Spring 2022

PBIS Tier 2 Intervention: Check-In/Check-Out

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EDU635.03.SP2022

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April 24, 2022

An Action Research Project Presented

in Partial Fulfillment of the Requirements

For the Degree of Master of Education

Abstract

The following is an action research project studying the effects of PBIS Tier 2 intervention, Check-In/Check-Out (CICO). Data was collected over the course of two weeks following four elementary students in a rural school district. CICO intervention data was taken according to the students' ability to demonstrate the three school rules; safety, respect, and responsibility. Findings of the study show a 75% success rate, as well as collaborating teachers' opinions regarding the intervention. In support of the using the CICO intervention, a literature review was conducted delving into the successes of previously conducted PBIS research. Limitations and future research are discussed.

Keywords: PBIS, tier 2 intervention, check-in/check-out

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Research PBIS Tier 2 Intervention: Check-In Check-Out

Schools across the United States are using PBIS as a way to teach socio-emotional skills, prevent unwanted behaviors, and improve academic outcomes. According to the Center on PBIS, funded by the U.S. Department of Education, "Positive Behavioral Interventions and Supports (PBIS) is an evidence-based three-tiered framework for improving and integrating all of the data systems, and practices affecting student outcomes every day". All students receive Tier 1 universal supports to help prevent problem behaviors from occurring as well as a school-wide discipline system; however, some students require additional interventions such as Tier 2 supports as in the Check-In/Check-Out (CICO) system.

"Check-in/Check-out pairs the use of an adult mentor with a daily progress report to help students meet individualized behavioral goals" (Boden et al., 2018). Tier 2 systems assist students in honing in on problem behaviors and providing them with supports on how to replace unwanted behaviors with a more desired outcome. With the level of diverse needs of students being served today, it is crucial to implement systems individualized to the students' needs. The problem with school's disciplinary procedures is typically the lack of a systematic process to assist students who's needs go beyond the basic level of supports. CICO allows positive adult/student interaction with frequent specific conversations about the child's day: "Check-in/Check-out pairs the use of an adult mentor with a daily progress report to help students meet individualized behavioral goals" (Boden et al., 2018).

This action research project will provide data to support the use of Tier 2 interventions are needed to assist the 10-15% of the student population that Tier 1 interventions are not sufficient. CICO intervention will provide students with the supports needed to reduce the amount of off-task behavior and increase the amount of positive behavior focusing on safety, respect, and responsibility.

A multitude of action research studies have founded positive results of the CICO system with decreased negative behaviors as well as increased positive behaviors and feedback. As cited in

Hawken, et al., (2015), "CICO was effective in reducing problem behavior in 14 out of 18 studies conducted in elementary settings and in 9 out of 10 studies conducted in secondary settings" (p. 306). Additional research has stated the large increase in positive student behaviors by vast margins across the board. "Researchers Ennis et al. (2012), Todd et al. (2008), and Wallace et al. (2008), have applied different techniques to assess for CICO effectiveness, including the frequency of office discipline referrals, problem and prosocial behavior ratings, and direct observations. Elementary and middle school students have shown decreases in the frequency of problem behavior when exposed to CICO" (Sobalvarro et al., 2016). The opportunity to address multiple areas of concern through the use of a CICO system has shown great success and effectiveness in variety of settings.

The use of a CICO system, that includes frequent positive adult interactions, promotes a decrease in student behaviors while increasing student daily report points in the areas of safety, respect, and responsibility. Success will be gleaned from the Daily Progress Report (DPR) data collected for this quantitative research. According to Goodman-Scott (2013), "Data were used to guide implementation of interventions, and new data were collected regularly to assess intervention effectiveness" (Goodman-Scott, 2013, p. 114). By creating opportunities for students to have multiple daily check-ins, it allows the students to begin the self-monitoring process. Students benefit from the teacher check-ins throughout the day as well as the mentor check-ins before and after school.

The primary purpose of this action research project was to determine the degree of Tier 2 intervention effectiveness using CICO data. Prior to this year the elementary has not had a structured Tier 2 intervention along with only one full year of Tier 1 PBIS implementation. Students who were considered to be in need of additional assistance were given a variety of charts and/or schedule modifications to promote positive day-to-day behaviors and interactions. Data was collected from previous types of charts day to day; however, little was done with the information.

The school in this project made plans to implement Tier 2 interventions. With the necessity of one consistent CICO mentor for students on a Tier 2 intervention it is suggested an alternative person

be designated for CICO students. As the school participating in this action research does not have a full-time school counselor, one of the instructional strategists will be the designated CICO mentor for the participating students.

This action research project will focus on the following:

- Does the implementation of a CICO system improve student behavior in the classroom in the areas of safety, respect, and responsibility?
- Do the students using the CICO system feel this is a successful intervention for them?
- Do the participating classroom teachers feel the CICO system is an effective Tier 2 intervention?

At the conclusion of this action research paper it will be determined by percent how the participating students DPRs were changed, as well as the feedback of the participating parties regarding the functionality and effectiveness of this intervention. Quantitative data from the DPRs will be collected and displayed by graphs as well as qualitative data will be compiled from the interviews of participants.

Overall findings from action research on PBIS will be compiled into four main themes. The literature review will delve into the topics of PBIS as a multitiered system, which will be laid out beginning with the foundations of PBIS. Further studies will explicitly explain the necessity of Tier 2 interventions. The second area of discussion will consider the staff members needed to effectively implement PBIS. The third section will establish the necessity of their roles for full PBIS implementation. The conclusion of the literature review will analyze the findings regarding the effects of PBIS and tier 2 interventions overall.

