

Northwestern College, Iowa

NWCommons

Master's Theses & Capstone Projects

Education

Spring 2021

TCIT's Impact on Various Challenging Behaviors

Emily Krakau

Follow this and additional works at: https://nwcommons.nwciowa.edu/education_masters



Part of the [Early Childhood Education Commons](#), and the [Educational Methods Commons](#)

TCIT's Impact on Various Challenging Behaviors

Emily Krakau

Northwestern College

An Action Research Project Presented
in Partial Fulfillment of the Requirements
For the Degree of Master of Education

Table of Contents

Abstract	3
Introduction	4
Literature Review	6
Challenging Behavior	6
Teacher-Child Relationships	9
Teacher-Child Interaction Training	14
Methods	18
Aims and Hypothesis	18
Participants	18
Data Collection	19
Procedures	21
Analytic Plan	22
Findings	22
TCIT Strategies	22
Challenging Behavior	25
Discussion	28
Summary of Findings	28
Limitations of the Study	29
Further Study	30
Conclusion	30
References	31
Appendix	35

Abstract

Preventing and managing challenging behaviors is a responsibility that many educators encounter and is an aspect of the teaching profession that can cause high stress. For a child who exhibits challenging behaviors, there are lasting negative effects that can occur. The purpose of this action research project is to examine the effectiveness of Teacher-Child Interaction Training (TCIT) on reducing the frequency of different types of challenging behaviors in an early childhood setting. With a sample of three preschool aged students, who were identified as having elevated levels of challenging behavior, the teacher researcher observed the frequency for delay/avoidance, aggression, disruptive to teacher, and disruptive to peer behaviors before and after the implementation of a TCIT CDI phase. The results showed a percentage change decrease of 50% for delay/avoidance and for disruptive to teacher behaviors. There was no percentage change for aggression or disruptive to peer behaviors. Overall, two of the four types of challenging behavior showed a reduction after the TCIT intervention.

Keywords: TCIT – challenging behaviors – early childhood

TCIT's Impact on Various Challenging Behaviors

Early childhood educators have many tasks to juggle in their classrooms, all while trying to prevent and manage challenging behaviors. Challenging behaviors, including aggression, avoidance, defiance, and interruption, are prevalent in many preschool classrooms today. The problem is that the challenging behaviors cause the teacher-child relationship to become strained, resulting in higher stress for both the teacher (Gagnon et al., 2019) and the children (Hatfield & Williford, 2017). There are many intervention programs and curriculums that address the social-emotional skills of preschool students, but this action research project will be looking more closely at the skills of the preschool teacher. The Teacher-Child Interaction Training (TCIT) professional development aims to strengthen the teacher's relationship skills, which in turn improves the teacher-child relationship, resulting in a decrease in challenging behaviors exhibited in the classroom (Fawley et al., 2019).

The researcher was first introduced to TCIT through an early childhood instructional coach, due to the fact that their preschool classroom includes several students who regularly exhibit challenging behaviors. The TCIT professional development was to be implemented by the researcher with the goal of reducing student challenging behaviors by addressing teacher-child interactions. Research completed by Fawley et al. (2019) and Kanine et al. (2018) has shown that the implementation of TCIT results in a decrease of challenging behaviors. Therefore, the purpose of this action research project is to identify the type of challenging behavior that decreases the most after receiving TCIT intervention in a preschool classroom.

By sifting through the research, several areas of interest became clear. It is important to understand how TCIT has been implemented in other early childhood classrooms. Clarification

on how challenging behaviors affect both the students and the teachers should be noted. The dynamics of teacher-child relationships and how that relationship changes bring meaningful perspective to this project. The ERIC, Gale Academic OneFile, and WorldCat databases were used to find peer-reviewed journal articles, through the Northwestern College DeWitt Library online catalog. Specifically, references were included if they were within the last ten years, and if they pertained to preschool or early childhood settings, to match the setting of this action research project.

The expected finding from this action research is that all types of challenging behavior will be decreased for the target students after receiving the TCIT intervention. The disruptive to teacher type of challenging behavior is hypothesized to decrease the most because the TCIT intervention is focused on improving teacher-child interactions, which in turn improves the teacher-child relationship. This finding is important for early childhood educators because having conflicting teacher-child relationships negatively impacts both the teacher and the children in their care (Gagnon, et al., 2019; Lippard et al., 2018).

By presenting the issue of challenging behavior, we will see the prevalence it has in early childhood education settings and the negative effects it has on students and teachers. The focus will then turn to the impact challenging behavior has on the teacher-child relationship, noting the difference in relationships that are positive and those that are in conflict. Finally, the TCIT intervention will be explained by looking at the implementation, its effectiveness, and why it was the chosen strategy for this action research project.

Literature Review

Challenging behaviors affect not only the child displaying the behavior but affect the teachers in the classroom as well. Children who exhibit challenging behaviors have been shown to have lower levels of social functioning throughout childhood (Brennan et al., 2015; Milledge et al., 2019), and may be at a higher risk for deficits in reading and mathematics (McDermott et al., 2018). For teachers, challenging behaviors create stress and place strain on teacher-child relationships (Gagnon et al., 2019; Williford & Vitiello, 2020). This research demonstrates the need to decrease challenging behaviors and increase support to the teacher-child relationship to better support children and teachers in early childhood settings.

