

Spring 2018

Reducing Disruptive Behaviors in Students With Emotional and Behavior Disorders

Diego Ortega
California State University, Monterey Bay

Follow this and additional works at: https://digitalcommons.csumb.edu/caps_thes_all

Recommended Citation

Ortega, Diego, "Reducing Disruptive Behaviors in Students With Emotional and Behavior Disorders" (2018).
Capstone Projects and Master's Theses. 293.
https://digitalcommons.csumb.edu/caps_thes_all/293

This Master's Thesis (Open Access) is brought to you for free and open access by the Capstone Projects and Master's Theses at Digital Commons @ CSUMB. It has been accepted for inclusion in Capstone Projects and Master's Theses by an authorized administrator of Digital Commons @ CSUMB. For more information, please contact digitalcommons@csumb.edu.

Running head: REDUCING DISRUPTIVE BEHAVIORS

Reducing Disruptive Behaviors in Students With Emotional and Behavior Disorders

Diego Ortega

Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Arts in Education

California State University, Monterey Bay

May 2018

©2018 by (Diego Ortega). All Rights Reserved

REDUCING DISRUPTIVE BEHAVIORS

Appropriate Classroom Behaviors and Students with Behavior and Emotional Disorders

Diego Ortega

APPROVED BY THE GRADUATE ADVISORY COMMITTEE

Kerrie Lemons Chitwood, Ph.D.
Advisor and Program Coordinator, Master of Arts in Education

Erin Ramirez, Ph.D.
Advisor, Master of Arts in Education

Kris Roney, Ph.D. Associate Vice President
Academic Programs and Dean of Undergraduate & Graduate Studies

REDUCING DISRUPTIVE BEHAVIORS

Abstract

Students diagnosed with Emotional and Behavioral Disorders (EBD) often have a difficult time complying with classroom expectations as they frequently demonstrate significant deficits in social interaction, academic performance, and behavior. Deficits in these areas negatively impact a student's ability to cope and learn in the classroom environment. Students with these needs benefit from well structured evidence based interventions that will help reduce negative behaviors that disrupt student learning. The current study combined the flexibility of a Point Reward System (PRS) with the immediate and constant student feedback of Check in Check Out (CICO) system to measure the impact on disruptive behaviors of five students with EBD in the general education setting. This study used a single case study AB design where baseline phase was the standard level of care and the intervention incorporated the CICO and PRS into the classroom structure. Results demonstrated a decrease in the average percentage of classroom disruption per observation period for every student. This study revealed a positive relationship between the use of CICO and PRS as behavior interventions and the reduction of disruptive behaviors in students with EBD in the general education environment.

Keywords: Emotional and Behavioral Disorders, Point Reward System, Check in Check Out, classroom disruption, general education, behavior interventions

REDUCING DISRUPTIVE BEHAVIORS

Table of Contents

Abstract..... iii

Literature Review 1

Method..... 8

 Research Design 9

 Setting & Participants 11

 Measures..... 13

 Intervention 14

 Procedures..... 15

 Ethical Considerations..... 16

 Social Validity 17

Results 18

Discussion 23

 Limitations and Directions for Further Research..... 25

References 26

Appendix A 30

Appendix B 31

Appendix C..... 32

Appropriate Classroom Behaviors and Students with Behavior and Emotional Disorders

Literature Review

Middle school has proven to be challenging for students. Early adolescents during this time face many changes making it difficult to cope with everyday life expectations (Lane, Pierson, Stang, & Carter, 2009). Early adolescence is a crucial time of development that is marked by a clash of normative biological, psychological, and social challenges (Rudolph, Lambert, Clark, & Kurlakowsky, 2001). Changes in a student's life can pose difficulties when adjusting to a new school, multiple classes, new friends, and changes in their bodies due to puberty. This period is associated with sharp increases in rates of psychological symptoms and maladaptive behaviors, such as anxiety, depression, substance abuse, and antisocial conduct (Rudolph et al., 2001). Along with managing the aforementioned psychological and biological factors, middle school students are expected to demonstrate appropriate classroom behaviors in order to be successful.

Appropriate Classroom Expectations

Appropriate classroom behaviors and expectations include self-control, cooperation, and compliance (Lane et al., 2010). Behavior expectations can vary from teacher, classroom, school, and school district. Lane and colleagues (2010) conducted a study focused on understanding the social behaviors teachers believe are critical for school success. Results from the study classified classroom expectations into two categories, self-control and cooperation (Lane et al., 2010). Self-control expectations are as follows: controls temper in conflict situation with peers, controls temper in conflict situations with adults, and responds appropriately to physical aggression (Lane et al., 2010). Cooperation expectations include ignoring peer distractions when doing class work, attending to teacher instructions, transitions from one classroom activity to another, gets along

with people who are different, produces correct schoolwork, uses time appropriately while waiting for help, listens to classmates when they present their work or ideas, and follows directions and complies with directions given (Lane et al., 2010). The two categories of self-control and cooperation have an impact on student learning.

Self-control and cooperation are essential categories of behaviors that allow students to function within the classroom to maximize their learning (Lane et al., 2010). Self-control empowers students to have command of their actions and enables them to positively interact with peers and teachers in the classroom setting. Cooperation ensures that students follow classroom routines and expectations to create a positive learning environment.

Classroom expectations can be difficult to follow for non-disabled students going through early adolescence and even more challenging for students with disabilities (Simpson, 2004). Students with Emotional and Behavioral Disorders (EBD) often have a difficult time complying with classroom expectations as they often demonstrate significant deficits in social interaction, academic performance, and behavior (Simpson, 2004). Deficits in these areas negatively impact students ability to cope in the classroom environment and their ability to learn, making them eligible for an Individual Education Plan (IEP). When properly identified, students with EBD receive special education services under an IEP. An IEP is developed by a team including general and special education teachers, administration, and family at a minimum. The IEP team ensures that the student is receiving the appropriate educational services. Students with EBD can greatly benefit from modifications and accommodations the IEP grants. It is important to highlight that not all students with EBD have a secondary disability impacting their ability to learn, making them fully capable of engaging in the general education curriculum, aside their nondisabled peers (Ysseldyke et al., 2017).

Students with EBD and Negative Behaviors Impact Learning

Studies over the past three decades have indicated that six to 10 percent of children and youth have emotional or behavioral problems that seriously impede their development and learning (Simpson, 2004). Students with EBD often demonstrate difficulties abiding by basic rules of conduct, relating appropriately to others, and successfully following and mastering an unmodified school curriculum (Simpson, 2004). However, these students often have difficulties with peer and teacher interactions, lack emotional maturity, have poor working habits and coping skills, all of which make it difficult for students to function in the general education classroom. Not being able to participate in a general education setting will likely have a negative impact on student learning (Johnson-Harris & Mundschenk, 2014). The behaviors of students with EBD can be unpredictable at times, as the behaviors exhibited by each students differ from student and situation.

