

March 2019

Using Class Pass Intervention (CPI) to Decrease Disruptive Behavior in Children

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Using Class Pass Intervention (CPI) to Decrease Disruptive Behavior in Children

by

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A thesis defense submitted in partial fulfillment
of the requirements for the degree of
Master of Science
Applied Behavior Analysis
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University of South Florida

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Date of Approval:
February 19, 2019

Keywords: academic engagement, multiply-maintained behaviors, negative reinforcement,
positive reinforcement

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Dedication

These two years pursuing my degree and conducting this research is dedicated to my mom and grandmother who have taught me the meaning of love and perseverance. I would not have made it this far without their sacrifices and without their support. I also want to thank my husband for his love and support as I pursued my career, and for making me laugh even when I wanted to cry. To my family and friends who cheered me on and believed in me, you're very much appreciated.

I am beyond thankful to God for blessing me with such a wonderful team and guiding me the whole way through!

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Abstract

Finding of previous research has shown that disruptive behavior can impair students' academic success (Pierce, Reid, & Epstein, 2004), as well as increase teacher's stress level (Westling, 2010). Class Pass Intervention (CPI) is a Tier 2 intervention designed to decrease disruptive behavior and increase academic engagement, however, thus far research on the effects of CPI has been limited to typically developing elementary and high school students with escape and attention-maintained problem behaviors. Therefore, the purpose of this study was to replicate and extend previous research on the effects of CPI on problem behavior and academic engagement however with students whose problem behavior was multiply-maintained. The study used a multiple baseline design to assess experimental control. In the current study, CPI led to a decrease in problem behavior and increase in academic engagement for two students with ADHD and one student at risk of ADHD, all of whom engaged in problem behavior maintained by escape, access to attention, or both. In addition, results of a social validity assessment completed with teachers and students indicated that the intervention was effective and easy, respectively.

Keywords: academic engagement; positive reinforcement; negative reinforcement

Introduction

Classroom related disruptive behaviors are problematic for both students and teachers. In fact, 8 to 12% of elementary school students suffer from hyperactivity, impulsivity, and/or inattention (Owens, Holdaway, Zoromski, Evans, Himawan, 2012). In addition, research has shown that childhood disruptive behavior is associated with adolescent delinquency (Broidy et al., 2003), adolescent and adult criminality (Farrington, 1994; Fergusson & Horwood, 1995), and higher levels of unemployment due to poor academic skills (Pierce, Reid, & Epstein, 2004). Additionally, children with disabilities have shown worse behavioral, social and low academic performance and are more likely to engage in disruptive behaviors compared to children without disabilities (Owens et al., 2012; Pierce, Reid, & Epstein, 2004). Children with disabilities (e.g., ADHD) are 2.5 times more likely to engage in off-task behaviors compared to typically developing students, and off-task behavior impedes their learning (Vile-Junod, DuPaul, Jitendra, Volpe, & Cleary, 2006). Disruptive behavior is also the most common reason students are referred for mental health services from preschool to adolescence (Owens et al., 2012).

Students with disruptive behaviors also pose a real challenge for teachers in public schools. For instance, disruptive behavior affects the student's peers and the teacher's stress level (Westling, 2010). Westling (2010) note that both general education and special education teachers report that students' disruptive behavior requires a great deal of their time, reduces their effectiveness as teachers, and inhibits the learning of the student's peers. Furthermore, disruptive behavior is the most predominate contributor to teacher burnout (Owens, Holdaway, Zoromski,

Evans, Himawan, 2012), and teachers report that they have not been sufficiently prepared, nor have the adequate support available to address challenging behavior (Sugai, Sprague, Horner, & Walker, 2000; Van Acker, 1993; Westling, 2010).

To address these issues, many schools have implemented Positive Behavioral Interventions and Supports (PBIS), also regarded as Multi-tiered systems of support (MTSS) (Horner, Sugai, Lewis-Palmer, & Todd, 2001; Lewis & Sugai, 1999; Sugai & Horner, 2002; 2006; 2009). This educational framework uses a three-tier model that is selected based on the students' needs. The first tier includes procedures that reflect school-wide expectations for student behavior and are paired with pre-planned strategies that are applied within the classroom (Horner & Sugai, 2015). Tier 1 is designed as a proactive measure before problem behaviors begin. Tier 1 provides a universal support to all students and has helped prevent problem behavior in 80-85% of the school population simply by promoting a safe and orderly school environment that is conducive to learning (Andreu & Blair, 2017). The first tier is individualized by the school's needs, and they determine their targeted and appropriate behaviors based on the school's values. Thus, Tier 1 meets the needs of the students by defining, teaching and reinforcing those desired behaviors expected by the school before the students can engage in problem behavior (Horner & Sugai, 2015; Iovannone, et al., 2009).

Approximately 10 to 15% of the students however may require additional support and therefore receive Tier 2 interventions (Horner & Sugai, 2015). These are moderately intensive interventions that address the student's specific behavioral problems that interfere with their social and academic success (Horner & Sugai, 2015; Yong & Cheney, 2013). In addition, they are relatively fast, immediately accessible, cost effective, and may not require a functional behavior assessment (Andreu & Blair, 2017). Tier 2 interventions still reflect the school-wide expectations

for student behavior, but it also addresses the ongoing behavioral issues of groups of students with similar behavior problems or behaviors that seem to occur for the same reason (Horner & Sugai, 2015). Tier 2 interventions might include Check and Connect (Anderson, Christenson, Sinclair, & Lehr, 2004; Evelo, 1996), Check-in/Check-out (Fairbanks, Sugai, Guardino, & Lathrop, 2007), and First Step to Success (Carter & Horner, 2007). According to Sugai and Horner (2002), effective Tier 2 interventions may prevent a high number of students from needing Tier 3 interventions.

If Tier 1 and Tier 2 interventions are not efficient in addressing the student's disruptive behavior, then the student will receive Tier 3 interventions. Students meeting the need for Tier 3 interventions receive a functional behavior assessment and interventions such as Prevent-TeachReinforce (PTR; Iovannone, et al., 2009). Tier 3 interventions require more time and expertise to implement (Sugai & Horner, 2002) and require a functional behavioral assessment, individualized support plan, and implementation of function-based interventions (Horner & Sugai, 2015). Functional behavioral assessments (FBA) identify the function of the problem behavior so that an individualized treatment plan can be developed. In other words, FBAs help teachers recognize the topography of the problem behavior, triggers for problem behavior, and specific situations or routines during which the behavior is more likely to occur. FBAs can enhance student success by servicing as the basis for developing a comprehensive, effective and efficient intervention plan for that child (Horner, 1994). Tier 3 interventions have been shown to be more effective than non-function-based interventions (Ingram, Lewis-Palmer, Sugai, 2005).

Research has shown that a variety of Tier 2 and Tier 3 interventions have been effective in decreasing classroom disruptive behavior of typically developing students as well as students with a variety of disabilities such as attention deficit hyperactivity disorder (ADHD) (Forness &

Kavala, 2001), EBD (Pierce, Reid, & Epstein, 2004), and IDD (Collins, Gresham, & Dart, 2016; Melius, Swoszowski, & Siders, 2015). Examples of these interventions include token economies (Musser, Bray, & Kehle, 2001), contingency contracting (Murphy, 1988), Check-in/Check-out (CICO; Collins, Gresham, & Dart, 2016), and Check and Connect (Anderson, Christenson, Sinclair, & Lehr, 2004; Evelo, 1996). Despite research supporting the efficacy of the various Tier 2 and Tier 3 interventions, at times these are not properly adapted or consistently implemented (Walker, 2004). Factors that may impact the selection and implementation of these interventions include the required resources for establishing the intervention as well as maintaining the intervention. For instance, Check and Connect, and CICO, both examples of Tier 2 interventions, require that the teacher provide the student with direct instruction on the target skills, prompt the student to engage in the target skills, arrange the environment so the student has opportunities to practice the skills, and provides feedback to students (Anderson & Borgmeier, 2010). Thus, these interventions may not be very time and/or resource efficient, and thus difficult for teachers to implement.