Review of the Literature

The following will be a literature review on PBIS with a focus on Tier 2 interventions and the action research findings. Areas covered will be foundations of PBIS, necessity of Tier 2 interventions, roles of staff members, and the effects of PBIS/Tier 2 interventions.

Foundations of PBIS

"PBIS encompasses multiple levels of support, so the specific interventions and their intensities will vary depending on the unique needs of the students. However, in general, PBIS consistently relies on data to inform decisions about the selection, implementation, and progress monitoring of interventions across tiers" (James et.al., 2019). Data-driven decisions, implementation, and progress monitoring are at the forefront of PBIS success rate, all of which revolve around the fidelity at which the program is carried out. In this study over the course of two school years, 2015-2016 and 2016-2017, implementation fidelity levels were assessed to predict out-of-school suspension changes per 100 students. On average, James et.al. (2019), reported about 4.05 fewer suspensions per 100 students. Concluding the findings of student suspensions, longitudinal studies were done to assess relationships between implementation fidelity of school-wide positive behavioral support and interventions (SWPBIS) and student outcomes. "Specifically, we found that changes in implementation fidelity overtime are inversely related to changes in behavioral problems (OSS). What the current findings do is buoy the claim that SWPBIS is an effective MTSS tool, when implemented with fidelity, regarding reducing problem behaviors in schools" (James et.al., 2019). Without the fidelity portion of the PBIS system, student success rates would decrease as well as a lack of data to support decisions for student interventions.

In concurring ideas Horner et.al. (2015), states the impact of behavior analysis on PBIS is most clear in an unrelenting commitment to measurement of both implementation fidelity and the impact of PBIS on student outcomes. "Effective implementation processes build district and school capacity while establishing initial demonstrations" (Horner et.al., 2015). The necessity of proper

implementation and fidelity does not begin and end with initial introductions to the concept of PBIS. As Horner et.al. (2015), goes on to conclude as initial schools in a district adopt PBIS, the leadership team needs to be improving district capacity to provide active coaching of trained skills to ensure that they are applied under natural conditions, at high fidelity, and with the adaptation to local culture needed to achieve the core features. Horner et.al. (2015), goes on to state his beliefs of emphasizing core features, rather than the practices taught to achieve the core features gives schools the opportunity to tailor their own strategies to accommodate and meet the cultural needs of their individual populations.

Many districts use videos to teach PBIS strategies to students, educational staff, and parents. Horner et al. (2015), Hirsch et al. (2019), states "The authors highlight how video can not only be used to teach expectations to students but also how it may be a vehicle for training staff (including nonteaching staff such as bus drivers, substitutes, and paraprofessionals), communicating the message and purpose of PBIS to a larger audience (e.g., families, district staff/administration, new hires), building a sense of connection/community (e.g., focusing on mental health needs or bullying prevention), and emphasizing school pride." With a large emphasis on the creation of an effective PBIS matrix Hirsch et.al., conducts a study to analyze the use of videos to teach how and what is the PBIS matrix (2019). Videos are used to distribute the information to a plethora of school faculty and students alike. Here is how the matrix was defined: "A PBIS matrix defines three to five universal expectations (e.g., be respectful, be responsible, be ready) across a variety of settings (e.g., classroom, cafeteria, bathroom). These behaviors are explicitly taught and reinforced" (Hirsch et al., 2019).

Universal expectations or core values are at the forefront of effective SWPBIS implementation. During a case study by Cressey et al., (2015), "[The research team members] collaboration focused on several key components of PBIS: the development of core values and behavioral expectations, lesson plans for teaching and reinforcing these expectations, and a system of positive reinforcement and meaningful consequences". Within the five-year case study of SWPBIS implementation data was

collected on office discipline referrals (ODR). The most frequent problem behavior was indicated as defiance. Reports from the study concluded 161 out of 257 referrals were for defiance across all grade levels. “The CARE team used these data to plan a booster intervention that would promote and reinforce positive behaviors such as cooperation, following directions, and self-control” (Cressey et.al., 2015). With increased collaboration in these areas positive behaviors increase along with positive school culture.

A qualitative study by Koumas (2015) was conducted to discover how PBIS influenced student behavior and school culture. The study consisted of 21 middle school teachers with 33 (staff, student, and parent) participating interviews. “There is a lack of studies based on teacher, parent and administrator perceptions of how PBIS works; therefore, reflecting a gap in the literature” (Koumas 2015). Koumas (2015) went on to state by investigating the research questions it would provide advancement in scientific knowledge base in reference to the program and its influences on student discipline and school culture. “Nearly eighty-two (82%) percent of the participants believe PBIS to be effective at their schools while eighteen (18%) percent believe the program to still be in the early stages or would be more effective at another school” (Koumas 2015).

The Role of Tier 2 Interventions

Students are identified as needing additional supports above and beyond the universal Tier 1 instruction. “Approximately 5% to 15% of the student population will need additional behavior support provided by a Tier 2 intervention such as social skills training or a check-in, check-out intervention” (Hawken et.al., 2015). “For schools utilizing a multi-tiered approach, Tier 2 conforms to a standard protocol approach, wherein all students requiring targeted support receive the same intervention” (Eklund et.al., 2019). Most commonly used tier two support being CICO. CICO systems are put in place to assist students with the lessoning of disruptive off-task behaviors. “A student is described as being disruptive off-task when he/she is negatively impacting the environment of other students or

teachers by talking out, being out of seat, inappropriately touching students, and not complying with teacher directions" (Sobalvarro et.al., 2015).

In a study conducted by Sobalvarro et.al. (2015) "students exposed to the CICO program responded positively as demonstrated by visual analysis and decreases in of off-task disruptive behavior from baseline to intervention." Sobalvarro et.al. (2015) found with the utilization of immediate intervention off-task disruptive behaviors decreased significantly with a 16% decrease within the first intervention phase.