Students with EBD may interrupt classroom instruction or sit silently disengaged from the lesson. In either scenario, the student is not engaged with the material, and subsequently not learning (Johnson-Harris & Mundschenk, 2014). Furthermore, students who display negative behaviors in the classroom are often met with disciplinary actions that hinder student learning. In most cases students are sent out of the classroom and / or referred to the main office. In return, this time not spent in the classroom is essentially time spent not learning. When behavior interventions are not established for these students, negative behaviors continue to recur until the consequences they face become more severe (Johnson-Harris & Mundschenk, 2014). As a result, students are often banned from attending classes, suspended, and in the most extreme of cases expelled.

Research shows that students who are suspended repeatedly, are students who are already performing below grade level, causing students to fall further behind and eventually lead to disengagement and higher dropout probability (Stage, 1997). This means that suspensions do not favor students academically in contrast, students greatly benefit from being in the mainstream classroom. Students profit from the day to day experience mainstream education in the least restrictive environment (LRE).

Benefits of Mainstreaming

In 2004, the Individuals with Disabilities Education Act (IDEA) mandated students be educated in the LRE (Hicks-Monroe, 2011). IDEA (2004) states that students with disabilities are to be educated with nondisabled children as much as possible, to the maximum extent appropriate. The law requires that children with disabilities be educated with children who are not disabled. Furthermore, special classes, separate schooling, or other removal of children with disabilities from the regular environment should occur only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be adequately met (Hicks-Monroe, 2011). In conclusion, students with disabilities need to be supported in the general education environment before considering alternative placements. Mainstreaming students with EBD with proper supports in place may allow these students to benefit from the mainstream environment.

There are many benefits of providing a mainstream or inclusion environment for students with EBD. Some benefits are: friendships, increased social initiations, relationships and networks, peer role models for academics, social and behavioral skills, increased achievement of IEP goals, greater access to general curriculum, enhanced skill acquisition and generalization, increased inclusion in future environments, greater opportunities for interactions, higher

expectations, increased school staff collaboration, increased parent participation and families are more integrated into the community (Hicks-Monroe, 2011). Additionally, inclusion can better prepare students with disabilities for community living and many teachers also report improvement in professional skills as a result of teaching in inclusive classrooms (Hicks-Monroe, 2011). Students with diverse disabilities when given the opportunity to participate in the mainstream environment can learn from their interactions and benefit from experiences and learning opportunities only available in mainstream education.

Students diagnosed with EBD can benefit from the social interactions made possible in the general education setting. Students with EBD in inclusive environments improve in social interaction, language development, appropriate behavior, and self-esteem (Hicks-Monroe, 2011). With mainstream inclusion, students with disabilities are able to develop relationships with general education peers. Furthermore, nondisabled peers provide models for correct behavior. General education students also benefit from understanding that people with disabilities are a part of the community and can contribute unique gifts and talents to the community (McCarty, 2016). Aside from social gains, EBD students in mainstream settings can benefit from the academic aspect of the mainstream classroom. According to McCarty (2016), positive aspects of full inclusion include increased achievement of IEP goals due to greater access to general education curriculum and enhanced skill acquisition and generalization. However, placing students with EBD into the general education setting without proper support and intervention may be just as harmful as not having these students in the general education setting. It is crucial that proper systems of intervention are instituted to guide students to success in the general education classroom.

Interventions

When addressing the needs of high-risk students, many evidence based practices have been researched (Simonsen & Sugai, 2013). One evidence based practice that has increased in popularity over the years is School-Wide Positive Behavioral Interventions and Supports (SWPBIS). In 2016, there were an increasing number of schools, exceeding 18,000 nationally, implementing SWPBIS (McCurdy, Truckenmiller, Rich, Hillis-Clark, & Lopez, 2016). SWPBIS is an evidence based practice that incorporates systems-level problem solving to improve behavior across the school. SWPBIS emphasizes a three-tiered prevention logic that is intended to support all students at the Tier 1, or universal, level. Tier 2, or group-based, intervention are employed to reduce risk and prevent further escalation for students who continue to engage in problem behavior. Finally, Tier 3, or individualized, strategies are implemented for those students requiring more intensive supports (Hunter, Barton-Arwood, Jasper, Murley, & Clements, 2017). Within each tier, there are a range of interventions to improve the behavior of students such as the Check in Check Out system.

Check In Check Out. Within Tier 2 of PBIS, one of the interventions that is proven to be effective in reducing negative student behaviors is the Check-In/Check-Out (CICO) program (Campbell & Anderson, 2011). The CICO program is considered a model secondary intervention for students who do not respond to universal, preventive methods in Tier 1 (Maggin, Zurheide, Pickett, & Baillie, 2015). The CICO system targets negative behavior by providing more frequent instruction regarding expected behavior, increasing structured contact between students and adults in the school, providing a formal mechanism for students to receive feedback on their behavior, and increasing opportunities for reinforcement contingent on expected behavior. Studies using direct observation to assess the effects of CICO have shown that the intervention

reduces the frequency of problem behavior during the academic routine (Campbell & Anderson, 2011). The CICO system is a great way to provide students with immediate feedback on their behaviors, making them aware of their performance to encourage improvement. The CICO system lends itself to be used with other interventions such as a Point Reward System (PRS). Points earned in the CICO system are easily transferable to a class wide PRS.

Point reward system. Another evidence-based practice that has been used in conjunction with the different interventions of PBIS is token economies or PRS. PRSs are a contingency management system that allows participants to earn points for presenting specific, positive behaviors that are later exchanged for predetermined backup reinforcement (Maggin, Chafouleas, Goddard, & Johnson, 2011). The theory behind PRS lies in the ability to exchange points to access or obtain a range of reinforcement options. This leads to the reward points becoming a generalized reinforcement that, in belief, is conditioned on the presentation of positive behavior (Maggin et al., 2011). PRS are intended to serve as a behavior intervention strategy, designed to create a more positive and productive classroom environment, by using reinforcers to increase students on task behaviors. One of the favorable features of PRS is the flexibility and it is applicable for use with a diverse set of populations, settings, and behaviors (Maggin et al., 2011). The range of target behaviors has included the improvement of academic and social skills, attention, speech, drug addiction, self-care, and disruptive behaviors. In terms of the use of token economies in schools and classrooms, research has demonstrated the effectiveness of such systems for students with both high- and low-incidence disabilities (Maggin et al., 2011). PRS is a great way to encourage students to perform at higher standards academically and behaviorally. Furthermore, the flexibility of PRS lends itself to be used in conjunction with other interventions such as the CICO system. Although the use and efficacy of

these interventions have been examined separately, the current study seeks to fill a gap in the literature by combining both interventions; an area that has been unexplored in the educational research field.

Direct behavior rating. When working with students with problem behaviors it is important to obtain precise data to better comprehend student behavior. Published research based on surveys of school psychologists suggest that interviews, rating scales, and Systematic Direct Observations (SDOs) are the most frequently used methods of assessment for classroom-based behavior problems; however, those methods each lack characteristics that facilitate problem solving (Christ et al., 2011). Direct Behavior Rating (DBR) is a hybrid method of assessment that combines characteristics of both Systematic Direct Observation and behavior rating scales (Christ et al., 2011). DBR data is collected at the time and place that behavior occurs, which is consistent with SDO, but data are generated using a rating scale format by those persons naturally occurring in the context of interest (Christ et al., 2011). DBR provides a standardized method for teachers to record their evaluations to identify, define, and monitor classroom behavior problems.

