. Buy-in generates effort.

Personal Revelations

An unexpected revelation for the researcher was that the data indicated students felt that the intervention had negative effects on their social standing. When developing incentives and rewards for this group, four out of five students wanted the opportunity to choose a friend to bring with them to their reward time. Initially they all thought it was the best idea. When the researcher reviewed the post surveys, two students wrote side comments beside question number three, which asked the student if the intervention used to deal with the problem might cause problems with friends. The comments were “kids begging” and “problems.” These comments were flushed out when the researcher asked question three during the interviews. Students were asked if there was anything they would change or suggest about the CICO program. One of the boys summed it up when he said, “I don’t use ‘bring a friend’ for my reward. It’s too stressful. Everybody starts bothering me all day. Then teachers get mad at me ‘cause kids are talking to me in class.” This statement was also supported by the data generated from question 21 on the teacher survey, which asks the level of the teachers’ agreement regarding whether or not the intervention is disruptive to other students. Three teachers specifically indicated a strong agreement to this question with side comments that specifically stated the disruption was because other students are leaving class early as part of the incentive for another student.

Implications for Practice

In review of the literature and the data from this case study, the following implications for practice of a PBIS Tier II intervention would support and increase the opportunity for student success in the general education classroom. These would include correlating the Tier II support expectations with the common expectations of school wide PBIS, obtaining student buy-in with the program using collaborative development of the reward menu and reaching out to parents directly to support involvement with student success with the return of signed point cards.

Correlating the expectations for a CICO program with the common expectations of school wide PBIS supports a successful implementation of the intervention. Having common language throughout the day for positive reinforcement, in this case study EPIC, allows for fluid behavior management and supports for students with a Tier II need. This positive reinforcement can be done with a flooding of tickets for demonstrating an EPIC behavior or in whatever manner the token economy for the reward system is being implemented for CICO participants. A solid program aligns positive identification of appropriate behavior expectations expected from students receiving the intervention with the common expectations of school wide PBIS (Flannery et al., 2010). It is important to have correlation and consistency through the tiered supports. Students that require multilevel supports with common language and expectations benefit from an increase of acknowledgment of appropriate behaviors through flooding of Tier I acknowledgements.

Obtaining student buy-in with the intervention by collaborative development of the reward menu supports the student need to have a program that is useful and authentic for their needs (Bradshaw et al., 2011; Sugai et al., 2008). Program participants should be part of the development process when establishing a reward menu. Students will work harder for success when the reward is something that they have created (Sugai et al., 2008). Allowing students to incorporate peer involvement within their individualized rewards also supports student buy-in for the intervention, especially among adolescents, which was the age group for this case study.

Reaching out to parents directly can help increase support for student participation, promote compliance with the requirements of the program and support positive reinforcement of the student's effort to manage behavior daily. The CICO intervention was developed to support the student who has the need for adult attention as the function of their behavior. Success with

the return of anything requiring a signature of an adult at home can be problematic for some students and cause a perception of failure for something beyond the student's control. To increase the probability for parental participation, it is recommended that the CICO coordinator make contact with home to establish a connection and support student need for parental participation. Parent participation with CICO raises the probability of student success (Sugai et al., 2008).

Suggestions for Future Research

An important future direction for research into the CICO program and other similar secondary level interventions is to evaluate its impact on overall school discipline. The purpose of the secondary level, targeted intervention in a three-tiered preventative model is to quickly remediate problems while they are still emerging, thereby reducing the number of students with problem behavior in the school (Sugai et al, 2002). Since the participants of this study were eighth graders only, it would be an important next step to conduct some pre-post comparisons on overall levels of school ODRs based on CICO implementation across grade levels.

This study would work well in another small, one school district. The research questions could be broadened or narrowed to evaluate certain perspectives. This research project could easily be replicated and conclusions gained from this study would benefit the school or system evaluating the data to be more effective managers of a positive behavior system or intervention system within the school's individualized framework and structure. The researcher highly recommends further study in the area of staff development in supporting staff at the research site in working with behavioral students and/or fidelity using the CICO intervention program. The researcher also recommends that individual schools research what the best intervention program

would be when working with students at the research site in the most effective method possible to prevent negative behaviors and encourage/replace with positive behaviors.