Challenging Behavior

Preventing, managing, and reacting to challenging behaviors are now common practices for educators today. Most young children exhibit what could be considered challenging behaviors from time to time, since their developmental level is much lower than the adults in their lives. However, some children show elevated levels of challenging or disruptive behaviors that may cause concerns for their future social and cognitive development. Children who exhibit challenging behaviors both at home and at school tend to have the highest rate of symptoms, while children who exhibit challenging behaviors in only one context tend to have a more moderate rate of symptoms (Sulik et al., 2017).

Prevalence in Early Childhood

The developmental period that preschool aged children are in is well-known as a time of transition for social skills (Brennan et al., 2015). The early childhood years are a key time to address negative behaviors that may interfere with healthy social, emotional, and academic

growth. In the U.S., about 61% of children under the age of 5 are enrolled in early care and early education settings (Laughlin, 2013). Therefore, it is important for early childhood educators to work specifically towards preventing the cycle of challenging behaviors that can occur in the classroom (Garbacz et al., 2014; Williford & Vitiello, 2020).

Behavior concerns for young children are not always isolated occurrences and can be a symptom of another developmental area of concern. It is well documented that a child's language development greatly impacts their social development (Rhoad-Drogalis et al., 2018; Sulik et al., 2017). McDermott's (2018) research on over 2,000 at-risk preschoolers demonstrates that children show notable gains in motivation and persistence throughout their preschool education. However, after looking at 191 preschoolers with developmental language disorders, Rhoad-Drogalis (2018) noted that the children with the lowest language scores while in preschool were more likely to struggle with motivation, attention, and persistence when they reached kindergarten. In Sulik's (2017) study of over 1,000 children, higher levels in executive function and verbal ability were shown to be important in protecting against severe behavior problems. These findings should strengthen educators' focus on the needs and developmental levels of the whole child, and to not look at each area or concern as separate or unique.

In a study of 72 preschoolers, aged 3-5, Gagnon (2019) found that the lower the emotional regulation of the child, the more challenges that the teacher needs to address or work to prevent, thus creating more stress put on the teacher. Gagnon (2019) related these findings to the fact that preschool children's emotional regulation is not well developed, therefore, preschool teachers may be at a higher risk of experiencing student-specific stress than teachers in elementary or secondary settings. Pas & Bradshaw (2014) indicate challenging behaviors can be looked at from the opposite direction. In a quantitative study of 702 teachers over a span of three

years, Pas & Bradshaw (2014) found that teachers who perceive an unhealthy work environment had higher rates of challenging behaviors happening in the classroom. Teachers who perceived a healthy work environment reported lower rates of challenging behaviors occurring in the classroom (Pas & Bradshaw, 2014). These conflicting findings suggest that both child behavior and the work environment may influence how teachers perceive and report challenging behaviors occurring in their classroom.

Negative Effects

Research examining challenging behaviors has shown that young children who exhibit frequent or severe challenging behaviors have lasting effects to social and cognitive skills as they grow (Brennan et al., 2015; McDermott et al., 2018; Milledge et al., 2019). In a 6.5-year study with 731 mother-child pairs, Brennan (2015) found that aggression was a significant predictor for peer dysfunction in elementary school. While looking at 147 children in the UK, Milledge (2019) reports that the presence of attention-deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), or callous-unemotional (CU) symptoms are related to an increase in peer social problems. The similarities between the Brennan (2015) and Milledge (2019) findings demonstrate that the challenging behaviors reported for young children are linked to lower levels of social functioning throughout the early childhood years.

There are notable findings for the different types of challenging behaviors that students may exhibit. Aggression at an early age is a significant predictor for dysfunctional peer relationships in later years (Brennan et al., 2015). Oppositional behavior, when reported by parents, is highly associated with lower social functioning skills as children grow (Brennan et al., 2015). Inattention is linked to low peer interaction skills, including ability to read social cues

(Milledge et al., 2019). While looking at over 2,000 children from their time in a Head Start preschool class through their year of first grade, McDermott (2018) reports that of the children exhibiting challenging behaviors in preschool, male children and children who receive special education services are at especially high risk for continued social and behavioral problems, as well as future deficits in reading and mathematics. The possibility of these negative impacts happening for the children suggests that educators need to implement strategies that are effective at reducing challenging behaviors.

Teacher-Child Relationships

The presence of challenging behaviors has been shown to greatly impact the health and productivity of the teacher-child relationship (Cash & Pianta, 2014; Demirkaya & Bakkaloglu, 2015; Williford & Vitiello, 2020). Teacher-child relationships are unique to the perceptions of each individual. Even children within the same classroom will have different experiences with their teacher (Lippard et al., 2018). Teacher interactions with children are related to their own perception of the student and how that student engages in the classroom community (Pas & Bradshaw, 2014). Demirkaya and Bakkaloglu (2015) emphasize that problem behaviors negatively affect the teacher-child relationship whereas social behaviors positively affect teacher-child relationships. Difficulties in the teacher-child relationship are shown to negatively impact both the teacher and the child (Gagnon et al., 2019; Williford & Vitiello, 2020).

Positive Relationships

Positive and healthy teacher-child relationships have influence on not only the social interactions between the teacher and the child but can also create a physical response in the child. After collecting saliva samples for 113 preschool children, Hatfield and Williford (2017)

observed children to have lower cortisol levels when their teachers engaged in classroom behaviors that are emotionally supportive. The children's stress response was reduced, allowing the child to feel safe and secure in their environment (Hatfield & Williford, 2017). Many factors make up a child's stress response, but these findings are important for early childhood educators to remember in their daily interactions and in their relationship building with the children in their care.