Method

Purpose

The focus of this study will be to reduce disruptive classroom behaviors in the general education setting for students with Emotional and Behavioral Disabilities (EBD) through a fusion of the CICO system (Campbell & Anderson, 2011) and the Point Rewards System (Cancio & Johnson, 2007). Studies in the past have closely examined the effects of the CICO and Point Rewards Systems separately (Campbell & Anderson, 2011; Cancio & Johnson, 2007), but not many have incorporated a fusion of both interventions. By incorporating both interventions

to reduce negative behaviors, this study aims to allow students with EBD to take part and benefit from the general education setting in the least restrictive environment.

Research Question

Does the implementation of a CICO system combined with a class wide Point Rewards System reduce disruptive behaviors for middle school students with EBD?

Hypothesis

Based on prior research examining CICO (Campbell & Anderson, 2011) and Point Rewards Systems (Cancio & Johnson, 2007), I hypothesize that the implementation of a combined a CICO and Point Rewards System will reduce the occurrence of disruptive behaviors among students with EBD in the general education setting.

Research Design

In this study, a single case study AB design was used to determine the impact of the CICO and PRS on decreasing disruptive behaviors of students with EBD in the general education setting. Disruptive behaviors can be described as student actions that interrupt regular school or classroom activity (Chafouleas, 2011). Examples of disruptive behaviors are students out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction (Chafouleas, 2011). Phase A, established the baseline for the percentage of time each student demonstrated disruptive behaviors within each observational period by collecting sufficient data points in order to reach stability. Stability was reached when every student was within plus or minus 30 percent of total disruption time from each data point. Only once baseline performance was stabilized for every individual student, then students entered Phase B, the intervention. Since the intervention was class wide, it was important for

students to start all at once. Observational periods remained consistent throughout the baseline and intervention phase as each occurred during the same instructional period, teacher, and time of day.

Independent variable. The independent variable in this study was the use of the CICO/Point Reward System. The intervention aimed to diminish inappropriate disruptive classroom behaviors in students with EBD. The target was to provide students with more frequent and structured access to positive consequences contingent on the demonstration of appropriate behavior (Maggin, Zurheide, Pickett, & Baillie, 2015). The intervention was composed of two components. The CICO system is implemented as a way to keep track of daily academic performance and behavior. The CICO was designed for students who exhibit non-dangerous problem behavior during academic routines (Campbell & Anderson, 2011). The daily points of the CICO scores were transferred and recorded into the class wide PRS. In the PRS students have the ability to earn rewards based of the number points they have accumulated over time as an incentive for doing well.

Dependent variable. The dependent variable in this study is the disruptive behaviors students display. For this study, the operational definition of student disruption is student actions that interrupt regular school or classroom activity (Chafouleas, 2011). Examples of these disruptive behaviors are out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction. For observational purposes, disruption will be measured by the percentage of time the student participates in disruptive behaviors within that fifteen-minute observational period.

Setting & Participants

This study took place in a middle school in central California. The middle school system in this district is composed of grades seven and eight. During the 2014-2015 school year, there were 1,152 students enrolled, with a teacher to student ratio of 25:1. Of these students, 85% self-identified as Hispanic/Latino, 10% as White/Caucasian, 3% as Asian (not Hispanic), 1% as African American, and 1% as Multiracial (CALPADS, 2015).

The classroom setting was a Therapeutic Intervention Program (TIP). TIP is a partially self-contained special education program designed for students with emotional and behavioral needs that provides academic instruction, behavioral support and therapeutic techniques to ensure academic and developmental success. The class was composed of six students, one teacher, and two paraprofessionals. Every student in this classroom qualified for special education services through an EBD diagnosis. Students in the classroom displayed behavior that impeded their learning to a certain extent. Students in this program may attend general education classes on a regular basis. Some of these students whose behavior is not fit for the general education setting only attend a limited amount of general education classes. Some of the negative student behaviors that impact learning were disruption, defiance, aggression, elopement, and disrespect towards peers and adults.

Jesse. Jesse is a Mexican-American male student enrolled in the TIP. He is 12 years old and currently in the seventh grade. Jesse qualifies for special education under Emotional Disturbance. He was identified with ED back in 2015 when he was assessed due to severe challenging behaviors. When faced with a non-preferred tasks Jesse can become defiant, disruptive, and verbally aggressive.

Kobe. Kobe is a Mexican-American male student enrolled in TIP. He is 14 years old and currently in eighth grade. Kobe qualifies for special education under a primary disability of Emotional Disturbance and a secondary disability of Specific Learning Disability (SLD). Kobe has a long history of Special Education qualification that dates back when he was five years old. Kobe has difficulties with controlling his emotions, is often aggressive towards students, and has trouble following adult directions.

Brandon. Brandon is a Mexican American male student in TIP. He is 13 years old and in the seventh grade. Brandon qualifies for special education under a primary disability of Emotional Disturbance and a secondary disability of Speech and Language Impairment. Brandon first qualified for special education services when he was five years old, five years later his primary disability became ED. Brandon displays impulsive behaviors like disruption, defiance, and elopement. He has difficulties controlling his actions and sometimes behaves aggressively towards other students.

Robert. Robert is a Mexican American male student in TIP. He is 13 years old and in the seventh grade. Robert qualifies for special education under a primary disability of Specific Learning Disability. He does not have an Emotional Disturbance diagnosis but was placed in TIP due to a one-time incident he was incarcerated for. He is currently being assessed for Emotional Disturbance. Robert does not display any challenging behaviors; he controls his emotions well and gets along with other students. Robert was just recently diagnosed with Attention Deficit Disorder and is receiving medication.

Andrew. Andrew is a Mexican-American male student in the TIP program. He is 13 years old and in the eighth grade. Andrew qualifies for special education under a primary

disability of Emotional Disturbance that dates back to when he was nine years old. Andrew has extreme difficulties controlling his emotions and is easily irritable. When he loses his temper he engages in foul language, property destruction, defiance, and aggressive physical behaviors towards peers and staff.

Measures

To measure the effect of CICO/Point Rewards System on student classroom disruption this study utilized a modified Direct Behavior Rating (DBR) form. The DBR uses interval scales to measure the percentage of total time the student exhibited disruption for that observational period. In addition, the measure uses a 10-point Likert scale (e.g., 1 = never to 10 = always) to assess the frequency of the targeted behavior. DBR's combine the advantages of Systematic Direct Observation (SDO) and behavior rating scales as an efficient method of progress monitoring of behavior (Filter & Alvarez, 2012). DBR's are very practical in use due to their properties of efficiency, flexibility, and repeatability while the technical properties include reliability, validity, and directness (Filter & Alvarez, 2012).