Hawken et.al. (2015) also found that "84% of the students earned more than 80% of their DPR points. Results indicate that the majority of students on CICO in the schools in the Illinois PBIS Network regularly followed school-wide expectations" (Hawken et.al., 2015). To further promote the success and positive effects of CICO systems a recommended exit of tier two interventions is provided. "The percentage of students earning 80% or more of their DPR points on average was also calculated across 4 years, because students who receive 80% of points per day are successful on the intervention and typically need no additional intervention" (Hawken et.al., 2015). DPR points are first obtained during a morning check-in with the student's facilitator or mentor. "During the check-in, the student was given a daily progress report (DPR) sheet that provided three positively stated student behavioral expectations (e.g., be safe, be respectful, be responsible), aligned with school-wide expectations. Mentors also assessed student readiness for the day, reminded them of their goals and expectations, and encouraged them to have a great day" (Eklund et.al., 2019). DPR points are utilized throughout the day as a tool for students to follow school-wide expectations with the intent to reach the level of 80% in order to be exited from Tier 2 interventions.

In a study analyzing the use of CICO beyond school walls Boden et.al. (2018) researched the effects of CICO in a vocational setting. "Students with MoID who display inappropriate behaviors often receive tertiary-tier interventions through the implementation of a behavioral intervention plan (BIP) as opposed to less intensive secondary-tier interventions which may be just as effective.

Providing students with MoID with secondary-tier interventions may be a more effective and less-intensive method for reversing current levels of problem behavior and may increase the inclusiveness of this population of students with less-restrictive educational practices" (Boden et.al., 2018). With the knowledge of special education services being provided in the least restrictive ways possible Boden et.al. (2018) was able to conduct a study showing positive results of a less intrusive tier two support, CICO. Among the three students who participated in this study their off-task behaviors decreased in the following percentages: 41.82% - 5.83%, 44.07% - 5.42%, and 46.09% - 14.67%.

In contrasting views Majeika et al. (2022) conducts a study opposing the stict use of CICO. "The bread and butter of Tier 2 logic is the notion of efficiency achieved using a standard protocol intervention. Therefore, it is important that teachers have multiple interventions to choose from when matching students to Tier 2 behavioral interventions" (Majeika et al., 2022). Majeika et.al. (2022) states "BrB (Breaks Are Better) is an adapted version of CICO that includes scheduled breaks for students who have been identified as having escape-maintained problem behavior." Despite an extensive study Majeika et.al. (2022) was unable to find substantial results implicating BrB was more effective. "The results from this study provide one example of a functional relation to show BrB as more effective at reducing problem behavior than CICO. The remainder of the cases show indiscernible differences between the implementation of CICO and BrB" (Majeika et al., 2022).

Staff and Fidelity Impacts

The involvement of staff, administration, and community members in the PBIS framework have been assessed through the findings of many case studies. "Stakeholder support and leadership is critical to successful PBIS implementation and sustainability. Generally, 80% of staff should commit to PBIS to increase the likelihood of successful implementation" (Goodman-Scott et al., 2017).

Leadership teams are typically comprised of six to eight school staff, a leadership coach, school counselor, and often times a community member all working in conjunction with the school's administrators. In similar findings in a research study conducted at a PBIS implemented school, Clyne

(2017) found the importance of administrative support in promoting the use of PBIS as well as funding the program to run it with fidelity. Clyne (2017) went on to acknowledge how the promotion of PBIS coursed through the school personnel allowing a more fluid implementation. Goodman-Scott et al. (2017) did go on to state how the PBIS team should be culturally responsive and adapted to fit the school's unique climate. "By soliciting the voices of various stakeholders and taking into account the school's context, PBIS can be customized to represent and meet the specific needs of the school's demographics and community" (Goodman-Scott et al., 2017).

In a multitude of studies, school counselors came out with a reoccurring theme of importance and staple role in PBIS. School counselors were deemed a critical component of the success of PBIS due to their large impact regarding implementation, fidelity, and in culturally responsive ways. "School counselors can use their knowledge and recommendations (McIntosh et al., 2014) to reduce this very real problem of disproportionality in discipline practices, including implementing culturally responsive PBIS, disaggregating data and implementing accountability policies focused on discipline equity" (Betters-Bubon et al., 2016). An additional study Goodman-Scott et al. (2018), was conducted to further promote the importance of school counselors by focusing on the roles and responsibilities leading to the following themes supporting their part in PBIS; "(a) advocacy and systemic change, (b) leadership, and (c) collaboration." The study went on to state how "[participants of the study] proposed that, when assisting with student identification and intervention, school counselors utilize their in-depth knowledge of the students" (Goodman-Scott et al., 2018).

In continued support of PBIS implementation, the following study was conducted with the focus on school personnel roles and importance as well as fidelity scores. Results of fidelity research by Goodman-Scott et al. (2017) determined with proper administrative leadership, proactive practices, community building, consistent implementation, and school counselor integration, the school district used in this study had a School-Wide Evaluation Tool (SET) score between 80-100% in all categories/features indicating high effectiveness of PBIS implementation. In conclusion of Goodman-

Scott et al. (2017) research it was stated the positive outcomes gleaned from PBIS implementation included “increased student academics, decreased student disciplinary actions, improved school climate, staff commitment to PBIS, and decreased staff turn-over.”