To address some of the limitations of Tier 2 interventions noted above, Cook and colleagues (2014) designed the Class Pass Intervention (CPI). This intervention is based on the Bedtime Pass which consists of giving the child access to a specific number of passes (i.e., card with the child's name) that can be exchanged for leaving the bedroom after bedtime or saved until the morning and exchanged for a reinforcer. The Bedtime Pass has been found to reduce bedtime problem behavior, including crying and coming out of bed and research suggest that parents like it (Frimen et al., 1999). Like the Bedtime Pass, CPI consists of giving passes to students and these passes can be used to take a break from instructional time or saved and then exchanged for a reinforcer at the end of the instructional time (Cook et al., 2014). Therefore, CPI includes both

negative and positive reinforcement components and gives students autonomy to choose when and whether they want to use their passes.

The effects of CPI on disruptive behavior and academic engagement have been evaluated by a limited number of researchers. For instance, Cook and colleagues (2014) investigated the effects of CPI on the disruptive behavior and academic engagement of three typically developing elementary school students. They found that CPI resulted in reductions in disruptive behavior and increases in academic engagement for all three students. For one participant, an ABAB design was employed whereas for the other two participants a multiple baseline across participants was employed to demonstrate experimental control. For all the participants CPI decreased disruptive behavior and increased academic engagement.

In addition, in Cook et al. (2014) levels of disruptive behavior and academic engagement maintained for one student after passes were systemically removed and for a second student some treatment effect persisted as well, but the target responses did not remain at the same level as when 3 passes were available. Moreover, results of Cook et al. suggested that both students and teachers found CPI to be reasonable, acceptable and effective. Additional studies have evaluated the impact of CPI on the disruptive behaviors of typically developing high school students with escape-maintained problem behaviors (e.g., Collins et al., 2016) and typically developing elementary students with attention- or escape-maintained disruptive behavior (Andreu & Blair, 2017). Finally, Narozanick and Blair (2018) investigated the effects of the negative reinforcement component of CPI on escape-maintained disruptive behaviors of students with disabilities (i.e., autism; speech and language disorder). They found that the negative reinforcement component of CPI alone (using the pass to access a break) decreased disruptive behavior and increased academic engagement for all participants. This is likely because all of participants in this study

engaged in escape-maintained problem behavior, thus CPI allowed them to access a break by engaging in an appropriate response (i.e., use of pass).

In addition to the positive outcomes described above, further strengths of CPI include the fact that teachers can identify activities during which students cannot use their pass (e.g., during exams), as well as a minimum amount of time that must elapse before a student can use another pass, and can encourage students to save their passes by providing access to more preferred or bigger reinforcers for a larger number of saved passes. In addition, by systematically fading the amount of passes available, this intervention could result in further increase in academic engagement while still maintaining disruptive behaviors at low levels. Furthermore, CPI does not require many resources or extensive training, and it has been found to be effective for disruptive behavior maintained by either attention or escape (Andreu & Blair, 2017; Collins et al., 2016; Cook et al., 2014; Narozanick & Blair, 2018).

As previously noted, CPI has many strengths and has the potential to be effective in a variety of settings and with a variety of population, however it has only been evaluated with elementary and high school students, and in most cases these students were typically developing. Therefore, further research is needed to determine whether similar outcomes would be attained with other populations such as students with disabilities. Thus, the purpose of this study was to replicate and extend previous research on CPI by:

1. Evaluating the effects of CPI on the disruptive behavior and academic engagement of students with multiply-maintained problem behavior.
2. Assessing whether it was possible to systematic fade the number of passes while maintaining appropriate levels of problem behavior and academic engagement.

Chapter 1: Method

Participants

Participants included both students and teachers. Teachers and students were recruited through a flyer that was emailed by the principal investigator (PI) to all teachers and the principal at the school. Students were also recruited through referrals from teachers and the school principal. Any teacher who had at least a student receiving a Tier 1 or Tier 2 intervention for disruptive behavior and who was interested in evaluating the effects of CPI on that student's behavior were eligible to participate. Student participant eligibility criteria consisted of a) engaging in disruptive behavior during instructional time for at least 20% of observation intervals, b) disrupted behavior was socially maintained, c) aged 5 to 17 years old, and d) had not responded to class-wide or other individualized interventions. Exclusion criteria included disruptive behavior that posed a risk to the student, other people in the environment, or the researcher (s) and disruptive behavior for which the researcher could not identify a hypothesized social function. Additionally, a maximum of two students from the same classroom participated in this study concurrently.

Institutional review board (IRB) approval, parental consent, teacher consent, and participant assent were attained prior to beginning the study. Information about the study and parental consent forms were mailed to the families of all students referred to this study who might meet participation criteria and the first three students for whom parental consent and participant assent were received were included in this study.

Once the PI received consent for teachers, and both consent and assent for the students, the PI assessed whether the participant's disruptive behavior was in fact maintained by social consequences. This was determined through a functional behavior assessment that consisted of an interview with the teacher (Problem Behavior Questionnaire PBQ, see Appendix A) and direct observations of the student using the Functional Assessment Observation (FOA) Form.

Franklin was a 9-year-old male, attending 4th grade in a public school. Franklin engaged in inappropriate vocalizations during writing and reading periods. Franklin also had an ADHD diagnosis, but was not taking any medication. Franklin was using Check in/Check out (CICO), but both the teacher and principal indicated that CICO was not effective in addressing challenging behavior during the afternoon classes. After the interview with the teacher and direct observation, it was hypothesized that Franklin's disruptive behavior was maintained by access to attention from peers (score 16/18) and adults (score 15/18). Teacher 1 was Franklin's fourth grade teacher. Teacher 1 had seven years of teaching experience across different grade levels.

Charlie was a 6-year-old male in first grade in a public school. He engaged in off-task behavior, crying and leaning back in his chair/tipping his chair. Charlie had received other interventions such as self-monitoring system, but these were not effective in decreasing his problem behavior. Data from PBQ indicated that his problem behavior was likely maintained by attention from adults (score 18/18) and access to items/activities (score 18/18). Teacher 2 was Charlie's first grade teacher. This was her first year teaching.

James was a 6-year-old male in first grade in a public school. James had an ADHD diagnosis and was taking medication daily. James disruptive behavior included crying, reoff-task behavior (e.g., not completing math work) and wandering around the room. Based on the information gathered through the PBQ it was hypothesized that his problem behaviors were maintained by attention from adults (score 18/18) and escape (score 17/18). Teacher 3 was

James' teacher in both kindergarten and first grade, and this teacher had three years of teaching experience. Prior to enrolling in this study other interventions were trialed with James, including self-monitoring and a token system, but these did not decrease his problem behavior, especially during math class.

Data Collection, Materials, and Setting

Two research assistants (RAs) and the PI collected all the data for this study. Research assistants were students enrolled at the University of South Florida (USF). The PI trained the RAs through instruction, modeling, practice, and feedback. The RAs then scored a mock session and they reached at least 90% agreement with the PI prior to independently collecting data for the study.