Validity. The validity of the modified DBR form is largely related to the fact that the behavior rated is the behavior of interest, rather than the combination of many specific behaviors combined to create an abstract category (Filter & Alvarez, 2012). In addition, DBR's correlate significantly with SDO from the same behaviors observed by the same raters (Filter & Alvarez, 2012). The correspondence between DBR and SDO have demonstrated a fair-to-moderate relationship (average $r = .67$ in Chafouleas, McDougal, Riley-Tillman, Panahon, & Hilt, 2005; average $r = .87$ in Riley-Tillman, Chafouleas, Sassu, Chanese, & Glazer, 2008), which contributes to the validity of DBR scores and interpretations (Christ, Nelson, Van Norman,

Chafouleas, & Riley-Tillman, 2014). The validity of DBR forms directly influences its reliability.

Reliability. The definition of disruptive behavior was clearly outlined and defined on the modified DBR form, making it easy for the researcher to train all members of the research team to use the same behavior definition for every student whose behavior was being monitored. In addition, all three members of the research team took the Direct Behavior Rating Training to ensure reliability through consistency in data collection. To ensure inter-rater reliability among the three researchers collecting data, the primary researcher collects data 20 % of the time under both baseline and intervention conditions. In addition, both fifteen-minute observation sessions were done by the same researcher and took place within the same academic period, same time of the day, and the same academic teacher for every individual student. This process was repeated during the baseline and intervention stage. Inter-rater reliability data was collected and compared for approximately 20% of all trials to ensure that inter-rater agreement of a minimum of 80% was obtained, a percentage adequate for educational research (Graham, Milanowski, & Westat, 2012). Upon data analysis, inter-rater agreement for this study was measured at 80%.

Intervention

The intervention was composed of two parts. First part was the modified CICO system. The CICO system was implemented with the use of a CICO card (See Appendix B) that students took around to every one of their classes for their teachers to fill out after the class was over. On the card, teachers graded students based on that day's performance on a scale of 1-3 in the areas of being safe, responsible, and respectful. Students were able to earn a total of nine points per period and a total of 54 points per day for their six periods. In addition, the CICO card also include a section in which teachers can comment on positive or negative behaviors in class. The

CICO card was collected at the end of the day by researcher and the points were totaled for the day. The second part of the intervention was the PRS. The PRS will transfer the total points earned from the CICO cards and reward students after meeting a designated number of points. For example, students who reached 200 points have the option of buying a front of the line lunch pass for a week or students may choose to wait to cash out their rewards for something much more preferred, like lunch with their favorite teacher or school staff.

Procedures

Subjects participated in a four week long two-phase study. Phase A representing baseline and Phase B representing the intervention. Data was collected using modified DBR forms focusing on the percentage of total time the student exhibited disruptive behaviors within that observational period. During the intervention phase both interventions the CICO and PRS will be implemented with consistency and fidelity. Before intervention was implemented students were given an informational session in which they were introduced and instructed on the CICO process and PRS.

To implement the intervention, students will be given a CICO card at the beginning of every day that they will take with them to every period. After the period is over the student will take the CICO card to their teacher. The teacher will assign the student a score of 1-3 in the categories of being safe, being respectful, and responsible. At the end of the day, students will take the CICO card to the researcher for points to be totaled and accounted for in the class wide PRS. Daily points will be recorded and added to the Point Rewards where students have access to see throughout the day in the classroom.

Data collection. Data was collected through a modified DBR form by the researcher and two DBR trained paraprofessionals. The DBR form has been modified for the purpose of only measuring disruption as a target behavior. The modified DBR form uses interval scales to measure the percentage of total time the student exhibited disruptive behaviors for that 15-minute observational period. Observational sessions consisted of two 15 minute observational periods due to 15 minutes being roughly the cognitive load of a middle school student. This will also assist in collecting multiple data points since multiple data points are needed to obtain adequate reliability (Chafouleas, 2011). To accurately measure disruption periods researchers used a timer. Researchers activated the stopwatch as soon as the student was out of seat, fidgeting, playing with objects, acting aggressively, and talking/yelling about things that are unrelated to classroom instruction. Timer was deactivated as soon as the student stopped exhibiting disruptive behaviors. Data from both daily observational periods were collected and logged in to be analyzed.

Fidelity. To ensure fidelity, paraprofessionals that collected data, also serve as the second independent observers for 20% of the time during observation periods in the general education setting. Second observers will also verify that the teachers and participants implement intervention instructions as specified. In addition, to make sure that the fidelity of the experiment is being kept, a fidelity checklist will be used to make sure both observers are consistent with their observations (see Appendix C).

Ethical Considerations

To ensure ethical principles of research are followed and taken into consideration, the researcher abided by the Economic and Social Research Council Framework for Research Ethics. The researcher ensured quality and integrity of study by eliminating any bias and taking

an objective standpoint when collecting and analyzing data. In addition, the researcher respected the confidentiality of the individual by ensuring anonymity in the research. Harm to participants was avoided at all times.

Validity threats. To minimize validity threats in personal bias the use of inter-rater observers were implemented. Inter rater observations were conducted 20% of the time during observation periods in the general education setting. To avoid discrepancies or misinterpretations of student behaviors between observers, operational definition of disruption as well as examples of target behaviors were provided directly on the DBR form (see Appendix A). In addition, all three researchers took the Direct Behavior Rating Training that also targeted biases and discrepancies when performing observations.

Social Validity

At the completion of the study, five of the student's general education teachers completed a four-point Likert scale (i.e., 1 = strongly disagree to 4 = strongly agree) social validity questionnaire (see Appendix C). The questionnaire, adapted from Berger, Manston and Ingersoll (2016), consists of seven questions designed to understand the perceived usefulness, significance and satisfaction with the implemented intervention (Kennedy, 2005). Participant responses were kept confidential and descriptive statistics were conducted to gain insights regarding the intervention.

Similar answers from the questionnaire were obtained from the five general education teachers for most of the study participants. For Jesse, Brandon, and Kobe all of the teachers strongly agreed or agreed that the intervention was effective. In addition, they also strongly agreed that the intervention decreased student disruption frequency and improved students

overall performance in class. Some of the differences noted among the three teachers were in the questions; “I would strongly suggest the use of this treatment to other individuals,” and “ I think that the students skills would remain at an improved level even after the interventions ends.” In these two questions, results varied from disagree to strongly agree.

For Andrew and Robert the social validity questionnaire results had more variance. When rating interventions effectiveness, one teacher agreed while the other disagreed. Even though they both found the intervention to be useful for other individuals they did not agree on the intervention improving the overall classroom performance. Both teachers found the intervention acceptable for decreasing students’ disruption frequency when in the general education environment.

Proposed Data Analyses

All data pertaining to an observational period will be collected and entered into Excel Sheets. Data collected on disruptive behavior was individually analyzed for every student for the purpose of measuring the individual effect of the intervention. Individual line graphs of baseline and intervention phases were created and visual analysis of the data was conducted.

Results

Data for each study participant was represented through an individual line graph (see Figures 1, 2, 3, 4, and 5). The horizontal x-axis displays the observation session number in chronological order. The vertical y-axis displays the percent of time the participant exhibited disruptive behaviors within the 15-minute observational period.