Congruent with Goodman-Scott et al. (2017), Betters-Bubon et al. (2016) also found a positive correlation between high-fidelity PBIS implementation and student success. “The effects of universal interventions on children's behavior throughout the school were measured via the number of ODRs per student for years 1–3. The average number of ODRs per student per year decreased for both schools.” (Betters-Bubon et al., 2016). The case study went on to state, students who had been enrolled with the PBIS implemented school district resulted in fewer ODRs than for those students who moved in from out of district. Betters-Bubon et al. (2016) went on to address the potential effect to ODR numbers in regard to students moving in from a non PBIS district. “During year five the team noted that students who had moved to the school in the previous year received a high percentage of total ODRs and accounted for many of the students needing Tier 2 and 3 supports. The team integrated interventions and behavioral teaching opportunities to assist new students in that transition” (Betters-Bubon et al., 2016). The study concluded by providing findings of fidelity importance. Results showed of the 29 Tier 2 intervention groups that were implemented, an average of 90% fidelity was found.

In similar thoughts, the following study described the importance of fidelity and how it is best obtained when staff are given direct support and guidance on PBIS implementation. In a case study by Eiraldi et al. (2019) it was reported the importance of providing support to school counselors providing Tier 1 and Tier 2 supports. In the study conducted by Eiraldi et al. (2019) “a doctoral-level psychologist and a masters-level school psychologist (consultants) conducted two full days of training with members of the school leadership teams on PBIS. For Tier 2, school counselors participated in an initial training workshop and follow-up consultation.” In accordance to the study it is concluded that fidelity is obtained when time, focus, and explicit instruction is provided for school personnel.

Effects of PBIS and Tier 2 Intervention

Effects of PBIS and Tier 2 interventions have been looked at through a multitude of studies. A case study done by Clayton et al. (2020) looked at five schools over the course of three years who had fully implemented PBIS Tier 2 interventions. From the results of post PBIS implementation surveys, four themes emerged from the responses given by the PBIS staff participants of the five schools, when asked about their experiences of PBIS: the benefits of PBIS, the importance of school culture, the power of relationships in equity work, and challenges and next steps.

Of all the themes that emerged from the Clayton et al. (2020) case study it was noted the benefits of PBIS was the largest take away- "Study participants saw the benefits of PBIS in a number of ways, primarily in how it shifted their mindsets to looking for the positive in all aspects of their school and even their personal lives" (Clayton et al., 2020). In agreeance with the benefits of PBIS theme, Swoszowiski et al. (2013) discussed the benefits founded with PBIS Tier 2 intervention, CICO. In this study, four elementary aged students, living at an off-campus residential treatment facility, found success with an average of 23.96% increase regarding on-task and behavioral improvement while being a participant of the CICO intervention. Again, a high level of fidelity was crucial for the success of Tier 2 effectiveness. Swoszowiski et al. (2013) included the level of fidelity within the case study was 94.45%.

In addition to the positive impacts of PBIS, Cook et al. (2015) found positive impacts of PBIS in the areas of culture and climate within the schools where high fidelity took place. Cook et al. (2015) conducted a study in fourth and fifth grade classrooms having been identified as needing an additional support system beyond Tier 1. Teachers were asked to identify three behavioral expectations they wanted to improve in the five-week trial period. Within the case study time frame, PBIS intervention fidelity was recorded at a 97%. It was noted the importance of fidelity due to the nature of PBIS. "PBIS is focused on teaching, modeling, cueing, and reinforcing expectations in all settings throughout the school by all staff, as well as the inclusion of ongoing data-based decision making by tracking

disciplinary referrals" (Cook et al., 2015). At the conclusion of the trial period Cook et al. (2015) recorded the culture and climate of the school staff. It was noted out of a six-point scale of acceptability, feasibility, and fairness teachers responded to the survey with an average of 5.5 points, supporting the findings of the importance of school culture themes in study done by Clayton et al. (2020).

The benefits of PBIS were also examined in a large study conducted by Pas et al. (2019) utilizing 180 elementary, middle, and high schools. Using the School Wide Evaluation (SET) tool, schools reporting higher SET scores produced students with lower rates of suspension and truancy, and higher rates of achievement. While utilizing a variety of tests and assessments within the case study, fidelity was stated as a contributing factor towards the findings in this case study. "Although the [t] tests do not provide clarity on which specific cut point is best, there is a clear differentiation between reaching a level of high fidelity on specific subscales for particular outcomes" (Pas et al., 2019). Pas et al. (2019) concluded the research stating, "as a result, training, coaching, and support efforts should aim to fully optimize implementation fidelity of these elements as they may in turn translate into the best outcomes for students."

As noted by Clayton et al. (2020), positive school culture was also deemed critical to the success of PBIS. "Schools also noted the importance of the implementation being school based and the benefit that PBIS provided in being able to address the unique context of their own students and environment" (Clayton et al., 2020). Clayton et al. (2020) went on to say, "It is critical to recognize the importance of a full cultural shift among leaders, teachers, and students from the outset." When referencing the change in school and district culture it was noted "The clear and consistent expectations driven by the school district and senior leadership were seen as necessary ingredients to the success of PBIS implementation" (Clayton et al., 2020).

Related to the Clayton et al.'s (2020) theme referencing the power of relationships in equity work, Fefer et al. (2020) conducted a study with similar findings. Referencing the research of positive

parent contacts to student on-task behavior, Fefer et al. (2020) states “Evaluating practical strategies to enhance partnership in multi-tiered behavioral supports is an essential element to move the field of PBIS forward, as is developing and evaluating feasible methods for teachers to engage in simple proactive practices for students with off-task, and possibly challenging, behavior.” Fefer et al. (2020) went on the state the importance of building the partnerships in a multi-tiered system creates the open line of communication between staff, students, and parents, involved in PBIS. Fefer et al. (2020) concluded with his findings on the relationships between a positive parent contacts and relationships to the desired outcomes of student on-task behavior through the use of PBIS interventions.