The effects of a teacher's emotional support on the teacher-child relationship are prevalent in the research, which is shown in Moen's (2019) agreement with the findings from Hatfield and Williford (2017). Based on the observations of 237 preschool aged children, Moen (2019) noticed that with higher levels of emotional support, preschool students were developing closer relationships with their teachers. High emotional support is found through positive and reflective interactions with the teacher, while also having the needs, interests, and points-of-view of students included consistently in daily routines and activities (Moen et al., 2019). These findings emphasized the importance of early childhood educators providing emotional support to all students in order to improve their teacher-child relationships.

In a quantitative study with 206 student and teacher pairs, Cadima (2016) reports that teachers who are sensitive, warm, and responsive in their relationships with children do have an impact on the child's self-regulation abilities. The children that increased proficiency in self-regulation skills were shown to be in classrooms with a teacher who encouraged communication and provided more feedback (Cadima et al., 2016). These findings demonstrate how the teacher-child relationship has an impact on a child's growth in the area of self-regulation. Cadima (2016) also claims that their research may be the first study to make that connection between self-regulation and teacher-child relationships for preschool aged children.

There are disagreements in the research as to how teachers can best promote positive teacher-child relationships in their classroom. Lippard (2018) and Cadima (2016), who both used the closeness and conflict subscales from the Student-Teacher Relationship Scale, agree that individual teacher-child relationships are more beneficial to future positive outcomes than overall classroom interactions. Cadima (2016) suggests that individualized attention from the teacher, supports the child effectively because those interactions provide open conversations, feedback, and scaffolding. Contrarily, Moen (2019), who used the same closeness and conflict subscales from the Student-Teacher Relationship Scale, argues that teachers are still able to develop positive teacher-child relationships at the classroom-wide level. Considering the fact that both individual interactions and classroom-wide interactions have been shown to improve teacher-child relationships, early childhood educators should implement strategies to target both audiences in order to develop more positive teacher-child relationships for all children in their classroom.

When it comes to positive teacher-child relationships, the characteristic of closeness has been well researched. Based on the data collected on 1,100 4-year-old children enrolled in center-based care, Lippard (2018) reports that the level of teacher-child closeness in preschool is positively associated with a child's positive classroom behavior when they are in kindergarten. Rhoad-Drogalis (2018), when looking specifically at 191 children with developmental language disorders, found that overall, the preschool teacher-child relationships were relatively close. Closeness in the relationship was positively associated with an increase in classroom learning behaviors like motivation, attention, persistence, and flexibility (Rhoad-Drogalis, 2018). With a sample of 108 children, Demirkaya and Bakkaloglu (2015) observed that a child's skills in social-interaction, social acceptance, and independence predict the level of closeness in their

teacher-child relationships. A rise in social behaviors for the child increases the positive reports of close teacher-child relationships by the teacher (Demirkaya & Bakkaloglu, 2015).

Conflictual Relationships

Recent research has shown how strain in the teacher-child relationship negatively impacts the teachers. For 44 preschool teachers, both an increase in conflict and an increase in dependency were linked to higher levels of teacher stress (Gagnon et al., 2019). When the teacher-child relationship was conflictual, Gagnon (2019) describes how these preschool teachers were more likely to experience a physical stress response when a child displayed a challenging behavior. Similarly, with a sample of 155 preschool teachers, Williford and Vitiello (2020) observed that even children who exhibit low levels of challenging or disruptive behavior still cause demanding challenges for teachers.

Williford and Vitiello (2020), with their sample of 300 preschool aged children, report that the student who is driving an interaction cycle affects the teacher's practice and the teacher's feeling of control in the classroom. The challenging behaviors may repeat patterns with certain people, in specific situations, or be the cause of a distinct trigger. This emphasis on behavior cycles is extremely important for both early childhood educators and early childhood administrators to acknowledge. Teachers who have a child or multiple children who exhibit challenging behaviors in their classroom may require more support from their administration and may need professional development opportunities to help develop strong teacher-child relationships because the cycle of negative interactions continues to repeat.

Research that demonstrates the impact conflictual teacher-child relationships have on the children. Lippard's (2018) quantitative data on 1,100 children shows how a teacher-child

relationship reported as conflictual during preschool is associated with lower scores for the child in reading and math during kindergarten. High levels of conflict in the teacher-child relationship in preschool are also linked with having more problem behaviors in kindergarten (Lippard et al., 2018). Rhoad-Drogalis (2018) found associations from preschool to kindergarten in the study of 191 children who had developmental language disorders. The teacher-child relationship with more conflict was related to poorer learning behaviors in kindergarten (Rhoad-Drogalis, 2018). This decrease in appropriate learning behaviors includes struggling with attention and persistence, low motivation, and poor attitudes (Rhoad-Drogalis, 2018). These findings indicate that the relationship between the preschool teacher and the preschool aged child has implications that reach beyond the preschool years.

Several other factors were discussed in the research on conflictual teacher-child relationships. In a study involving 54 children with special needs and 54 children without special needs, Demirkaya and Bakkaloglu (2015) report that students with special needs had more conflictual teacher-child relationships than students without special needs. The teacher-child relationship was impacted by class size, for the 40 different classrooms observed, an increase in children per classroom resulted in an increase of conflictual tendencies (Demirkaya & Bakkaloglu, 2015). This may be caused by the teacher not having enough time to have meaningful interactions with each child every day. It is important to note that the research findings on conflictual relationships are teacher reported (Demirkaya & Bakkaloglu, 2015; Gagnon et al., 2019; Lippard et al., 2018; Rhoad-Drogalis, 2018; Williford & Vitiello, 2020), therefore, the findings may be impacted by the cycle of negative behaviors and possible stressors described above.