Jesse. Over the course of the baseline phase, Jesse’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 62 %. His range for the

percentage of time exhibiting disruptive behaviors in the baseline phase was 45% to 82%. In the intervention phase, Jesse’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 26%, decreasing by 36% from the baseline phase. His range for the percentage of time exhibiting disruptive behaviors in the intervention phase was 14% to 48% (see Figure 1).

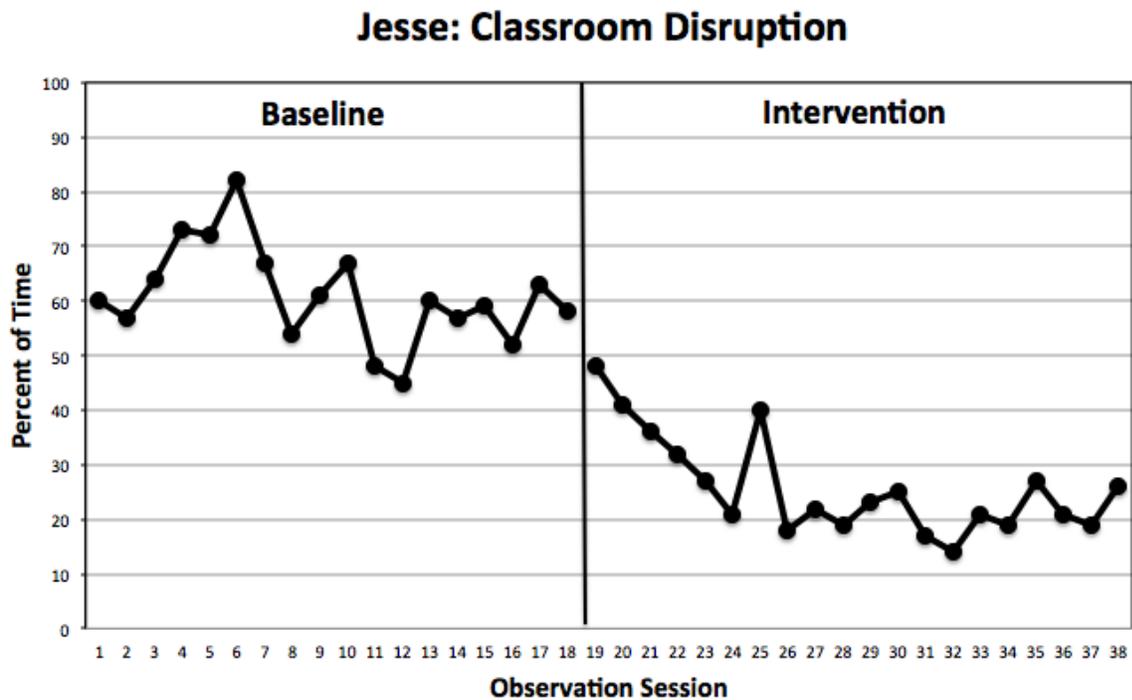


Figure 1. The graph depicts Jesse’s percent of time exhibiting disruptive behaviors in baseline and intervention phases.

Brandon. Over the course of the baseline phase, Brandon’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 49 %. His range for the percentage of time exhibiting disruptive behaviors in the baseline phase was 30% to 67%. In intervention phase, Brandon’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 27%, decreasing by 22% from baseline phase. His range

for the percentage of time exhibiting disruptive behaviors in the intervention phase was 15% to 40% (see Figure 2).

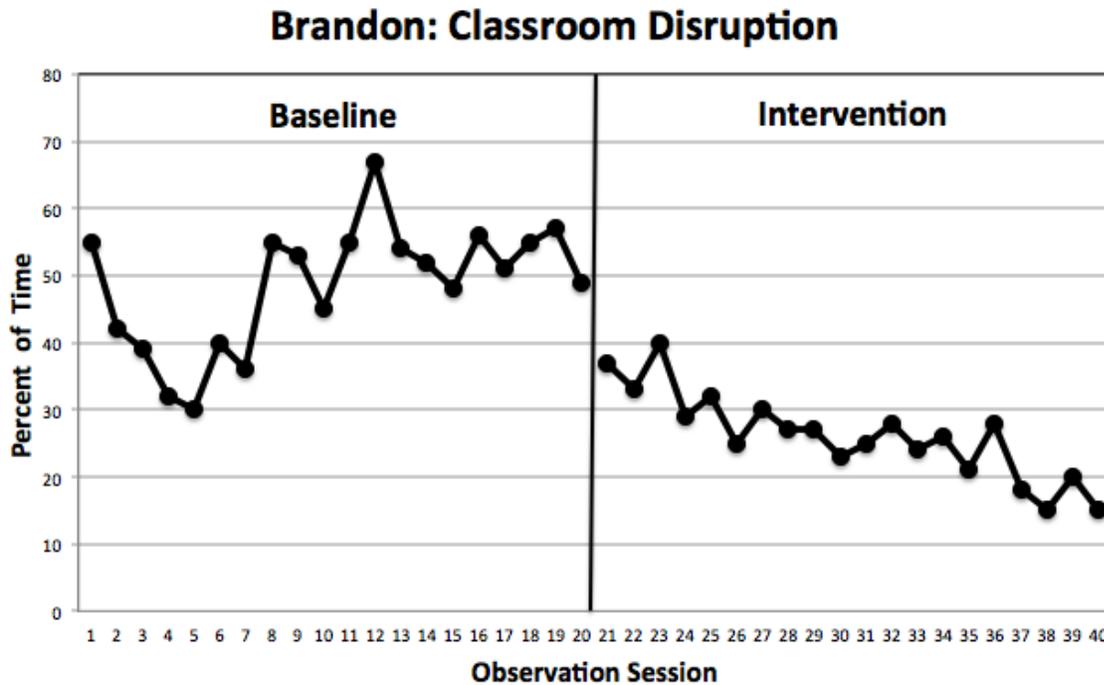


Figure 2. The graph depicts Brandon’s percent of time exhibiting disruptive behaviors in baseline and intervention phases.

Kobe. Over the course of the baseline phase, Kobe’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 49 %. His range for the percentage of time exhibiting disruptive behaviors in the baseline phase was 14% to 76%. In intervention phase, Kobe average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 18%, decreasing by 31% from baseline phase. His range for the percentage of time exhibiting disruptive behaviors in the intervention phase was 10% to 26% (see Figure 3).