In concluding thoughts, while referencing the change in school and district culture it was noted by Clayton et al. (2020) “The clear and consistent expectations driven by the school district and senior leadership were seen as necessary ingredients to the success of PBIS implementation.” Culture is strengthened and maintained through PBIS with norms, expectations, and shared language.

Methods

Research Question

How do Tier 2 interventions (CICO) support students in less off task behavior within the classroom in the areas of safety, respect, and responsibility?

Setting

Hartley-Melvin-Sanborn Elementary was the district used in the research, where all data was collected, from grades TK, kindergarten, first, and third grade. School’s population is about 200 students from TK-fourth grade. Class size on average is 22 students. The elementary building resides in rural Iowa serving 41% of free and reduced families.

Table 1

Participants

Staff	Years of Teaching	Grade Level Taught	Student Demographics
Teacher A	8 years	Transitional Kindergarten	Student A: white/Hispanic female, five years old Grade: TK
Teacher B	8 years	Kindergarten	Student B: white male, six years old Grade: K
Teacher C	9 years	1st grade	Student C: white female, seven years old Grade: 1st
Teacher D	26 years	3rd grade	Student D: white male, nine years old Grade: 3rd

Intervention

Students were identified by general education teachers and PBIS team as needing tier two supports by assessing office referrals, behavior sheet incidents, and/or HELP team discussions. Once students were identified as needing additional support the facilitator conferenced with students individually to discuss how the CICO system could assist them in meeting the three school expectations more effectively; safety, respect, responsibility. Students were given supports through daily morning meetings to promote ways to reach their 80% daily goals in the three areas as well as example of how this might look, sound, and feel. At end of the day check out, students were a part of the logging in of data to allow them to take ownership of their daily points earned. Discussions about any areas potentially in need of change were held at the check-out meeting as well as concluding with a daily celebration to take home and share with their families. The CICO intervention data was collected for a two-week period, with five full day of school each week.

Variables

During the course of the data collection period two teachers had substitutes for two different days creating a potential difference in expectations. Within the data collection period there were three days the school had early outs, resulting in no data collection taken during the last period of the day. Outside variables with potential impact on student data: lack of sleep, medications not given at home, or day of the week (anticipation of the weekend/no school).

Measurement Instrument

The measurement tool used for this action research project was the Check-In Check-Out sheet created specifically for the targeted school. The same CICO sheet was used for all grade levels with a box describing how to mark the points correctly. Individual meetings were had with each teacher prior to using the CICO sheet to insure the highest level of fidelity.

Each student was present for all 14 days of the research period allowing a clear picture of student improvement over the course of the intervention. Data was collected daily and inputted into the PBIS SWIS system. At the end of the two-week collection period, data driven decisions were made for next steps students. Teacher and student interviews were collected at the end of the two-week trial period.

Data was all housed on the PBIS SWIS system which was accessible to the school counselor, principal, and action research facilitator. SWIS system is password protected and not accessible to any other staff members unless access is granted.

Statistical Analysis

All four students used the same CICO sheet for this research project. The CICO sheet was a system created to award students points on a scale of zero to two, based on their behavior, in the areas identified as the school's values; safety, respect, responsibility. Students were given points by the general education teacher as well as the CICO facilitator. According to the PBIS Tier 2 intervention system, 80% of the daily points possible is the targeted percentage. In this case study there were five

designated times throughout the day to obtain points in three separate categories; safety, respect, and responsibility. 30 points were possible each day with a target of 24 points. Students participating in this study were selected due to number of ODRs as well as failed in class attempts by the general education teacher to increase the three targeted school values of safety, respect, and responsibility by means of token economy, and sticker charts. Teacher and student feedback in the form of an interview was compiled to assess how the CICO system was received to determine personal perception of the trial.

Each student was met with before the trial period to explain how the CICO sheet would be used. Students began meeting with the researcher/facilitator every morning during the morning check-in block to discuss goals for the day and collect the previous day's CICO sheet signed by parents. At the end of each day the student would meet back with the researcher/facilitator and discuss how the day went. Daily points would be entered into the SWIS system while the student was present to show them the progress they were making on their personal graphs. Charts 1-4 below are individual charts displaying the two-week research period. Chart 5 is the overall school-wide graph displaying student success during the research period.

IRB Exemption

IRB exemption was granted for this action research project as no consent was needed from parents. Within the school system PBIS was already being utilized amongst all students; therefore, the CICO intervention was not infringing on any human rights or performing any services above or beyond the normal scope and sequence of the school.

Data Collection

Data collection was obtained through the use of PBIS Check-In Check-Out (CICO) system. A daily CICO document was created with the school day being divided into four parts (labeled as colors) as well as a morning check-in with the facilitator. CICO forms were created around a numbers system from zero to two points in three separate categories; respect, responsibility, and safety. Each student would begin their day with the CICO facilitator to determine how their morning had started utilizing

the points system and what goals they have for the day. Throughout the day, each of the colored block sections (time periods of the day) were marked by the student and their classroom teacher. During the teacher/student meeting to mark each section of the CICO paper the teacher would discuss what they felt and how the student felt they should be marked; zero, one, or two in all three categories. At the end of the school day the student would meet with the facilitator again to add up the daily points and determine if the 80% goal (24 points) was reached. All CICO sheets were sent home nightly to have a parent signature and returned to the facilitator the next morning. If a student came to school without the signed CICO sheet a parent contact was made with the CICO facilitator while the student was present.