Teacher-Child Interaction Training

Teacher-Child Interaction Training (TCIT) is a researched-based professional development program available for early childhood educators. The universal prevention strategies included in TCIT are meant to create a positive classroom environment, prevent future behavior problems, and reduce teacher stress and burnout (Gershenson et al., 2010). The TCIT program has been shown to be effective for both teachers and children (Fawley et al., 2019; Garbacz et al., 2014; Gershenson et al., 2010; Kanine et al., 2018).

Implementation

TCIT has been adapted from Parent-Child Interaction Therapy (PCIT). PCIT is used with young children aged two through seven that have disruptive behavior disorders, in order to help the parents build child-focused relationship skills and practice logical discipline (Gershenson et al., 2010). TCIT in turn focuses on building relationships between the teacher and the students by using consistent discipline strategies in a classroom setting. Gershenson (2010) acknowledges a major difference in the terminology of TCIT and PCIT, looking at training rather than therapy. TCIT is not meant to be a therapy for an individual child but aims to improve teachers' skills in building relationships with all children. The TCIT program is provided in the teacher and child's natural classroom setting with the focus to increase positive teacher behaviors, decrease negative comments by the teacher, and reduce the attention given to mild behavior distractions (Gershenson et al., 2010). These strategies are broken down into two implementation phases.

The first phase of implementing TCIT is Child Directed Interactions (CDI), which centers around relationship building skills and following the child's lead (Gershenson et al., 2010). The teacher is taught how to use PRIDE skills, a major focus of both PCIT and TCIT. The

PRIDE skills include descriptively praising appropriate behaviors, reflecting appropriate speech, imitating appropriate behaviors, describing appropriate behaviors, and using enthusiasm during interactions (Fawley et al., 2019; Gershenson et al., 2010). An increase in descriptive or behavior specific praise has been shown to increase on-task behavior and increase the rate of skill acquisition for children (Allday et al., 2012; Polick et al., 2012).

Structuring Behaviors are also explained to the teacher during the CDI phase. Structuring Behaviors, which include ineffective commands, unnecessary questions, and negative talk, are to decrease their use with children (Fawley et al., 2019). Throughout this CDI phase, the teacher attends training on the components of TCIT, starts to implement strategies with students, receives live individual coaching sessions in the classroom, and then receives feedback on the types of interactions that were observed during the coaching sessions (Gershenson et al., 2010).

The second phase of implementing TCIT is Teacher Directed Interactions (TDI), which focuses on using effective discipline strategies to address moderate to severe behavior problems (Gershenson et al., 2010). Teachers continue to work on and receive feedback for their use of PRIDE skills, effective commands, and avoiding negative talk, while also incorporating new strategies to the coaching sessions. The TDI phase explains how teachers can use active ignoring for behaviors that may be annoying or obnoxious and are not serious or dangerous (Lineman et al., 2017). TDI also includes the practice of using natural and logical consequences and introduces the Sit and Watch strategy (Lineman et al., 2017). Sit and Watch is an immediate consequence following a severe misbehavior, for example, hitting or throwing objects at peers (Gershenson et al., 2010). During Sit and Watch, the child is removed to the edge of a situation for 1-2 minutes in order to observe the other children behaving appropriately and is then invited back into the activity or situation by the teacher (Gershenson et al., 2010). The live coaching

sessions and cycles of feedback which were part of the CDI phase continue through the TDI phase as well.

Effectiveness

The following research demonstrates how the implementation of TCIT shifts teacher behaviors in the classroom. Gershenson (2010) reports an increase in teachers' use of the positive behaviors, or PRIDE skills, of TCIT, for 83% of the 12 teachers observed in the study. Both Garbacz (2014) and Kanine (2018) found similar patterns in the teachers' behavior. In Garbacz's (2014) sample of 12 teachers, the average use of PRIDE skills was shown to rise from 4 instances at the baseline to 16 instances at the end of training. With a sample of 8 teachers, Kanine (2018) observed the teachers' PRIDE skills increase by an average of 3-19.5 times from baseline through follow-up. Fawley (2019) describes that an increase of PRIDE skills was maintained through the following year after the teachers participated in TCIT, for a slightly smaller sample of 5 teachers.

TCIT not only focuses on improving positive behaviors in teachers, but TCIT also aims to decrease negative teacher behaviors used in the classroom. Fawley (2019) reports overall reductions in the use of Structuring Behaviors, specifically looking at ineffective commands and unnecessary questions. Kanine's (2018) results are in agreement with Fawley's, showing a decrease in occurrences of Structuring Behaviors, including ineffective commands, unnecessary questions, and negative talk, by 22-81% from baseline to the mid-point.

Research shows how the teacher's use of TCIT strategies impacts the behavior of the children in the class. Fawley's (2019) sample of 22 children and Garbacz's (2014) sample of 51 children each report decreases in children's behavior concerns over the course of the TCIT

program. Kanine's (2018) study of 39 children observed no significant change to overall behavior problems by the end of the implementation phases. However, those results have been associated with the fact that 32% of the children exited the classroom before the phases were complete (Kanine et al., 2018). Fawley (2019) found that children had an increase in social skills, and that those gains were maintained three months after the training was completed. Garbacz (2014) states the connection between increased levels of teacher change and lower levels of behavior concerns.