The dependent variables for this study consisted of each student's target disruptive behavior (s) and academic engagement. Disruptive behavior was individually defined for each student. For Franklin, disruptive behavior consisted of inappropriate vocalizations and these included as any instance of Franklin making animal noises (e.g., monkey) during inappropriate times (e.g., instructional time or independent reading) and speaking to a peer without teacher's approval. For Charlie, disruptive behavior consisted of crying, tipping chair, and off-task behavior. Crying was defined as any instance in which Charlie had tears in his eyes and/or engaged in whimpering for at least 3 sec. Tipping chair consisted of any instance in which Charlie used his foot/leg/or another body part to lean his chair back so that one or more of the chair's legs were not contacting the ground for at least three consecutive seconds. Finally, offtask behavior included any time in which Charlie was engaging in an activity (e.g., drawing, playing with objects) other than completing the math worksheet. For James, disruptive behavior consisted of crying (same definition used with Charlie), wandering around the room, and off-task behavior. Wandering around the room was defined as getting out of his seat without teacher approval and

/or going to an area in the classroom without approval. Off-task behavior was defined as any instance James tipped his chair back with his foot/leg/body, and/or his chair was not completely on the ground for more than 3 s.

Academic engagement was defined as a) continuously looking at the teacher or the instructional material for at least 5 s, b) continuously interacting with the assigned or instructional material (e.g., active reading, writing, or math problem) for at least 5 s, and/or c) raising his or her hand to ask a question or answer a question posed in class, and these were all in absence of disruptive behavior to be considered academic engagement. In the case of class or small group activities, academic engagement consisted of a) continuously interacting with the peers in the group by discussing the assigned task for at least 5 s and/or b) continuously interacting with the assignment task for at least 5 s.

The occurrence of the dependent variables was measured by using a 10-s partial interval recording (PIR) system (Appendix B). Data were collected four times per week during 30-min observation sessions scheduled with the teacher and during an academic period. Franklin was observed during reading and writing. Charlie was observed during math and science. James was observed during his math lesson. The PI and research assistants scored the occurrence of either disruptive behavior or academic engagement during each interval. The data were summarized as percentage of intervals with disruptive behavior and academic engagement.

The materials used for data collection included the laminated passes, Countee Application that had a timer to signal the end of the interval within the observation period, scoring sheets (in case the application was not working), and pencil. Additional materials included classroom materials, such as the student's desk, pencil and paper for the student's assignment, a break area, rewards to exchange, the reward menu, and a timer for the student to use during his break. The setting was the instructional time where the teacher was in front of the

class or at the carpet explaining an assignment/project or teaching a new lesson, and the teacher used worksheets, projector, and the whiteboard for instructional time.

Interobserver Agreement and Treatment Fidelity

Trained research assistants collected interobserver agreement (IOA) for approximately 30% of observation sessions across all students, assessments, and phases. To assess IOA a research assistant observed the session simultaneously as the researcher, but independently collected data on the target responses (Appendix B). IOA for disruptive behavior and academic engagement were calculated by dividing the total number of intervals with agreements by the total number of intervals with agreements plus disagreements and then multiplying by 100. Interobserver agreement for Franklin was assessed for 31% of sessions and the mean agreement score was 99.25% (range 98% to 100%). The mean agreement for baseline was 98%, for CPI 3 was 99%, for CPI 2 it was 100%, and for CPI 1 it was 100%. The mean IOA for Charlie's data collection was 96.71% (range 96% to 97%) and IOA was calculated for 30% of sessions. For Charlie, the baseline mean was 96.5% (range 96% to 97%), for CPI 3 it was 96.5% (range 96% to 97%), for CPI 2 it was 97%, and for CPI 1 it was 97%. For James IOA was calculated for 32% of the sessions and the average IOA for James was 98.85% (range 98% to 99%). For James, the mean for baseline was 98.67% (range 98 to 99%), for CPI 3 it was 99%, for CPI 2 it was 99%, and for CPI 1 it was 99%.

The trained research assistant also collected treatment fidelity using an adapted version of the checklist created by Cook et al. (2014; see Appendix C). Treatment fidelity was assessed for 31% of sessions for Teacher 1, 30% of sessions for Teacher 2, and 32% of sessions for Teacher 3. Treatment fidelity was assessed by indicating a yes/no whether the following components were observed: (a) the student was given the appropriate predetermined amount of passes number of class passes before instructional period (e.g., CPI 3= 3 passes; CPI 2= 2 passes; CPI 1= 1 pass),

(b) if student engaged in disruptive behavior, the teacher waited 5 s and then prompted the student to use a class pass to access a break, (c) if the student used a class pass, teacher made sure the student went to the predetermined place (d) teacher made sure predetermined activity for break was available and engaged in a preferred activity, (e) Teacher made sure the timer was available (f) Teacher made sure the timer was set to the correct duration (g) If student did not return to academic activity after specified amount of break time elapsed then teacher prompted the student to return (h) If student used a class pass, teacher made sure that student returned to academic activity after the specified amount of break time elapsed, (i) teacher tallied up the number of passes retained by the student at the end of the instructional time, and (j) teacher allowed the student to exchange his passes for a preferred item or activity from the reward menu. For each instructional period treatment fidelity was scored by determining the number of steps the teacher completed correctly, dividing that by the total number of steps, and multiplying by 100. If performance fell below 80%, the teacher was trained again, however all teachers remained above 80%. However, no teacher required additional training because procedural integrity of all three teachers remained at 100% across the phases. The IOA for treatment integrity was 100% for Teacher 1, 2 and 3 across phases.

Social validity. Social validity was assessed at the end of the intervention. Both students and teachers were asked to complete an adapted version of the Intervention Rating Profile (see Appendix D and E) (IRP-15; Andreu & Blair, 2017; Martens, Witt, Elliot, & Darveaux, 1985). The questionnaire for teachers included nine items designed to assess whether the intervention was acceptable, effective, and efficient (Appendix D). The items were scored using a 5-point Likert-type scale ranging from slightly disagree to agree. The student social validity questionnaire included six items based on the questionnaire developed by Andreu and Blair (2017). The questions were adapted to include terminology appropriate for the students in the

current study (Appendix E). The first part of the questionnaire evaluated if the students found the intervention to be acceptable and if they preferred to use it in other settings. This section consisted of five items that were scored using a 5-point Likert-type scale ranging from strongly disagree to agree. The remaining section included one open-ended question to identify elements of the CPI that were most preferred by the students. During the social validity assessment the PI read the questions aloud to the student and allowed the student to answer each question before reading the next one.

Experimental Design

This study used a multiple baseline across participants design. The study began with baseline and introduced the intervention, CPI, in a staggered manner across participants. Once CPI showed to be effective, a systematic fading procedure was put into place.

Chapter 2: General Procedure

The study consisted of two phases. During phase 1 we conducted a series of assessments to identify the function of the student's behavior and preferred items. Phase 1 initiated with a functional behavior assessment including direct and indirect measures and a preference assessment. Phase 2 commenced after training both the teacher and the student, which included baseline data and followed with the intervention phase. Finally, the study included a fading procedure.

Phase 1: Pre-Assessment

Functional Behavior Assessment (FBA). A functional behavior assessment was conducted to identify the function of the student's disruptive behavior and thus also determine if the student was eligible for the study. It included two parts: an interview with the teacher and direct observations of the participant.