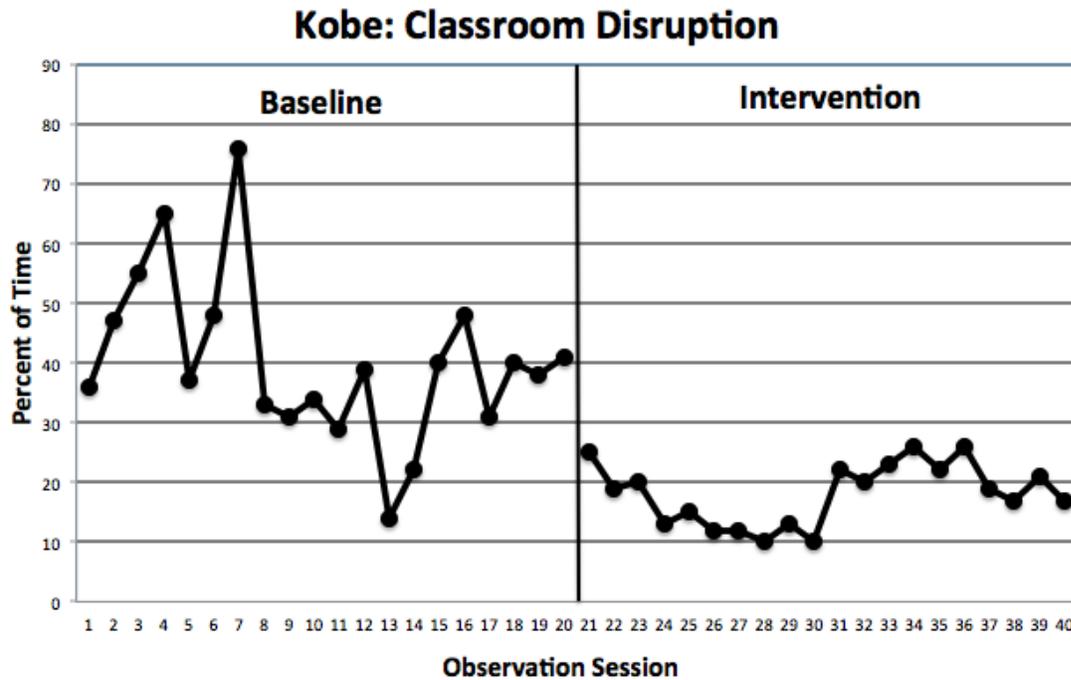


Figure 3. The graph depicts Kobe’s percent of time exhibiting disruptive behaviors in baseline and intervention phases

Andrew. Over the course of the baseline phase, Andrew’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 38 %. His range for the percentage of time exhibiting disruptive behaviors in the baseline phase was 14% to 64%. In intervention phase, Andrew’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 26%, decreasing by 12% from baseline phase. His range for the percentage of time exhibiting disruptive behaviors in the intervention phase was 15% to 40% (see Figure 4).

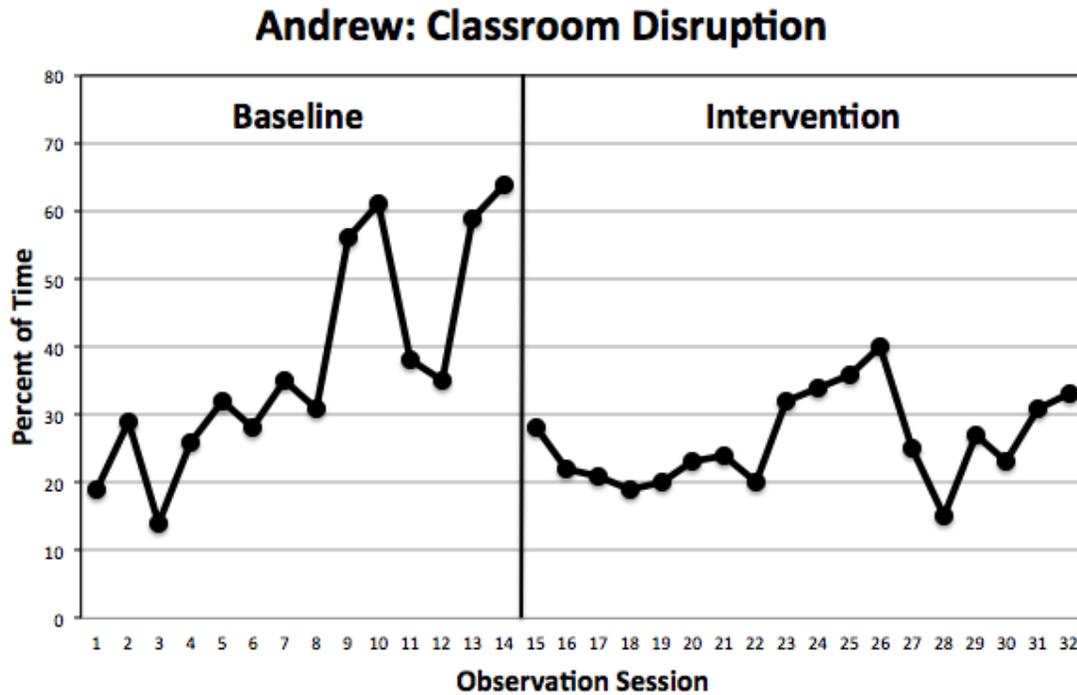


Figure 4. The graph depicts Andrew’s percent of time exhibiting disruptive behaviors in baseline and intervention phases.

Robert. Over the course of the baseline phase, Robert’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 12 %. His range for the percentage of time exhibiting disruptive behaviors in the baseline phase was 0% to 22%. In intervention phase, Brandon’s average percent of time exhibiting disruptive behaviors within the 15-minute observational period was 4%, decreasing by 8% from baseline phase. His range for the percentage of time exhibiting disruptive behaviors in the intervention phase was 0% to 10% (see Figure 5).

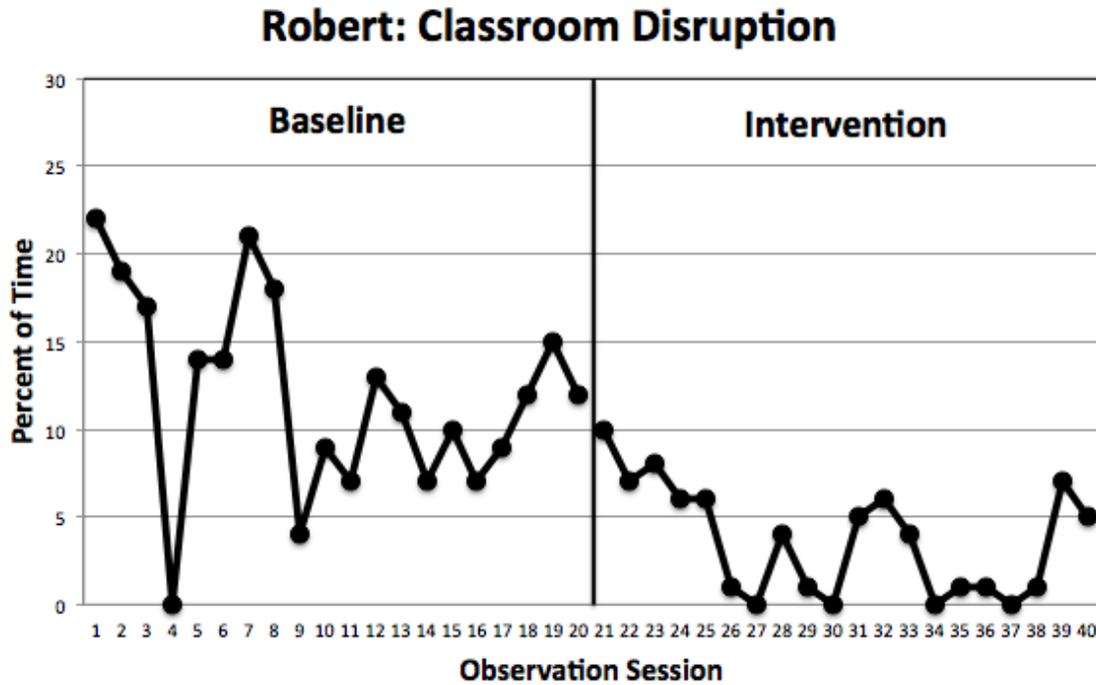


Figure 5. The graph depicts Robert’s percent of time exhibiting disruptive behaviors in baseline and intervention phases.