Daily CICO scores were put into the PBIS SWIS system. All scores were generated and placed on a graph to visually see how the student was doing in accordance to reaching the 80% points goal. Students were present as scores were entered so they were able to visually see how their points earned each day effected their graphs, looking for the 80% trend line. Data was placed into multiple graphs: individual student CICO data, grade level CICO data, and school-wide CICO data. At the end of the two-week period determinations were made if a student should remain on a CICO system based upon data collection with a goal of 80%, if further intervention was needed, or if they were ready to be exited from the CICO tier two intervention. These determinations were made by team meetings with the CICO facilitator, guidance counselor, and classroom teacher.

Findings

Data Analysis

Data was collected over a two-week period, five full days of school/week. Each day students met with the facilitator for a morning check-in. During the morning check-in the first daily points were obtained. Points were awarded in three categories; safety, respect, responsibility, with a possible score of two, one, or zero points per category. There were four additional times throughout the school day where students met with their general education teacher to be awarded points. Students were able to

obtain a maximum of 30 points per day with their goal of 24 points per day (80%). Below will be a breakdown of each student's data analysis.

When answering the first research question: Does the implementation of a CICO system improve student behavior in the classroom in the areas of safety, respect, and responsibility? Based upon the data collected from the daily CICO sheets, three of the four students obtained an 80% or higher success rate with improving student behavior in the classroom. The average data from all four students broken down by school value was; safety: 87%, respect: 80%, and responsibility: 84%. Prior to the CICO intervention the four identified students were consistently having little to no success based upon ODRs and number of parent contacts. I believe the data collected with daily points obtained as well as the frequency of the students reaching their daily goals (80% success) CICO system did improve student success in the areas of safety, respect, and responsibility. Due to the frequency of daily goals met, I believe continued utilization of PBIS CICO intervention in the school system is supported with sufficient data.

The second research question is: Do the students using the CICO system feel this is a successful intervention for them? Students were individually asked how they felt the CICO system worked for them. A set of questions were asked to each student at the end of the two-week data collection. These questions included:

1. Did you like the CICO system?
2. Did you feel it helped you follow the three school rules?
3. Would you change anything?

Each student responded to the first question using a numbered scale one to three. One meaning "I did not like the CICO system", two, "It was okay," and, three, "I really enjoyed it". Scoring for the second question was also done with the same type of numbering system. One "I do not feel it helped me", two, "It kind of helped me", three, "It really helped me". The third question was left as open ended for the students to respond on a more individual basis.

With regards to the first question given to participating students, three of the four students rated this question a three with one student rating it a two. The second question had similar results as three of the four students answered with threes, while one student answered with a two. The third question was answered with three students stating they would change nothing while the fourth student stated they did not wish to send the sheet home to their mom to be signed at night.

The final portion of data collection was obtained from the participating teacher interviews to address the research question: Do the participating classroom teachers feel the CICO system is an effective Tier 2 intervention? Using a numbering scale of one to three; one being "disagree", two being "neutral", and three being "agree", teachers were asked to rate each of the following questions.

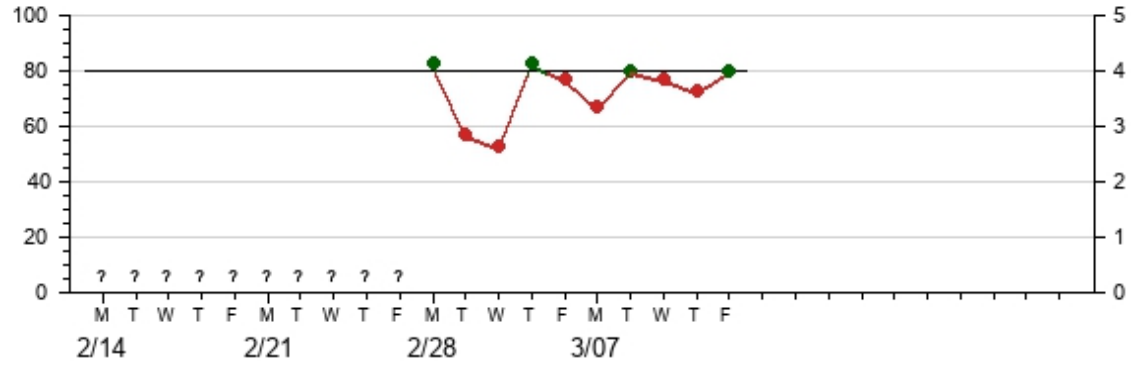
1. Do you feel the CICO system is an effective Tier 2 intervention?
2. Do you feel the students were successful using the CICO intervention?
3. Would you change anything about the CICO intervention?

The first question was answered from all four-participating teacher with threes. The second question resulted in three teachers marking three while one teacher gave it a two, explaining she felt there was potential with the CICO intervention; however, her student did not seem as receptive to it. Looking at the final question, three of the teachers responded with change nothing. One teacher did respond that she wishes the facilitator would have more time to meet with the students each day and have a set time in her schedule to do this rather than trying to squeeze it in before and after school with her other obligations.

Student A was awarded daily points over a two-week grading period with scores ranging from 16 points per day to 25 points per day, giving student A a mean score of 19.3 points. Student A reached the 80% goal four out of the ten-day data collection period.