The research findings of increased use of positive behaviors and decreased use of negative behaviors suggest that the implementation of the TCIT program is effective at changing teacher behavior. The findings indicate that increased use of the PRIDE skills, specifically praising appropriate behaviors, reflecting appropriate speech, and describing appropriate behaviors, has long-term effects on teacher behavior in the classroom. Students' problem behaviors were reduced after TCIT, while social skills were increased, suggesting that TCIT is also effective at changing student behavior.

The research reviewed shows the consequences that challenging behaviors and strained teacher-child relationships have on children and teachers in early childhood education. Research supports the use of TCIT to reduce challenging behaviors and improve teacher-child relationships. However, results of the previous research do not address what types of challenging behaviors TCIT was most effective at reducing. This current study will look to identify which type of challenging behavior has the greatest decrease in frequency after receiving TCIT.

Methods

Aims and Hypotheses

The current action research project aimed to expand the understanding of TCIT's impact on preschool students who exhibit challenging behaviors by answering two research questions. First, does the implementation of TCIT decrease certain types of challenging or disruptive behavior more than other types? It was hypothesized that all types of challenging behavior would be decreased after the students received the TCIT intervention. Second, which type of challenging behavior (delay/avoidance, aggressive, disruptive to teacher, disruptive to peer) will have the greatest decrease in frequency after receiving TCIT? The disruptive to teacher type of challenging behavior was hypothesized to decrease the most after receiving the TCIT intervention. This result was expected because TCIT focuses on improving teacher-child interactions, which has been shown to improve the teacher-child relationship (Gagnon et al., 2019; Lippard et al., 2018).

Participants

This action research project was conducted in an inclusive preschool classroom in a Northwest Iowa public school district. The classroom includes children ranging in age from 3-5 years old and serves children with an Individualized Education Program (IEP) and children without an IEP. The preschool classrooms had half-day programming, 5 days a week, as part of the school district's hybrid learning model as a response to the coronavirus pandemic. The morning session included 10 students, while the afternoon session included 8 students. Both sessions were taught by the same certified teacher, who serves as both the general education and the special education teacher, and the same teacher's aide. The preschool programs in this school

district are accredited by the National Association for the Education of Young Children (NAEYC) and follow the Iowa Early Learning Standards.

Target students were identified by the researcher, who is also the classroom teacher, as the children exhibiting elevated levels of challenging behaviors compared to their same age peers. Three different students were included in the current study and were assigned a numerical digit as an identifier during observations, data collection, and data analysis to maintain confidentiality. Student 1, a 5-year-old male, attended the morning session and was in his first year of experience in a school setting. Student 2, a 5-year-old female, attended the afternoon session and was also in her first year of experience in a school setting. Student 3, a 4-year-old male, attended the morning sessions and was in his second year of experience in a school setting. Student 3 had an IEP that included behavior and mathematics goals, student 1 and student 2 did not have an IEP.

Data Collection

Students' challenging behavior, the dependent variable of this action research, was assessed using a frequency count for each type of challenging behavior. Table 1 describes the four different types of challenging behavior that were assessed. See Appendix A for the data collection sheet used during student observations. The descriptions of child behaviors were identified from the teacher rating form Sutter-Eyberg Student Behavior Inventory-Revised (SESBI-R) (Eyberg & Pincus, 1999). The SESBI-R has been shown to have high internal consistency and significant test-retest reliability, with discriminant, incremental, and criterion validity (Querido & Eyberg, 2003). There is no information on the reliability or validity of the

frequency count data collection sheet, as it was developed by the researcher to be used specifically for this action research project.

The teacher’s use of the TCIT strategies, the independent variable of this action research, was assessed using the TCIT Coding Sheet, which had been adapted from the Dyadic Parent-Child Interaction Coding System (DPICS) (Eyberg et al., 2009). See Appendix B for the TCIT Coding Sheet used during teacher observations and teacher coaching sessions. The TCIT coach observed the teacher in the classroom, focusing on PRIDE skills and Structuring Behaviors, which is shown in Table 2. The DPICS has been shown to have acceptable reliability, with convergent validity (Bessmer, 1998). The reliability and validity of the TCIT Coding Sheet used for this action research project is unknown.

Table 1.

Descriptions of children’s behavior categorized into four types of challenging behavior.

Delay/Avoidance	Aggression	Disruptive to Teacher	Disruptive to Peer
<ul style="list-style-type: none"> -Dawdles in obeying rules or instructions -Refuses to obey instructions -Easily distracted -Fails to finish tasks 	<ul style="list-style-type: none"> -Physically fights or harms another student -Physically fights or harms a teacher -Damages property 	<ul style="list-style-type: none"> -Demands teacher attention -Interrupts teacher -Sasses teacher -Argues with teacher about rules or instructions -Difficulty accepting criticism or correction -Acts defiant when told to do something -Talks excessively 	<ul style="list-style-type: none"> -Teases or provokes another student -Acts bossy to other student(s) -Blames others for own behavior -Verbally fights with another student -Interrupts another student -Bothers others on purpose

Table 2.

Descriptions of teacher interactions during the CDI phase of TCIT.

PRIDE Skills	Structuring Behaviors
<ul style="list-style-type: none"> -Behavioral Descriptions -Reflections -Labeled Praise -Unlabeled Praise 	<ul style="list-style-type: none"> -Ineffective Commands -Effective Commands -Unnecessary Questions -Negative Talk

Procedures

The quantitative data for the current action research project was collected during the CDI phase of the teacher’s TCIT coaching cycle. Baseline observations for student behavior and for the teacher’s use of TCIT strategies were conducted the second week of February. The teacher researcher tallied the student’s behavior over the course of a three-hour school day for each student. The TCIT coach tallied the teacher’s interactions during a 5-minute coding segment of the 30-minute coaching session.