Teacher interview. We used the Problem Behavior Questionnaire (PBQ; Lewis, Scott, & Sugai, 1994; Appendix A) to interview the teachers. The interview was conducted at a time that was convenient for the teacher and it lasted 15 min. This questionnaire identified common antecedents and consequences for the target problem behaviors. Teacher answered the various items using a rating scale consisted of 0-6, where 0 meant the behavior "never" happened and 6 meant the behavior "always" happened. Then, we identified plausible functions for the target problem behaviors by adding up the scores (maximum possible score 18), assigned by the teacher to each item (three items total per plausible function; see section three of PBQ) correlated with a specific function (i.e., attention from peers, attention from teachers; escape; access to items).

Thus, a higher score indicated a potential function. If the results of the PBQ indicated that problem behavior was likely maintained by access to socially mediated reinforcer, then we completed some direct observations of the student.

Direct observations. The PI observed the student and collected data on the target disruptive behavior and environmental stimuli using the Functional Assessment Observation (FOA) Form (O’Neill et al., 1997). The FOA form was used to collect data on the observed antecedents to the target behavior, a description of the target behavior, and observed consequences to the target behavior. Two observations, across academic periods, were completed with each participant. For Franklin the first observation was 40 min and the second observation was for 15 min. For Charlie, the two observations lasted 60 min each. For James each observation lasted 30 min. Data were collected until a clear pattern was identified and a hypothesis on the function of the behavior was determined. If the data attained during the observations and the PBQ indicated that the target behavior was likely maintained by a social reinforcer, the student was included in the study.

Preference Assessment. A preference assessment was conducted to identify toys and social stimuli (i.e., sharing a joke or story with the class, a note sent to the student’s parents, the chance talk to a friend) to use for the reward menu and determine the activities acceptable for break time. The preference assessment consisted of an open-ended questionnaire that was vocally presented to the student (adapted from Worthington & Gargiulo, 1998). The highly preferred items were used for the reward menu and were available at the end of the instructional time when the student was given a chance to exchange his passes.

The preference assessment questionnaire was based on the reinforcement survey from Functional Assessment Interview from Worthington & Gargiulo (1998), and for this study only the reinforcement survey portion was used. Some sample questions used were: “What do you

like to do with your best friend from school?” and “What do you like to do in your free time during school?”. Once we identified a variety of preferred items for each student, the PI met with the teacher to determine the availability which stimuli can be provided to the student during his break and for the reward menu. Then a list of the available items was given to the student and the PI helped the student rank order them from most-to-least preferred. Each of these stimuli were assigned a value (i.e., number of passes) based on each student’s ranking, such that the more preferred items cost more (i.e., more passes). A menu of available preferred stimuli and their value was created for each student and displayed within the student’s view (i.e., desk, wall nearby; Appendix F).

Phase 2: Intervention Phase

During this phase we evaluated the effects of CPI on the disruptive and academic engagement of each student. We began with a baseline phase followed by CPI and fading. Each observation session consisted of a predetermined number of passes, such that CPI 3 indicated the student would receive three passes, CPI 2 indicated two passes and CPI 1 indicated only one pass per academic instruction time.

Baseline. During the baseline phase the teacher conducted her lesson as usual. In other words, we reminded the teacher to follow the same instructional procedures as she had done thus far. Regarding disruptive behavior, the teacher also followed the same procedures as before. We completed at least three sessions and then visually evaluated the data. Decisions regarding phase changes were made solely based on levels of disruptive behaviors although attempts were made to ensure that level of academic engagement was also stable. Once levels of disruptive behavior for one of the students was either stable or on an increasing trend, we began the CPI intervention with that student and continued baseline with the remaining students. Introduction of CPI was staggered across students to show experimental control.

Class Pass Intervention. Prior to beginning the CPI phase, we provided training on the CPI procedures to both the teachers and students.

Teacher Training. Teachers were individually trained using behavioral skills training (BST) procedures at a time and location that was convenient for the teacher and lasted approximately 15 min (Sarokoff & Sturmey, 2004). The training included instruction on the components of CPI listed in the fidelity checklist (Appendix C), modeling on how to complete the steps of the intervention, a teacher role-play component, and then feedback on the teacher's performance and allowing the teacher to ask any questions if she had any. The teachers also received the treatment integrity checklist with the procedures as a reference. Each teacher was expected to complete the different steps of CPI with 100% treatment integrity during the roleplay phase for three consecutive trials.

Student Training. The teacher and the researcher explained how to use the class pass using BST. For instance, the student must raise his hand and patiently wait to give the pass to the teacher. The instructions also included what conditions the student could use the passes for (e.g., he is bored, tired, disinterested with work, he needs help with an assignment, or feels frustrated), and how to exchange the passes for more valuable reinforcers if they were kept by the end of the instructional time. Modeling and feedback were also used to train the students on the appropriate use of the passes. Intervention began after three consecutive role-play sessions in which the student performed at least 80% of the steps independently.

Class Pass Intervention. All students received the same intervention components, regardless of the function maintaining their disruptive behavior. The student received the available number of passes right before the academic instruction on his desk depending on the phase (CPI 3= 3 passes, CPI 2= 2 passes, CPI 1= 1 pass). The student had to raise his hand to use the pass and each pass use resulted in a 5-min break in the predetermined area. To be contextually

fit, the location and the duration of the break was determined with the help of the teacher, but it consisted of 5 min for all students. A location where the student could take his break (e.g., reading nook) and the activity (e.g., reading, squishy/stress ball) was established before the intervention was implemented. The PI and the teacher established the break area and activity depending on the student's history (e.g., James destroyed stress balls, so he given a lava timer). A visual timer was displayed to signal the student when he was required to go back to his seat and continue the original academic task.

Franklin's break area was right outside the room because his inappropriate vocalizations were disruptive to other students. However, his classroom had large windows as walls, thus his teacher could still see him throughout the duration of the break. The break timer remained inside the classroom, but it remained within Charlie's eyesight during his break. Initially Charlie had access to a stress-ball during his break, but because he did not remain in the designated area with the ball, access to the stress-ball was terminated after the first session. Charlie's break area was in a reading nook of the classroom, and the break timer was placed on the edge of a dry erase board. During the break Charlie had access to a book, and/or a stress-ball. James' break area was on a different seat near his desk and his break timer was placed on another desk nearby. During the break James had access to a lava timer that he could watch or manipulate.

The students could choose to save their laminated passes and trade them for access to preferred item or activity from the reward menu on their desk. Thus, the more passes the student held onto the better the item or activity they could choose from the reward menu. The student had the opportunity to exchange passes at the end of the instructional time. For instance, the student could choose to visit his sister in a different classroom for 10 min or complete a puzzle for 10 min. This positive reinforcement component was intended to provide the students with an

incentive to continue to work and behave during difficult or aversive academic tasks. The researcher and teacher determined the value (number of passes) of reinforcer (Appendix F). Those values were written on the “reward menu” and displayed for the student to see (e.g., 3 passes = 5 min on the computer/iPad; 2 passes = visit teacher or sibling in a different classroom; 1 pass = play tic tac toe with a friend).

If the teacher observed the student engaging in disruptive behavior, she waited until disruptive behavior stopped for 5 s and then prompted the student to use his pass. Prompts used by the teacher included vocal or physical. To use his pass, Franklin was prompted to hand the pass to his teacher, whereas Charlie and James were required to place the pass on their teacher’s desk. Upon requesting a break, the teachers simply verbally prompted them to move to their break area.