References

- Bambara, L. M., Nonnemacher, S., & Kern, L. (2009). Sustaining school-based individualized positive behavior support: Perceived barriers and enablers. *Journal of Positive Behavior Interventions, 11*(3), 161-176.
- Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly, 23*(4), 462-473.
- Bradshaw, C. P., & Pas, E. T. (2011). A statewide scale up of positive behavioral interventions and supports: A description of the development of systems of support and analysis of adoption and implementation. *School Psychology Review, 40*(4), 530-548.
- Bradshaw, C., Pas, E., Bloom, J., Barrett, S., Hershfeldt, P., Alexander, A., & Leaf, P. (2012). A state-wide partnership to promote safe and supportive schools: The PBIS Maryland initiative. *Administration & Policy in Mental Health & Mental Health Services Research, 39*(4), 225-237.
- Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide positive behavioral interventions and supports (PBIS) in elementary schools: Observations from a randomized trial. *Education and Treatment of Children, 31*(1), 1-26.
- Carter, S. L. (2007). Education and training. *Developmental Disabilities, 42*(3), 301-316
- Carr, E. G. (2002). Positive behavior support: Evolution of an applied science. *Journal of Positive Behavior Interventions, 4*(1), 4-16.
- Colvin, G., & Fernandez, E. (2000). Sustaining effective behavior support systems in an elementary school. *Journal of Positive Behavior Interventions, 2*(4), 251-253.

- Creswell, J. H. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. H. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River: Pearson Education, Inc.
- Crone, D.A., Horner, R.H., & Hawken, L.S. (2010). *Responding to problem behavior in schools: The behavior education program* (2nd ed). New York: Guilford Press
- De Pry, R. L., & Sugai, G. (2002). The effect of active supervision and pre-correction on minor behavioral incidents in a sixth grade general education classroom. *Journal of Behavior Education, 11*(4), 255-267.
- Devers, K., & Frankel, R., (2000). Study design in qualitative research—2: Sampling and data collection strategies. *Education for Health, 13*(2), 263–271.
- Eder, D., & Fingerson, L. (2002). *Handbook of interview research: Context and method*. Thousand, Oaks, CA: Sage.
- Feinstein, S. (2003). School-wide positive behavior supports. *The Journal of Correctional Education, 54*(4), 163-173.
- Flannery, K. Brigid, E. M. Guest, X., & Horne, R. H. (2010). School-wide positive behavior supports. *Principal Leadership, 11*(1), 38-43.
- Handler, M. W., Rey, J., Connell, J., Their, K., Feinberg, A., & Putnam, R. (2007). Practical considerations in creating school-wide positive behavior support in public schools. *Psychology in the Schools, 44*(1), 29-39.
- Hershfeldt, P. A., Pell, K., Sechrest, R., Pas, E. T., & Bradshaw, C. P. (2012). Lessons learned coaching teachers in behavior management: The PBIS plus coaching model. *Journal of Educational & Psychological Consultation, 22*(4), 280-299.

Horner, R. H., & Sugai, G. (2000). School-wide behavior support. *Journal of Positive Behavior Interventions*, 2(4), 231-232.

Horner, R. H. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Interventions*, 6(1), 3-12.

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).

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

Irvin, L. K., Tobin, T. J., Sprague, J. R., Sugai, G., & Vincent, C. G. (2004). Validity of office discipline referral measures as indices of school-wide behavioral status and effects of school-wide behavioral interventions. *Journal of Positive Behavior Interventions*, 6(3), 131-47.

Kubiszyn, T., & Borich, G. (2013). *Educational testing and measurement: Classroom application and practice* (10th ed.). New York: John Wiley & Sons.

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), 701-12.