After the baseline data was collected, the teacher implemented the TCIT strategies of PRIDE skills and structuring behaviors for 4 consecutive weeks. The teacher engaged in weekly live coaching sessions from the TCIT coach and received feedback on the interaction skills both during and after the sessions. Follow-up observations, which were the same length as the baseline observations, were conducted the second week of March for the student behaviors and the teacher’s use of TCIT strategies. IRB exemption was obtained prior to the collection of data and prior to the implementation of the TCIT intervention period.

Analytic Plan

The plan for data analysis will compare the frequency of the teacher's TCIT skills from the baseline observation to the follow-up observation. The percent of change between the two data points was calculated for each PRIDE skill and for each structuring behavior. Percentage change was calculated by:

$$\frac{(FollowUp - Baseline)}{Baseline} \times 100$$

The data analysis was then compared to the frequency of student behaviors from the baseline observation to the follow-up observation. The percent of change between the two data points was calculated for each target student. The percentage change between the two data points was calculated for each of the four different types of challenging behavior. Finally, the change of the teacher's TCIT skills was examined alongside the change of student behavior in order to identify any patterns or trends.

Findings

TCIT Strategies

As both research questions rely on the implementation of TCIT, the teacher's use of the TCIT skills is a major factor to this research project. Figure 1 and Figure 2 shows the frequency of the teacher's use of PRDIE skills and Structuring Behaviors from the baseline observation to the follow-up observation. It must be noted that some of the strategies are to increase over the course of the TCIT intervention, while other strategies should decrease. Strategies to increase are Behavioral Descriptions, Reflections, Labeled Praise, and Effective Commands, while the strategies to decrease are Unlabeled Praise, Ineffective Commands, Unnecessary Questions, and

Negative Talk (Fawley et al., 2019; Gershenson et al., 2010). The data shows all areas had a change in teacher behavior, except for Negative Talk, which remained at 0 over the course of the CDI intervention.

Figure 1.

Teacher’s frequency of PRIDE skills in the classroom.

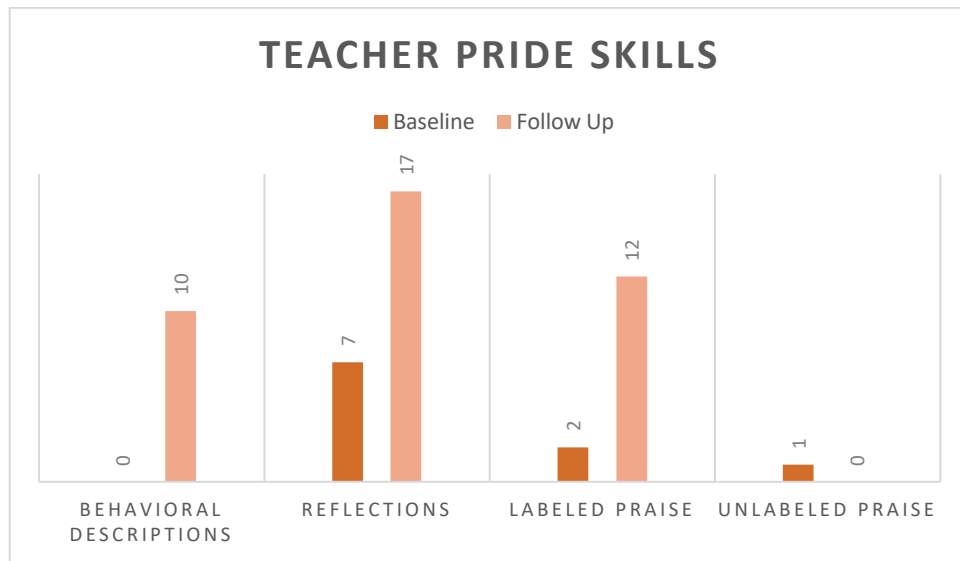


Figure 2.

Teacher’s frequency of structuring behaviors in the classroom.