There were exclusions on when the passes could be used. The passes were not allowed during an exam, or immediately following the use of a pass, such that the student had to wait a minimum of 10 min before using another pass. This time was signaled by a timer. However, the students also had the option to hold onto their passes and exchange them for preferred items or more valuable items at the end of the academic instruction. If the student engaged in problem behavior during the 10 min wait period or after the passes had run out, then the teacher was to complete the same steps she did during baseline.

Fading. Once levels of disruptive behavior were either stable or on an increasing trend for at least three sessions, as determined by baseline level and teacher input, we gradually faded the number of passes available for each student. Number of passes available were systematically reduced by one pass, and the value of the reinforcers changed according to the number of passes available to the student, but all other components of the CPI remained the same. That is, the value

of the reinforcers decreased by one (Appendix F). Therefore, the new highest value matched the amount of passes the student received during that phase (e.g., CPI 2 meant the highest value for a reinforcer was 2 passes). During each step of fading we conducted at least three sessions and then assessed the data. If target behaviors remain at acceptable levels, we proceeded with fading until only one pass was available to the student.

Chapter 3: Results

The results are shown in Figures 1-5 and Tables 1-2. Figure 1-3 show the results from the PBQ. In this questionnaire scores from 0 (likely not a function) to 18 (likely a function) are assigned to each of the potential reinforcers for problem behavior. Therefore, data are depicted in these figures in descending order from highest to lowest score. Based on results from this questionnaire we hypothesized that Franklin's disruptive behavior (Figure 1) was maintained by access to peer and adult attention; Charlie's disruptive behaviors (Figure 2) were maintained by access to adult attention, items/activities, and escape; and James's problem behaviors (Figure 3) were maintained by access to adult attention, items/activities, and escape, as well as more likely to occur during specific setting events.

Figure 4 includes the data from the FOA. These data represent the frequency with which each of the consequences followed disruptive behavior. Nine instances of Franklin's problem behaviors were followed by attention and ten were followed by escape. These data suggest that his problem behavior may be maintained by access to both attention and escape. For Charlie, problem behavior resulted in attention eight times, escape four times, and access to items once. These data suggest that his problem behavior was maintained by access to escape and attention. Finally, data collected for James indicated that five instances of disruptive behavior resulted in attention, six in access to escape, and two in access of items. These data suggested that his problem behavior was maintained by access to attention and escape. Although the results from the PBQ and the FAO differed in some cases, both assessments identified potential social

functions for the problem behaviors of all students, and therefore they were eligible to be participants.

Results of the treatment evaluation are shown in Figure 5. During baseline all students engaged in higher levels of disruptive behavior, ranging from 50 to 70% of the intervals. In addition, academic engagement occurred at low levels, ranging from 20 to 50% of intervals. During the CPI phase, problem behavior of all students decreased to low levels, ranging from 0 and 20% of intervals, and academic engagement increased to 80 and 100% of the intervals.

The top panel of Figure 5 shows the results for Franklin. During baseline he engaged in disruptive behavior during an average of 67% of the intervals and academic engagement occurred in an average of approximately 33% of the intervals. Once CPI 3 was introduced, disruptive behavior decreased to near 0 and remained low through fading. In addition, CPI increased academic engagement to nearly 100% of the intervals.

The middle panel of Figure 5 shows the results for Charlie. During baseline he engaged in disruptive behavior and academic engagement on an average of 68% and 33% of the intervals, respectively. Once CPI 3 was introduced on session seven, disruptive behavior occurred in 27% and academic engagement in 73% of the intervals, and both target responses remained at acceptable levels for the remaining of the phase. During fading to CPI 2, Charlie's disruptive behavior initially increased, but after continued exposure to this condition, Charlie's disruptive decreased to low levels, while academic engagement increased. Finally, the introduction of CPI 1 initially also led to an increase in disruptive behavior, but through continued exposure to this contingency, disruptive behavior decreased, and academic engagement increased to acceptable levels.

Results for James are shown on the bottom panel of Figure 5. During baseline both disruptive behavior and academic engagement occurred on average of 50% of the intervals. Once

CPI 3 was introduced on session 10, James' disruptive behavior decreased drastically to 13% of the intervals and academic engagement increased to 87% of the intervals. James' problem behavior and academic engagement remained at those levels for the remainder of this phase and throughout CPI 1.

Results of the social validity assessment are shown in Table 1. The teacher survey and student questionnaire were completed using a Likert scale ranging from 1= slightly disagree to 5= agree. All three teachers and students in this study completed the social validity assessment. The mean score for both Teacher 1 and 3 were 5; the mean score for Teacher 2 was 4.6, making the mean score across all three teachers 4.9. These data suggest that teachers found the procedures acceptable and effective, and that they would recommend this intervention to other teachers and a variety of students. In addition, results of the student questionnaire indicate that students were highly satisfied with the intervention. The mean for all the student questionnaires was 5, suggesting that the students liked the intervention, would recommend its use to other students, and wanted to continue to use the intervention, even during other classes. The three students indicated that their favorite component of the intervention was the option to save passes and exchange them for preferred items. That is, all three preferred the social positive aspect of the intervention.

Chapter 4: Discussion

This study evaluated the extent to which Class Pass Intervention (CPI) would decrease disruptive behavior and increase academic engagement for three elementary children, two with ADHD and one at risk of ADHD. In the current study CPI, which was implemented by each student's teacher, was successful in decreasing disruptive behavior and increasing academic engagement for all three students, and we successfully decreased the number of passes available while still maintaining high levels of engagement and low levels of problem behavior. These results are consistent with findings of previous research demonstrating that CPI was effective in reducing disruptive behavior and increasing academic engagement, and that the numbers of passes could be progressively reduced (Andreu & Blair, 2017; Collins et al., 2016; Cook et al., 2014; Narozanick & Blair, 2018;). In addition, results of the teacher and student social validity assessments completed at the end of this study indicated that the procedures employed in this study were acceptable, simple, and efficient. All three students also reported that their most preferred component of the CPI was the opportunity to earn a reward.

The current study extends the literature on CPI by evaluating its effect on problem behavior and academic engagement of students with multiply-controlled behavior. Previous research had demonstrated that CPI was effective in reducing disruptive behavior maintained by access to escape (Cook et al., 2014; Narozanick & Blair, 2018), attention (Andreu & Blair, 2017), and disruptive behavior without an identified function (Collins et al., 2016). Results of the current study suggest that CPI may be effective independent of the specific social function of problem behavior as well as in cases whether problem behavior is maintained by multiple social

reinforcers (e.g., escape from tasks, access to attention). This is likely because CPI, as implemented in this study, includes multiple components. First, passes can be used to access a break, which addresses escape-maintained problem behavior. Second, passes can be saved and exchanged for access to positive social reinforcers (e.g., attention, preferred items), thus addressing problem behavior maintained by access to attention and/or preferred stimuli. However, to ensure that CPI addresses all possible positive social functions, the inclusion of a preference and/or reinforcer assessment to identify which stimuli are preferred for each participant is imperative. For instance, in the current study students could exchange their passes for a variety of things such as visiting a sibling, preferred toys, and reading a book with a teacher.