Figure 1

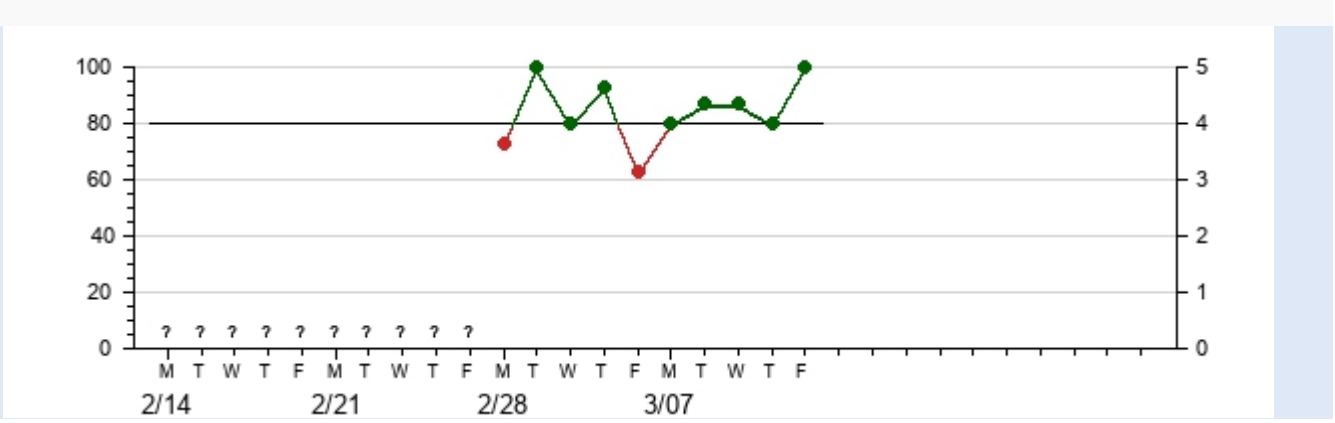
CICO - Individual Student Count, Student A



Student B was awarded daily points over a two-week grading period with scores ranging from 19 points per day to 30 points per day, giving Student B a mean score of 25.8 points. Student B reached the 80% goal eight out of the ten-day data collection period.

Figure 2

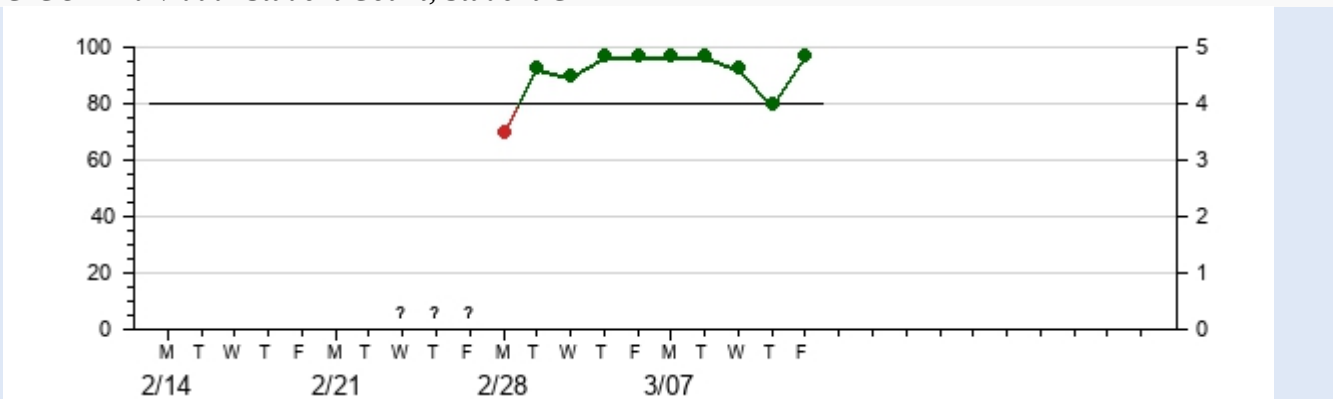
CICO - Individual Student Count, Student B



Student C was awarded daily points over a two-week grading period with scores ranging from 21 points per day to 29 points per day, giving Student C a mean score of 27.2 points. Student C reached the 80% goal nine out of the ten-day data collection period.

Figure 3

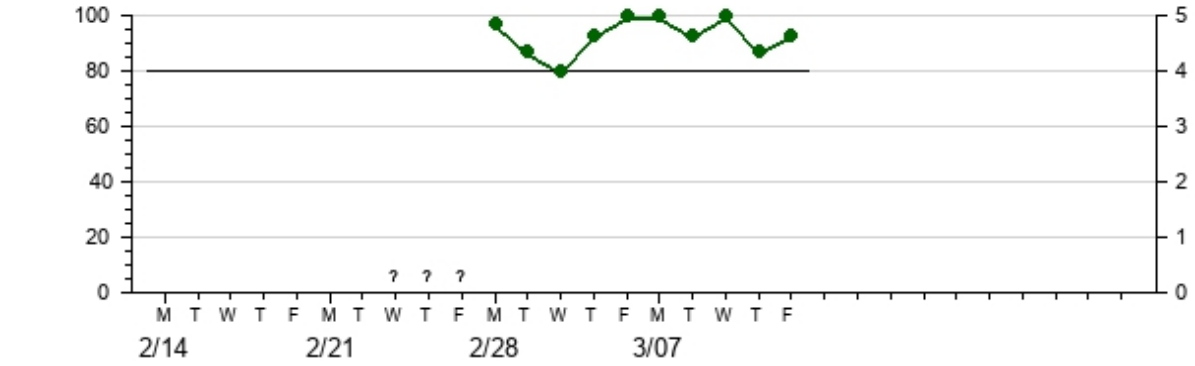
CICO - Individual Student Count, Student C



Student D was awarded daily points over a two-week grading period with scores ranging from 24 points per day to 30 points per day, giving Student D a mean score of 27.8 points. Student D reached the 80% goal ten out of the ten-day data collection period.