Lipton, L., & Wellman, B. M. (2012). *Got data? Now what? Creating and leading cultures of inquiry*. Bloomington, IN: Solution Tree Press

- Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behavior support: Effects on student discipline problems and academic performance. *Educational Psychology, 25*(2-3), 183-198
- Luiselli, J. K., Putman, 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.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. Thousand Oaks, CA: Sage Publications.
- No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).
- Patton, M. Q. (2002). *Qualitative research and evaluation methods (3rd.ed.)*. Thousand Oaks, CA: Sage.
- Reinke, W. M., Herman, K. C., & Stormont, M. (2013). Classroom-level positive behavior supports in schools implementing SW-PBIS identifying areas for enhancement. *Journal of Positive Behavior Interventions, 15*(1), 39-50.
- Ross, S., & Horner, R. H. (2009). Bully prevention in positive behavior support. *Journal of Applied Behavior Analysis, 42*(4), 747-59.
- Ruona, W. E. (2005). Analyzing qualitative data. In R. A. Swanson & E. F. Holdton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 223-263). San Francisco, CA: Berrett-Koehler.
- Sadler, C., & Sugai, G. (2009). Effective behavior and instructional support: A district model for early identification and prevention of reading and behavior problems. *Journal of Positive Behavior Interventions, 11*(1), 35-46.

- Safran, S. P. (2006). Using the effective behavior supports survey to guide development of school-wide positive behavior support. *Journal of Positive Behavior Interventions, 8*(1), 3-9.
- Safran, S. P., & Oswald, K. (2003). Positive behavior supports: Can schools reshape disciplinary practices? *Exceptional Children, 69*, 361–373.
- Salkind, N. J. (2013). *Excel statistics: A quick guide* (2nd ed.). Los Angeles, CA: SAGE Publications.
- Sandelowski, M. (2000). Focus on research methods-whatever happened to qualitative description? *Research in Nursing and Health, 23*(4), 334-340.
- Scott, T. M., & Hunter, J. (2001). Initiating school-wide support systems: An administrator's guide to the process. *Beyond Behavior, 11*, 13–15.
- Sugai, G. (2000). Applying positive behavior support and functional behavior assessment in schools. *Journal of Positive Behavior Interventions, 2*(3), 131-43.
- Sugai, G., & Horner, R. H. (2002). Introduction to the special series on positive behavior support in schools. *Journal of Emotional and Behavioral Disorders, 10*(3), 130-5.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality, 17*(4), 223-237.
- Sugai, G., Horner, R. H., & Gresham, F. M. (2002). Behaviorally effective school environments In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 315–350). Bethesda, MD: National Association of School Psychologists.

- Sugai, G., Simonsen, B., & Horner, R. H. (2008). School-wide positive behavior supports: A continuum of positive behavior supports for all students. *Teaching Exceptional Children, 40*(6), 5-6.
- Tobin, T. J., Lewis-Palmer, T., & Sugai, G. (2002). School-wide and individualized effective behavior support: An explanation and an example. *The Behavior Analyst Today, 3*(1), 51-75.
- Tobin, T. J., & Sugai, G. (2002). Preventing problem behaviors: Primary, secondary, and tertiary level preventions for young children. *Journal of Early and Intensive Behavior Intervention, 2*(3), 125-44.
- Walker, B. (2005). School-wide screening and positive behavior supports: Identifying and supporting students at risk for school failure. *Journal of Positive Behavior Interventions, 7*(4), 194-204.
- Warren, Jared S., Bohanon-Edmonson, H. M., Turnbull, A. P., Sailor, W., Wickham, D., Griggs, P., Shelly E. & Beech, S.E. (2006). School-wide positive behavior support: Addressing behavior problems that impede student learning. *Educational Psychology Review, 4*(18), 36-41.
- Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. Kratochwill (Ed.), *Advances in school psychology* (Vol. 4, pp. 251–288). Hillsdale, NJ: Erlbaum.
- Witt, J. C., & Martens, B. K. (1983). Assessing the acceptability of behavioral interventions used in classrooms. *Psychology in Schools, 20*, 510–517.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

Appendix A

Children's Intervention Rating Profile (Witt & Elliot, 1985)