In addition, two participants in the current study were students with ADHD and one student was at risk of ADHD. In previous research the effects of CPI were investigated with typically developing elementary (Cook et al., 2014) and high school students (Collins et al., 2016). Although Narozanick & Blair (2018) study included students with developmental disabilities (i.e., autism and language disorder), in that study only one component of CPI, access to a break, was evaluated. Additionally, Andrué & Blair (2017) only evaluated one student with ADHD and the participant only had attention-maintained problem behavior. Therefore, the current study appears to be the first study to evaluate the effects of CPI on multiply-controlled disruptive behavior, maintained by access to attention, items, and escape (i.e., Charlie), and access to attention, items, and escape (i.e., James). Previous research had demonstrated that CPI was effective in reducing disruptive behavior maintained by access to escape (Cook et al., 2014; Narozanick & Blair, 2018), attention (Andrué & Blair, 2017), and disruptive behavior without an identified function (Collins et al., 2016). The current study addresses all possible functions by allowing the student to choose from a break with the pass (e.g. for escape maintained behavior; or using the pass to exchange for a tangible item like a toy car (e.g. for behavior maintained by

access to tangibles); or exchanging the passes to read a book or visit a teacher (e.g. for behavior maintained by attention).

There are some limitations of this study that must be discussed. First, given that this research project was completed in an educational setting, we were unable to control for all potential confounding variables. For instance, throughout the treatment analysis Charlie had intermittent access to a “wobble” chair. This was an ergonomic stool with a convex base that allows for movement while sitting. Charlie’s classroom had only one “wobble” chair, therefore Charlie shared the chair with other students in the classroom and within the grade level. The inconsistent use of this chair may have contributed to the variability in Charlie’s levels of target behavior. Moreover, per instruction of the school administration, Charlie’s teacher began a group contingency during phase two of CPI. In the group contingency, the students were separated into groups based on sitting arrangements, and they earned points if all students from each group (table) followed the teacher’s instructions. Finally, it is possible that some of the treatment effects observed were due to student’s reactivity to the presence of the researcher. This was particularly the case for James, whose teacher reported that his behavior differed, especially initially, during the class meetings when the researcher was present. To minimize reactivity, future research should extend baseline and/or make data collection less obvious. Finally, like in previous research, the CPI procedure used in this study included multiple components (e.g., access to break, exchanging passes for access to preferred items). Given that we did not evaluate each component in isolation, we don’t know the relative effects of each component. However, in the study completed by Narozanick and Blair (2018), problem behavior decreased even though only the negative reinforcement component of CPI was in effect. Thus, future research should complete component analyses of CPI.

In conclusion, this study evaluated whether Class Pass Intervention was effective in decreasing problem behavior and increasing academic engagement of three students with or at risk for ADHD. The results of this study provided additional support for the use of CPI with various topographies of problem behavior, responses from various response classes, and with a variety of population. In addition, both teachers and students indicated that the procedure was acceptable.

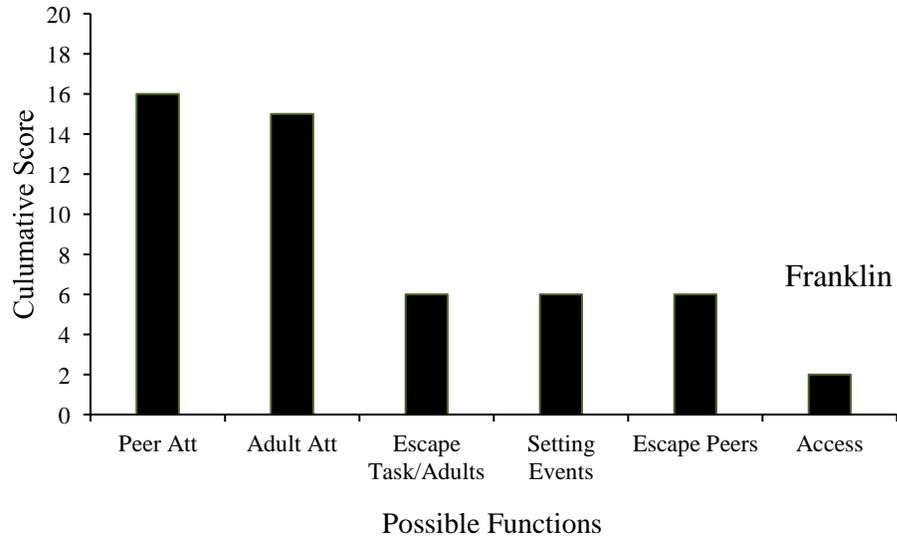


Figure 1. Summary of the teacher interview completed for Franklin using the PBQ.

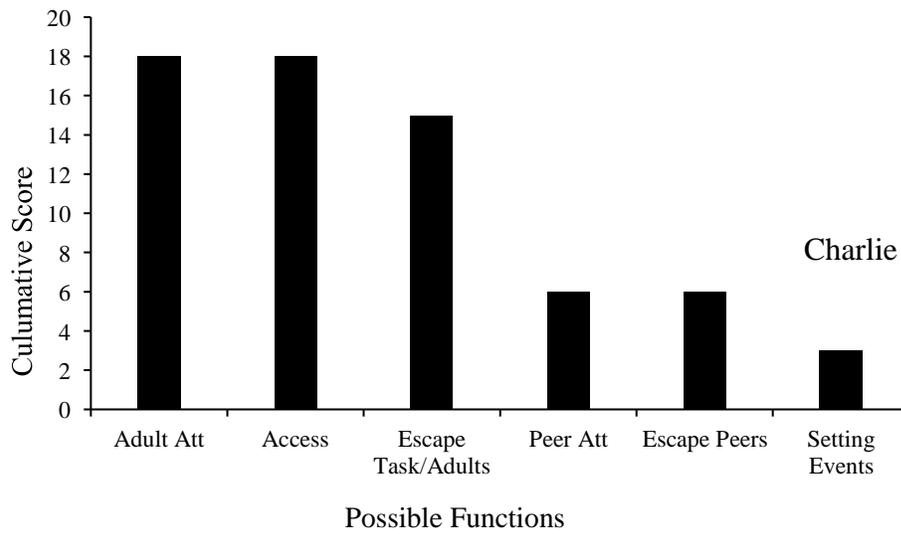


Figure 2. Summary of the teacher interview completed for Charlie using the PBQ.

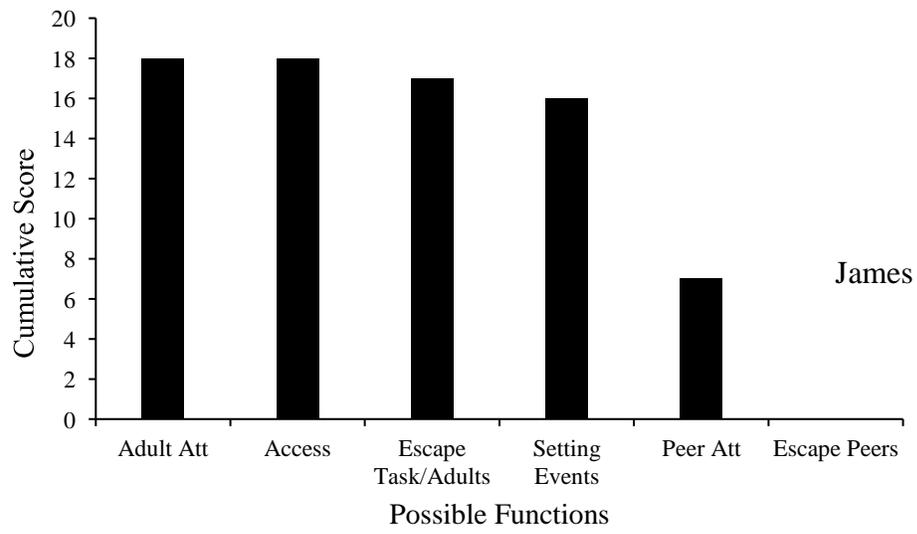


Figure 3. Summary of the teacher interview completed for James using the PBQ.