Figure 4

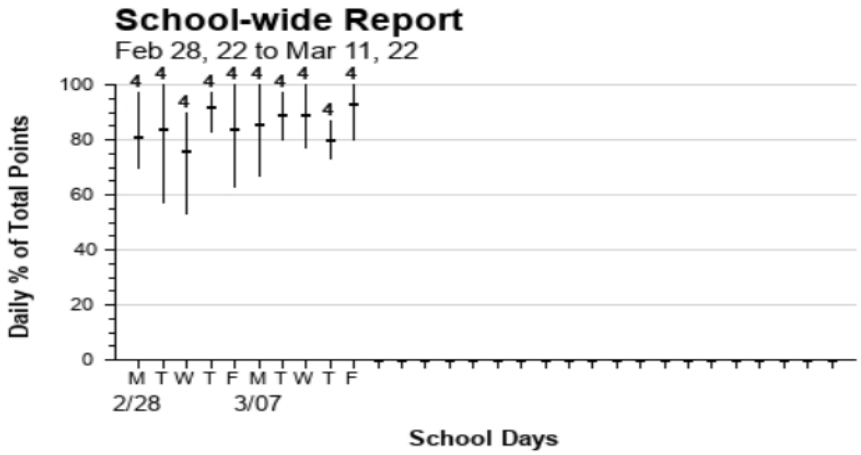
CICO - Individual Student Count, Student D



The range of points obtained during the data collection period from all four students was 16 to 30 points. The average percentage of daily points obtained for all four students over the course of the data collection period was 85.33% of daily points earned.

Figure 5

Whole Group Data



Discussion

Summary of Major Findings

Results of the current study suggest the validity of the Tier 2 intervention CICO. Participating students were identified as having difficulty with the three school PBIS values; safety, respect, responsibility. Previous to using the CICO system, classroom teachers had attempted a variety of interventions within their general education classrooms such as breaks, token economy systems, and classroom reward charts (i.e. sticker charts). Classroom teachers and students were then trained how to utilize a CICO system. Parents were contacted to inform and prepare them for their portion of the CICO intervention. Parents were asked to look at their child's daily CICO sheet, discuss it with their child, sign it, and send it back to school with their child. Students brought home their CICO sheets every day to share with families, have signed and return to school the following day. If students did not return CICO sheets signed, parent contacts were made the next morning.

During the two-week study, the goal was set for 24 out of 30 possible points (80%) earned daily. The points were awarded over the course of five preselected time frames throughout the day in three categories: safety, respect, responsibility. Each category had the possibility of earning zero, one,

or two points at each time frame. Three out of the four students were found to have an average of over 80% success rate with the CICO intervention at the end of the research period.

The findings of this study show the potential for successful Tier 2 interventions with the use of the CICO system. The system was essentially low to no cost beyond the school's current investment in SW-PBIS. Teachers reported a high level of fidelity while using the CICO system as well as the ease of implementing the intervention. General education teachers also reported their level of pleasure with the intervention not taking any of their academic instruction time or the student's personal time (recess). The amount of time reported to fill out each section of the CICO sheet was no more than one minute.

Looking at the implications for the students, the clear benefit to the CICO system was the lessoning of ODRs and the increase of in class, on task academic time. Students were able to be present and not lose out on instructional time with the use of the CICO system. At the end of the two-week research period, students voiced their level of enjoyment with less ODRs and their ability to please both their teachers and parents when reaching their goals.

The results of this study conquer with previous studies and research on the use of CICO intervention. Research states the importance of fidelity while using the CICO system as well as the efforts needed to create a successful Tier 2 intervention school-wide. The current study was used to focus the efforts of Tier 2 intervention CICO in a small rural school district focusing on grades TK-fourth. The research was used to create a plan for future PBIS Tier 2 implementation within the parameter of the targeted school. The study concludes with a 75% success rate, the use of CICO intervention students found over 80% success in the areas of the school's values: safety, respect, responsibility.

Limitations of the Study

Limitations of the study could be found in the level of training for the general education teachers prior to the study. As the CICO facilitator, the researcher did provide a small targeted training

for the general education teachers involved; however, the researcher was not formally trained on how to provide training for the general education teachers.

Other limitations to the study are the number of general education teachers marking the CICO sheets for each student. Students came from four different grades and classes, allowing for the judgment of four different adults when scoring the student's behaviors. A key of how to mark the CICO sheet was provided at the bottom of the paper for the student and teacher to use; however, still leaving room for interpretation.

Further Study

With the shortened data collection period, future studies with a longer period should be considered. As in the study of Pas et al. (2019) a year's worth of data collection would give a better indication of success percentages with the use of CICO. Longer data collection periods would give a clearer picture of how students maintain behaviors with the CICO system after the initial novelty ends. In addition, future studies could address the next step for the CICO intervention, students taking over more of the ownership in student led marking of scores. This is a process to determine if the CICO system is still warranted or if the student is ready to be exited from the intervention.

Future studies should be considered with a larger number of students. A larger number of students would allow for a more accurate percent of success, as well as consistency with general education teachers scoring the CICO sheet. By having multiple students from one classroom utilizing the CICO system it would create a clearer depiction of students' success with a consistent adult collaborator.

Lastly, a future study could be a repeat of the current study with different students from the same classrooms, as in the research by Swoszowski et al. (2013) where four students from the same classroom were selected for the study. The repeated study would show constancy over time of the same adult's scoring interpretation, with multiple students, allowing for a more data supported conclusion.

Conclusion

This study provides support of the use of PBIS Tier 2 CICO intervention. Of the four participating students, three completed the study with an 80% or higher success rate. The findings support with the use of CICO intervention, students obtained an increase percentage of daily success with school-wide values; safety, respect, and responsibility. With three of the four students obtaining 80% or higher of their daily points earned, the identified students were determined to have completed the intervention and were dismissed from the intervention. With 100% fidelity as well as 100% student attendance during the study, using the data obtained it was determined PBIS CICO intervention had a success rate of 75% for improving student's use of school-wide values.

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