Discussion

This study was designed to determine the impact of the CICO and PRS on decreasing disruptive behaviors of students with EBD in the general education setting. Based on prior research examining CICO (Campbell & Anderson, 2011) and PRS (Cancio & Johnson, 2007), the hypothesis stated that the implementation of a combined a CICO and PRS will reduce the occurrence of disruptive behaviors among students with EBD in the general education setting. Results from this study revealed that the CICO and PRS interventions might be helpful to reduce disruptive behaviors for some students with EBD in the general education setting.

In the case of Jesse and Brandon, data revealed a decreasing trend in the percentage of classroom disruption per observational period. The immediacy and consistency of the decrease in percentage following intervention shows that there was a functional relationship between CICO

and PRS and the decrease of disruption percentage for Jesse and Brandon. Furthermore, Jesse had 95% non-overlapping data indicating that the intervention was highly effective. In addition, his range in percentage of time exhibiting disruptive behavior decreased from 45-82 in baseline to a lower range of 14-48 in intervention phase. Brandon's percentage of non-overlapping data was 75%, classifying the intervention as moderately effective. His range in percentage of time exhibiting disruptive behavior decreased from 30-67 in baseline to 15-40 in intervention; thus, providing further evidence of the effectiveness of the intervention.

In the case of Kobe, Robert, and Andrew data does not establish any particular trend and percentage of non-overlapping data is very low for all three. Nonetheless, the data for all three demonstrates a decrease in the range indicating the disruptive behavior became less and was more stable and predictable. Kobe's range in the baseline phase went from a 14-76 to 10-26 in intervention phase. Even though his percentage of non-overlapping data was 30%, a decrease in range indicates effectiveness of the intervention. A lower range in data is favorable as it not only signifies a lower average percentage of disruption time, but also stabilizes data making performance more predictable. Although Robert had a low percentage of non-overlapping data, 0%, the range between data points decreased by more than half from 0-22 to 0-10. This decrease in range also indicates a lower average percentage of disruption time and stability in behavior. The case was also similar for Andrew as his percentage of non-overlapping data was also 0% and similarly demonstrated a decrease in range and average of data. Andrew's average percentage of disruption went from a 38% in baseline to a 26% in intervention. His range also decreased from phase to phase as it went from 14-64 in baseline to 15-40 in intervention. The reason for the low percentages of non-overlapping data is likely because of the variance of behavior these three students demonstrated during the baseline phase.

Similar to the Campbell and Anderson (2002) and Cancio and Johnson (2007) studies, a positive functional relationship between the use of CICO and PRS as behavior interventions and reduction of disruptive behaviors in students with EBD was existent in this study. Jesse, Brandon, Kobe, Robert, and Andrew all demonstrated a decrease of disruption time when in the general education environment. From baseline to intervention phase all participant's average and range decreased indicating the intervention had an impact on the reduction of disruptive behaviors. Similar to the Maggin, Chafouleas, Goddard, and Johnson (2011) study a noticeable increase in academic engagement and work completion was also noted in this study. When students were being less disruptive they were in turn being more productive and engaged in classroom activities.

Limitations and Directions for Further Research

One limitation for this study is the use of a small sample size. The use of a larger sample size is favorable, as it would closer represent the population. Small sample sizes run a greater risk of being unusual and non-representative of the overall population. Another limitation includes the use of convenience sampling, rather than the use of random sampling. Convenience sampling is not favorable as it does not produce a representative result and is difficult to replicate for future studies. Another limitation in this study was the restricted timeframe. Extended time in studies allow for more data and observations to be collected adding to the reliability of data. Additional limitations in this study were participant absences. Jesse was absent one day during baseline phase. Andrew was absent four days, two in baseline phase and two in intervention phase. Study participant absences caused a break in the data and created the possibility for confounding variables to influence the participants in this study.

Future studies in this area can benefit from using larger sample sizes, random sampling, and an extended period of time for research, as these specifications are more favorable and beneficial in studies. Based on student observation in reaction to the intervention, further research in this area should not only look at reducing disruptive behaviors but also measure the increase of academic engagement in functional relationship to the intervention. Lastly, future studies can also benefit from longer periods of observations. Fifteen-minute observation periods are easier when collecting data but longer periods of observation mirror a typical middle school class period and can be more representable of student behavior during those periods of time.

In conclusion, in this study, the use of CICO and PRS as a behavior intervention demonstrated a reduction in disruptive behaviors, though more research is needed in the area. As shown, individuals with EBD have difficulty coping with everyday classroom expectations and can often result in disruptions of academic sessions. With a decrease in classroom disruption students with EBD can fully participate in the general education environment and take full advantage of the academic session

References

- Berger, N. I., Manston, L., & Ingersoll, B. (2016). Establishing a scale for assessing social validity of skill building interventions for young children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *46*, 3258-3269. doi: 10.1007/s10803-016-2863-9
- Campbell, A., & Anderson, C. M. (2011). Check-in/check-out: A systematic evaluation and component analysis. *Journal of Applied Behavior Analysis*, *44*(2), 315-326. doi:10.1901/jaba.2011.44-315
- Cancio, E. J., & Johnson, J. W. (2007). Level systems revisited: An important tool for educating students with emotional and behavioral disorders. *International Journal of Behavioral Consultation and Therapy*, *3*(4), 512-527. doi:10.1037/h0100820
- Chafouleas, S. M. (2011). Direct behavior rating: A review of the issues and research in its development. *Education and Treatment of Children*, *34*(4), 575-591.
- Christ, T. J., Nelson, P. M., Van Norman, E. R., Chafouleas, S. M., & Riley-Tillman, T. (2014). Direct behavior rating: An evaluation of time-series interpretations as consequential validity. *School Psychology Quarterly*, *29*(2), 157-170.
- Christ, T. J., Riley-Tillman, T. C., Chafouleas, S., & Jaffery, R. (2011). Direct behavior rating: An evaluation of alternate definitions to assess classroom behaviors. *School Psychology Review*, *40*(2), 181-199.
- Filter, K. J., & Alvarez, M. (2012). *Functional behavioral assessment: A three-tiered prevention model*. New York: Oxford University Press.