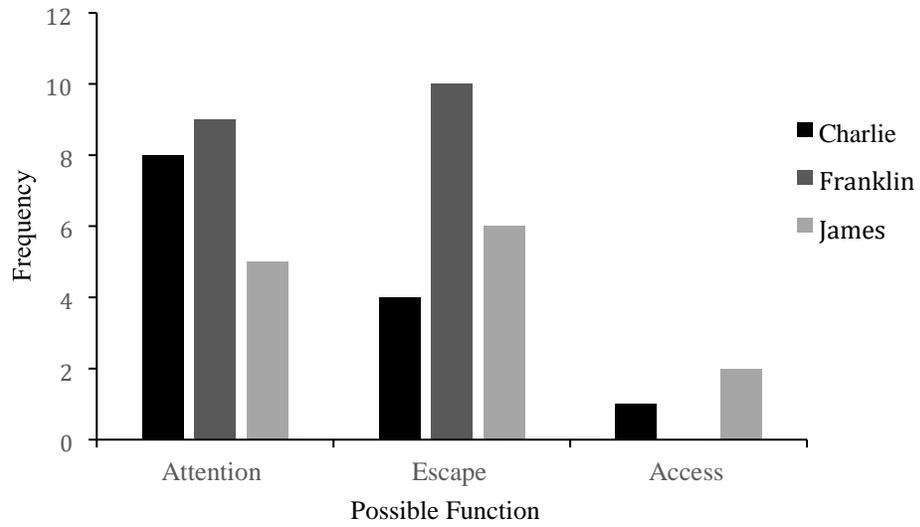


Figure 4. Summary of FAO forms for Franklin, Charlie and James.

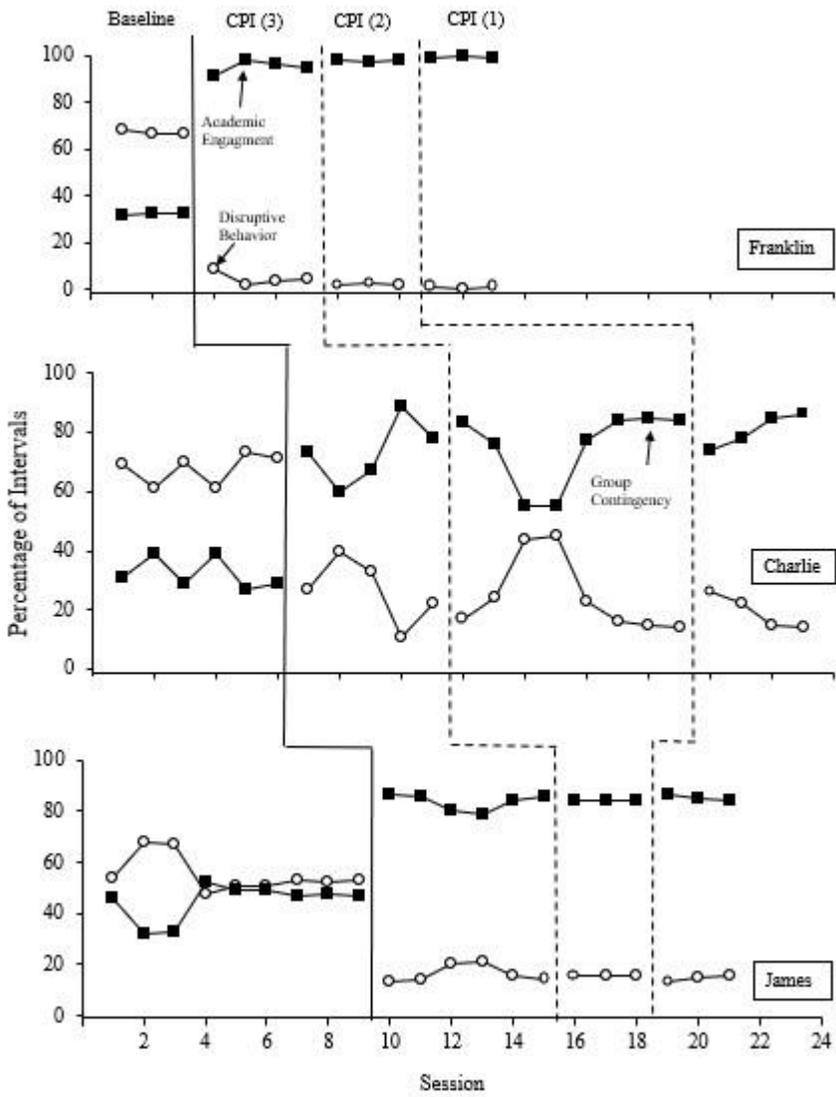


Figure 5. Percentage of intervals with disruptive behavior and academic engagement for each student across phases.

Table 1

Results of the Social Validity Assessment Completed with the Teachers

Questions	Teacher 1	Teacher 2	Teacher 3
This was an acceptable intervention given the target student's disruptive behavior.	5	4	5
This intervention led to a decrease in the target student's disruptive behavior.	5	4	5
Most teachers would find this intervention appropriate for disruptive behavior.	5	5	5
I would recommend this intervention to other teachers.	5	5	5
I would be willing to use this intervention in the classroom setting with other students.	5	5	5
This intervention would be appropriate for a variety of children and classrooms.	5	4	5
This intervention was a fair way to handle the problem behavior in my classroom.	5	4	5
I liked the procedures used in this intervention.	5	5	5
Overall, this intervention was beneficial for the students in my classroom.	5	5	5
Mean	5	4.6	5

Table 2

Student Social Validity Questionnaire Results

Questions	Franklin	Charlie	James
I liked using the Class Pass	5	5	5
It was easy to use the Class Pass.	5	5	5
I want to keep using the Class Pass.	5	5	5
I want to use the Class Pass in other classes.	5	5	5
I would recommend this to my friends	5	5	5
What did you like best about using the Class Pass?	Earning prizes for being good	You can earn a lot of things	I get to earn fun stuff

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Appendices

Appendix A: Problem Behavior Questionnaire (PBQ)
Lewis, Scott, & Sugai (1994)

PROBLEM BEHAVIOR QUESTIONNAIRE

Student:		Date:	
School:		Interviewer:	
Grade:	Age:	Respondent:	
Problem Behavior:			

DIRECTIONS: Keeping in mind a typical episode of the problem behavior, circle the frequency at which each of the following statements are true.