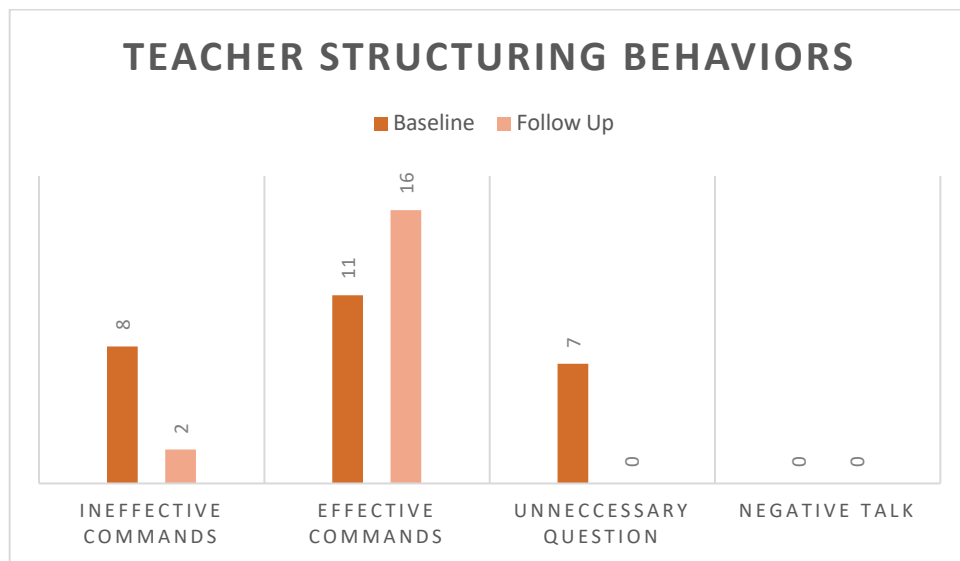


Table 3 shows the percentage change for each PRIDE skill and Structuring Behavior. The teacher did raise the frequency for the four TCIT strategies that should increase after intervention. The strategy with the greatest percentage change from baseline to follow-up was Labeled Praise, with an increase of 500%. The strategy that showed the least percentage change was Effective Commands, with an increase of 45%. For one strategy, Behavioral Descriptions, the percentage change was not able to be calculated with the formula, as the divisor was zero. Behavioral Descriptions did have an increase from 0 at baseline to 10 at follow-up. The other strategy, Reflections, had a percentage change increase of 143%.

The teacher did reduce the frequency for the four TCIT strategies that were to decrease after intervention. Both Unlabeled Praise and Unnecessary Questions had a percentage change decrease of 100%. The strategy of Ineffective Commands had a percentage change decrease of 75%. As noted above, the strategy of Negative Talk did not have a percentage change, as it remained at 0 from baseline to follow-up.

Table 3.

Teacher’s TCIT skills percentage change from baseline to follow-up.

	Behavioral Descriptions	Reflections	Labeled Praise	Unlabeled Praise	Ineffective Commands	Effective Commands	Unnecessary Question	Negative Talk
Percentage Change	increase from zero	143%	500%	-100%	-75%	45%	-100%	no change

Challenging Behaviors

For each target student, Figure 3, Figure 4, and Figure 5 show the frequency of student behaviors for the four types of challenging behavior. There was no observable data collected for the behavior type of aggression, as none of the target students showed any aggressive behaviors at baseline or at follow-up. Student 1 had a decrease in behavior frequency for delay/avoidance, disruptive to teacher, and disruptive to peer. Student 2 had a decrease in behavior frequency for delay/avoidance, an increase in behavior frequency for disruptive to teacher, and no change in behavior frequency for disruptive to peer. Student 3 had a decrease in behavior frequency for delay/avoidance and disruptive to teacher, with an increase in behavior frequency for disruptive to peer.

Figure 3.

Student 1 frequency of challenging behaviors.

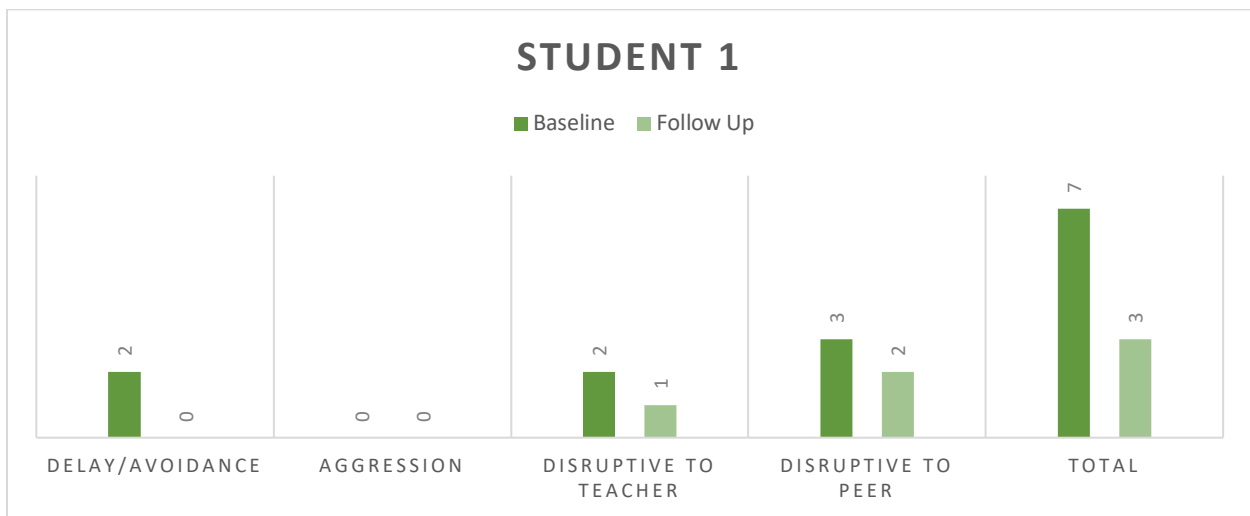


Figure 4.

Student 2 frequency of challenging behaviors.