- Graham, M., Miller, J., & Milanowski, A. (2012). *Measuring and Promoting Inter-Rater Agreement of Teacher and Principal Performance Ratings*. Center for Educator Compensation Reform.
- Hicks-Monroe, S. L. (2011). A review of research on the educational benefits of the inclusive model of education for special education students. *Journal of The American Academy of Special Education Professionals*, 61-69.
- Hunter, W. C., Barton-Arwood, S., Jasper, A., Murley, R., & Clements, T. (2017). Utilizing the PPET Mnemonic to Guide Classroom-Level PBIS for Students With or at Risk for EBD Across Classroom Settings. *Beyond Behavior*, 26(2), 81-88.
doi:10.1177/1074295617711398
- Johnson-Harris, K. M., & Mundschenk, N. A. (2014). Working Effectively with Students with BD in a General Education Classroom: The Case for Universal Design for Learning. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 87(4), 168-174.
doi:10.1080/00098655.2014.897927
- Kennedy, C. H. (2005). *Single-case designs for educational research*. Boston, MA: Allyn and Bacon.
- Lane, K. L., Pierson, M. R., Stang, K. K., & Carter, E. W. (2009). Teacher Expectations of Students' Classroom Behavior. *Remedial and Special Education*, 31(3), 163-174.
doi:10.1177/0741932508327464
- Maggin, D. M., Chafouleas, S. M., Goddard, K. M., & Johnson, A. H. (2011). A systematic evaluation of token economies as a classroom management tool for students with

challenging behavior. *Journal of School Psychology, 49*(5), 529-554.

doi:10.1016/j.jsp.2011.05.001

Maggin, D. M., Zurheide, J., Pickett, K. C., & Baillie, S. J. (2015). A Systematic Evidence Review of the Check-In/Check-Out Program for Reducing Student Challenging Behaviors. *Journal of Positive Behavior Interventions, 17*(4), 197-208.

doi:10.1177/1098300715573630

McCurdy, B. L., Thomas, L., Truckenmiller, A., Rich, S. H., Hillis-Clark, P., & Lopez, J. C. (2016). School-wide positive behavioral interventions and supports for students with emotional and behavioral disorders. *Psychology In The Schools, 53*(4), 375-389.

doi:10.1002/pits.21913

McCarty, K. (2006). Full inclusion: The benefits and disadvantages of inclusive schooling: An overview. California: Azusa Pacific University.

Rudolph, K. D., Lambert, S. F., Clark, A. G., & Kurlakowsky, K. D. (2001). Negotiating the transition to middle school: The role of self-regulatory processes. *Child Development, 72*(3), 929-946. doi:10.1111/1467-8624.00325

Simonsen, B., & Sugai, G. (2013). PBIS in alternative education settings: Positive support for youth with high-risk behavior. *Education & Treatment Of Children, 36*(3), 3-14.

Simpson, R. L., (2004). Inclusion of students with behavioral disorders in general education settings: Research and measurement issues. *Behavioral Disorders, 30*(1), 19-31.

Sims, W. A., Riley-Tillman, C., & Cohen, D. R. (2017). Formative assessment using direct behavior ratings: evaluating intervention effects of daily behavior report cards.

Assessment for Effective Intervention, 43(1), 6-20. doi:10.1177/1534508417708183

Stage, S. A. (1997). A preliminary investigation of the relationship between in-school suspension and the disruptive classroom behavior of students with behavioral disorders. *Behavioral Disorders* , 23(1), 57-76. doi:10.1177/019874299702300105

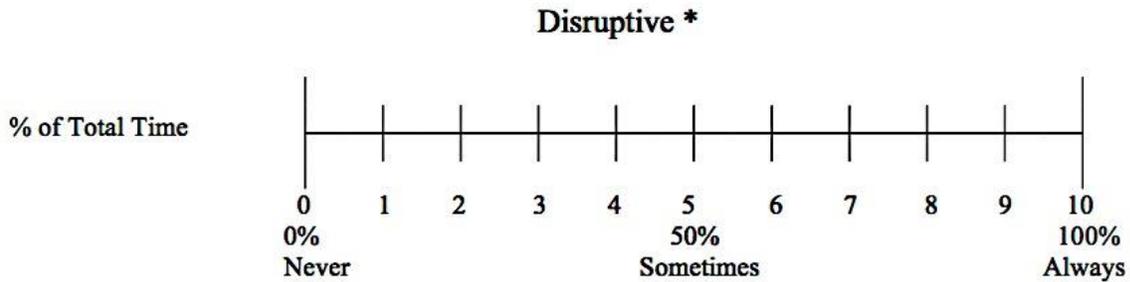
Ysseldyke, J., Scerra, C., Stickney, E., Beckler, A., Dituri, J., & Ellis, K. (2017). Academic growth expectations for students with emotional and behavior disorders. *Psychology in the Schools*, 54(8), 792-807. doi:10.1002/pits.22030

Appendix A

Direct Behavior Rating (DBR) Form: 3 Standard Behaviors

Date: M T W Th F	Student:	Activity Description:
	Rater:	
Observation Time: Start: _____ End: _____ <input type="checkbox"/> Check if no observation today	Behavior Descriptions: Disruptive is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

Directions: Place a mark along the line that best reflects the percentage of total time the student exhibited the target behavior. Note that the percentages do not need to total 100% across behaviors since some behaviors may co-occur.



*** Remember that a lower score for "Disruptive" is more desirable.**

V1.4 DBR Standard Form was created by Sandra M. Chafouleas, T. Chris Riley-Tillman, Theodore J. Christ, and Dr. George Sugai.

Copyright © 2009 by the University of Connecticut.

All rights reserved. Permission granted to photocopy for personal and educational use as long as the names of the creators and the full copyright notice are included in all copies. Downloadable from www.directbehaviorratings.org.

Appendix B



STAR CARD (Students Track Awesome Results)
Check In/Check Out (CICO) Daily Progress Report

Student Name: _____ ID: _____ Date: _____ CICO Coordinator: _____

Daily Goal: 44 Points (80%) 46 points (85%) 49 points (90%)

3 = Great Day 2 = Good (Minimal challenges in class) 1 = Needs Improvement (major challenges in class)

Period	Safety	Respect	Responsibility	Total Points	Initials	Optional Comment(s) (Positives and if challenges, please share what needs to be improved)
1	3 2 1	3 2 1	3 2 1	___/9		
2	3 2 1	3 2 1	3 2 1	___/9		
3	3 2 1	3 2 1	3 2 1	___/9		
4	3 2 1	3 2 1	3 2 1	___/9		
5	3 2 1	3 2 1	3 2 1	___/9		
6	3 2 1	3 2 1	3 2 1	___/9		
Daily Total				___/54		

CICO Coordinator Signature : _____ Parent/Guardian Signature: _____

Appendix C

Social Validity Questionnaire

Questions:		1 Strongly disagree	2 Disagree	3 Agree	4 Strongly Agree
1	This intervention was effective				
2	I found this intervention acceptable for decreasing students disruption frequency				
3	Using the intervention improved overall classroom performance (academically engagement and respectful)				
4	I think the student's skills would remain at an improved level even after the intervention ends				
5	This intervention improved student performance in class				
6	This intervention quickly improved the student's skills				
7	I would suggest the use of this treatment to other individuals				