	<i>(PERCENT OF THE TIME)</i>						
	Never	10%	25%	50%	75%	90%	Always
1. Does the problem behavior occur and persist when you make a request to perform a task?	0	1	2	3	4	5	6
2. When the problem behavior occurs do you redirect the student to get back to task or follow rules?	0	1	2	3	4	5	6
3. Is the problem behavior more likely to occur when told that he/she cannot do something that he/she wanted to do?	0	1	2	3	4	5	6
4. During a conflict with peers, if the student engages in the problem behavior, do peers leave the student alone?	0	1	2	3	4	5	6
5. When the problem behavior occurs, do peers verbally respond or laugh at the student?	0	1	2	3	4	5	6
6. Is the problem behavior more likely to occur following a conflict outside of the classroom? (e.g., bus write up)	0	1	2	3	4	5	6
7. Does the problem behavior occur to get your attention when you are working with other students?	0	1	2	3	4	5	6
8. Does the problem behavior occur in the presence of specific peers?	0	1	2	3	4	5	6

Problem Behavior Questionnaire - 1 -

	Never	(PERCENT OF THE TIME)					Always
		10%	25%	50%	75%	90%	
9. Is the problem behavior more likely to continue to occur throughout the day following an earlier episode?	0	1	2	3	4	5	6
10. Will the student engage in the problem behavior if the student is told he/she cannot have a preferred item or activity?	0	1	2	3	4	5	6
11. Does the problem behavior occur during specific academic activities?	0	1	2	3	4	5	6
12. Does the problem behavior stop when peers stop interacting with the student?	0	1	2	3	4	5	6
13. Does the behavior occur when peers are attending to other students?	0	1	2	3	4	5	6
14. If the student engages in the problem behavior, do you provide one-to-one instruction to get the student back on-task?	0	1	2	3	4	5	6
15. Will the student stop doing the problem behavior if you stop making requests or end an academic activity?	0	1	2	3	4	5	6
16. If the student engages in the problem behavior, do peers stop interacting with the student?	0	1	2	3	4	5	6
17. Is the problem behavior more likely to occur following unscheduled events or disruptions in classroom routines?	0	1	2	3	4	5	6
18. Is the problem behavior likely to occur if you take away a preferred item or activity?	0	1	2	3	4	5	6

Problem Behavior Questionnaire - 2 -

PROBLEM BEHAVIOR QUESTIONNAIRE PROFILE

DIRECTIONS: Circle the score given for each question from the scale below the corresponding question number (in bold).

Attention from peers			Escape from peers			Attention from adults			Escape from adults			Gain item or activity			Setting Events		
Questions			Questions			Questions			Questions			Questions			Questions		
5	8	13	4	12	16	2	7	14	1	11	15	3	10	18	6	9	17
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL_____			TOTAL_____			TOTAL_____			TOTAL_____			TOTAL_____			TOTAL_____		

Other Comments

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Appendix B: Interval Recording Sheet (IOA)

Participant Identifier: _____ Observer: _____ Date: _____

Participant Target Behaviors:

Type: Partial Interval

Min	10 s		20 s		30 s		40 s		50 s		60 s	
	B1	B2										
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Appendix C: Treatment Integrity Checklist

Steps	Points	Points	Points
1. Student was given pre-determined amount of passes before the instructional time (e.g., CPI 3= 3 passes; CPI 2= 2 passes; CPI 1= 1 pass).	Yes/No	Yes/No	Yes/No
2. If student engaged in disruptive behavior, the teacher will prompt the student to use the pass after problem behavior stops for 5 s.	Yes/No N/A	Yes/No N/A	Yes/No N/A
3. Teacher makes sure predetermined activity for break is available.	Yes/No	Yes/No	Yes/No
4. If the student chooses to use a class pass, teacher makes sure he/she went to the predetermined place.	Yes/No	Yes/No	Yes/No
5. Teacher makes sure the timer is available.	Yes/No	Yes/No	Yes/No
6. Teacher makes sure the timer is set to the correct duration.	Yes/No	Yes/No	Yes/No
7. If student does not return to academic activity after specified amount of break time elapsed then teacher will prompt the student.	Yes/No N/A	Yes/No N/A	Yes/No N/A
8. Teacher tallied up the number of passes retained by the student at the end of the instructional period.	Yes/No	Yes/No	Yes/No
9. Teacher continues baseline procedure if student runs out of passes and is engaging in problem behavior.	Yes/No N/A	Yes/No N/A	Yes/No N/A
10. Teacher allowed the student to exchange passes for preferred item or activity from the reward menu.	Yes/No	Yes/No	Yes/No
Subtotal:	/10	/10	/1
TOTAL: /30			
Percentage:			

Appendix D: Social Validity Questionnaire for Teachers

Please circle the number that best describes your agreement or disagreement with each statement using the scale below.

1= Slightly Disagree 2= Disagree 3= Neutral 4= Slightly Agree 5= Agree

1. This was an acceptable intervention given the target student's disruptive behavior
1 2 3 4 5
2. This intervention led to a decrease in the target student's disruptive behavior
1 2 3 4 5
3. Most teachers would find this intervention appropriate for disruptive behavior.
1 2 3 4 5
4. I would recommend this intervention to other teachers.
1 2 3 4 5
5. I would be willing to use this intervention in the classroom setting with other students.
1 2 3 4 5
6. This intervention would be appropriate for a variety of children and classrooms.
1 2 3 4 5
7. This intervention was a fair way to handle the problem behavior in my classroom.
1 2 3 4 5
8. I liked the procedures used in this intervention.
1 2 3 4 5
9. Overall, this intervention was beneficial for the students in my classroom.
1 2 3 4 5

Appendix E: Social Validity Questionnaire for Students

Please circle the number that best describes your agreement or disagreement with each statement using the scale below.

1= Slightly Disagree 2= Disagree 3= Neutral 4= Slightly Agree 5= Agree

1. I liked using the Class Pass.

1 2 3 4 5

2. It was easy to use the Class Pass.

1 2 3 4 5

3. I want to keep using the Class Pass.

1 2 3 4 5

4. I want to use the Class Pass in other classes.

1 2 3 4 5

5. I would recommend this to my friends

1 2 3 4 5

6. What did you like best about using the Class Pass?

Appendix F: Reward Menus

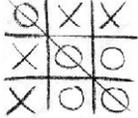
Reward Menu for Franklin

Activity/Item	Passes	(CPI 2)	(CPI 1)
Visit Sister for 10 minutes	3	2	1
Ipad for 5 minutes	3	2	1
Play game with friend (tic tac toe/checkers)	2	2	1
Tell the class a story	2	1	1
Word Search	1	1	1
Puzzle	1	1	1

Reward Menu for Charlie

Activity/Item	Passes	CPI 2	CPI 1
Stickers 	3	2	1
5 minutes of Ipad 	2	2	1
Reading to Ms. Palko 	2	1	1
Surprise	1	1	1

Reward Menu for James

Activity/Item	Passes	CPI 2	CPI 1
Puzzle 	3	2	1
Reading with a teacher 	3	2	1
Cars 	2	1	1
Superhero Magic Towel 	1	1	1
Games (Tic Tac Toe) 	1	1	1

Appendix G: IRB Approval



RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

9/4/2018

Andrea Zuniga
ABA-Applied Behavior Analysis
13022 Leeds CT Apt A9
Tampa, FL 33612

RE: Expedited Approval for Initial Review

IRB#: Pro00035812

Title: Using Class Pass Intervention (CPI) to Decrease Disruptive Behavior in Children with and without Disabilities

Study Approval Period: 9/4/2018 to 9/4/2019

Dear A. Zuniga:

On 9/4/2018, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents contained within, including those outlined below.

Approved Item(s):

Protocol Document(s):

[IRB Protocol Version 1_08.29.18](#)

Consent/Assent Document(s)*:

[Adult Teacher minimal risk Version #1 8.21.18.pdf](#)

[Parental Permission Version #1 8.21.18.pdf](#)

[Student Assent Version #1 8.21.18 .pdf](#)

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent documents are valid until the consent document is amended and approved.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review

category:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

This study involving child participants falls under the minimal risk category 45 CFR 46.404: Research not involving greater than minimal risk.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval via an amendment. Additionally, all unanticipated problems must be reported to the USF IRB within five (5) business days.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,



Kristen Salomon, Ph.D., Chairperson
USF Institutional Review Board