Parent initials:	Student initials:	Date:
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We are interested in learning your ideas about the intervention and support program that you are now beginning. Below are some sentences. You may or may not agree with the sentences. For each one, please circle the number that describes how much you agree or disagree with the statement. Using the following guide:

5 = I disagree very much

4 = I sort of disagree

3 = I don't agree or disagree

2 = I sort of agree

1 = I agree very much

	I agree very much	I sort of agree	I don't agree or disagree	I sort of disagree	I disagree very much
1. The intervention used to deal with the problem is fair.	1	2	3	4	5
2. The teacher/parent is too hard (mean).	1	2	3	4	5
3. The intervention used to deal with the problem might cause problems with my friends.	1	2	3	4	5
4. There are better ways to handle this problem.	1	2	3	4	5
5. The intervention used would be good for other children.	1	2	3	4	5
6. I like the intervention used to handle this problem.	1	2	3	4	5
7. The intervention used for this problem would help other children do better in school.	1	2	3	4	5

Appendix B

Children's Intervention Rating Profile (Witt & Elliot, 1985)

Parent initials:	Student initials:	Date:
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We are interested in learning your ideas about the intervention and support program that you are now finishing. Below are some sentences. You may or may not agree with the sentences. For each one, please circle the number that describes how much you agree or disagree with the statement. Using the following guide:

5 = I disagree very much

4 = I sort of disagree

3 = I don't agree or disagree

2 = I sort of agree

1 = I agree very much

	I agree very much	I sort of agree	I don't agree or disagree	I sort of disagree	I disagree very much
1. The intervention used to deal with the problem was fair.	1	2	3	4	5
2. The teacher/parent was too hard (mean).	1	2	3	4	5
3. The intervention used to deal with the problem might cause problems with my friends.	1	2	3	4	5
4. There are better ways to handle this problem.	1	2	3	4	5
5. The intervention used would be good for other children.	1	2	3	4	5
6. I like the intervention used to handle this problem.	1	2	3	4	5
7. The intervention used for this problem would help other children do better in school.	1	2	3	4	5

Appendix C

Behavior Intervention Plan Social Validity Survey for Teachers

Student Name _____ Teacher _____ Date _____

For each statement, circle one number that best describes how you feel about behavior intervention plan for this student.

1. I understood all of the elements of the behavior intervention plan.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

2. I had the skills needed to implement the behavior intervention plan.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

3. Problem behaviors have decreased since the implementation of the behavior intervention plan.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

4. Appropriate classroom behaviors have increased as a result of the implementation of the behavior intervention plan.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

5. My participation in the implementation of the behavior intervention plan was relatively easy (e.g. amount of time/effort) to implement.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

6. Participation in implementing the behavior intervention plan for this student was worth the time and effort.

Strongly Disagree						Strongly Agree
1	2	3	4	5		6

Adapted from Deanne A. Crone, Leanne S. Hawken, and Robert H. Horner (2010).

Appendix D

Name: _____

Date: _____

Time/Subject	Engaged	Prepared	Independent	Collaborative
Special Period 1	1 2 3	1 2 3	1 2 3	1 2 3
Special Period 2	1 2 3	1 2 3	1 2 3	1 2 3
Period A	1 2 3	1 2 3	1 2 3	1 2 3
Period B	1 2 3	1 2 3	1 2 3	1 2 3
Period C	1 2 3	1 2 3	1 2 3	1 2 3
Period D	1 2 3	1 2 3	1 2 3	1 2 3
Period E	1 2 3	1 2 3	1 2 3	1 2 3
Total Points Earned:				

R U EPIC?

Rating Scale: 1 = Never 2 = Sometimes 3 = Always
--

Today's Goal: _____

Today's Percent Score: _____

Additional Comments: _____

Parent Signature: _____

Appendix E

Interview Questions and Sub-Questions

1. What do you like about the intervention?
 - a. What was fair about CICO?
2. What didn't you like about the intervention?
 - a. What was unfair about CICO?
3. If you could make a change with the intervention, what would it be?