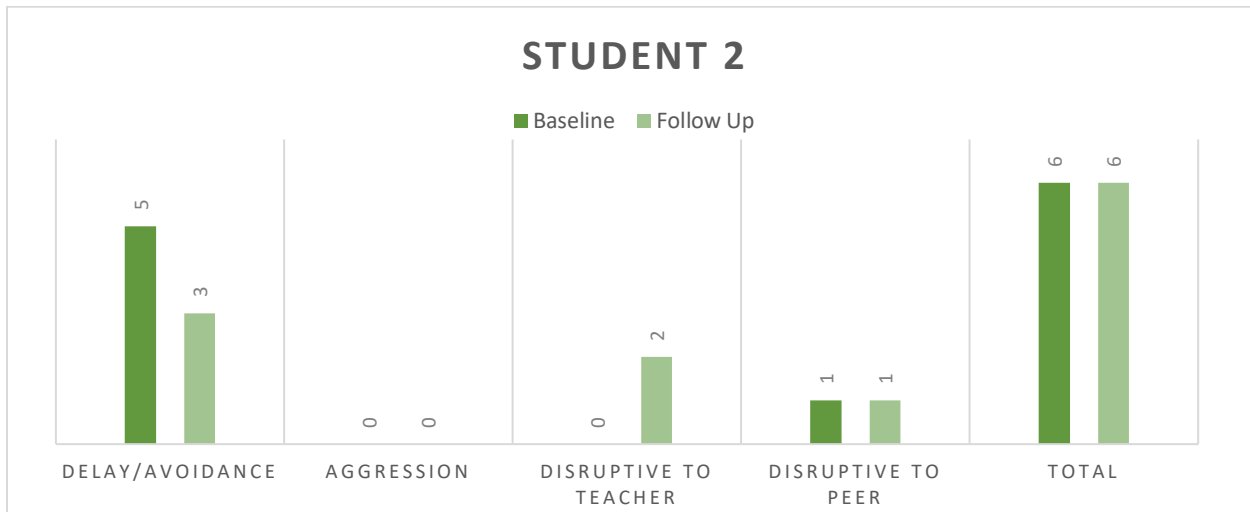


Figure 5.

Student 3 frequency of challenging behaviors.

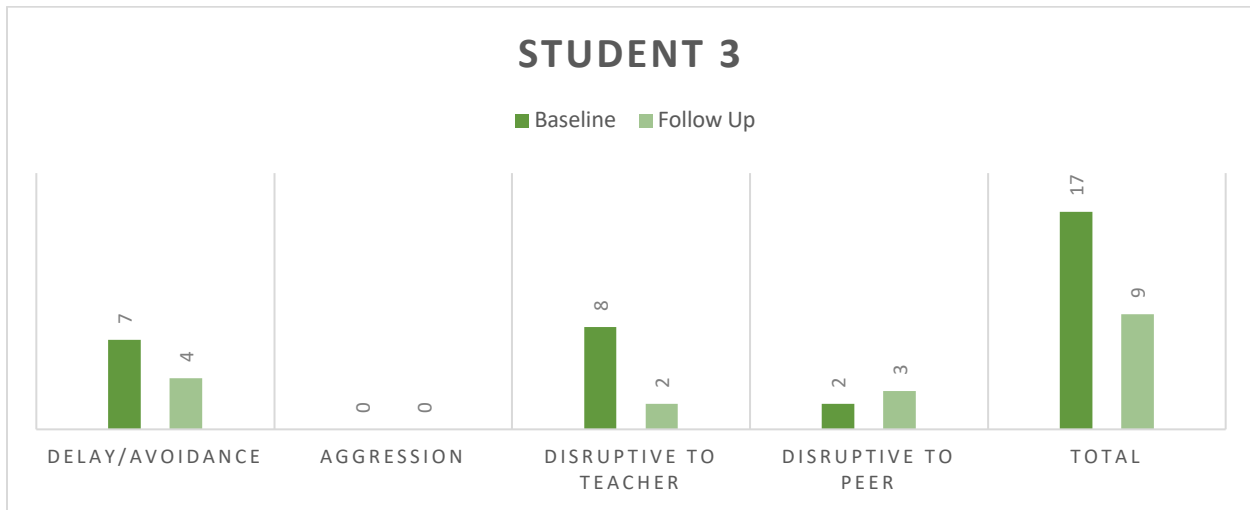


Table 4 shows the percentage change for the four types of challenging behaviors for each of the target students. For Student 1, delay/avoidance had the greatest decrease in percentage change, with a change of 100%. Student 1 also had decreases in percentage change of 50% for disruptive to teacher behaviors and of 33% for disruptive to peer behaviors. For Student 2, there was only one type of behavior that showed a percentage change, the delay/avoidance behaviors

had a decrease of 40%. Student 2 had no change for disruptive to peer behaviors. The percentage change for disruptive to teacher behaviors for Student 2 was not able to be calculated with the formula, as the divisor was zero. For Student 3, disruptive to teacher behaviors had the greatest decrease in percentage change, with a change of 75%. Student 3 also showed a decrease for delay/avoidance behaviors, with a percentage change of 43%. Student 3 had an increase of 50% for disruptive to peer behaviors.

Table 4.

Students' challenging behavior percentage change from baseline to follow-up.

	Delay/ Avoidance	Aggression	Disruptive to Teacher	Disruptive to Peer
Student 1 Percentage Change	-100%	no change	-50%	-33%
Student 2 Percentage Change	-40%	no change	increase from zero	no change
Student 3 Percentage Change	-43%	no change	-75%	50%

The data from each student was then combined to establish a total for each type of challenging behavior. Figure 6 shows the total frequency for each type of challenging behavior. Table 5 describes the percentage change that occurred for the four types of challenging behavior from the baseline to follow-up. Overall, delay/avoidance and disruptive to teacher behaviors were reduced, while disruptive to peer behaviors had no change. The percentage change was the same for both delay/avoidance and disruptive to teacher, with a decrease of 50%. There was no percentage change for disruptive to peer behaviors.

Figure 6.

Total student behaviors for each type of challenging behaviors.

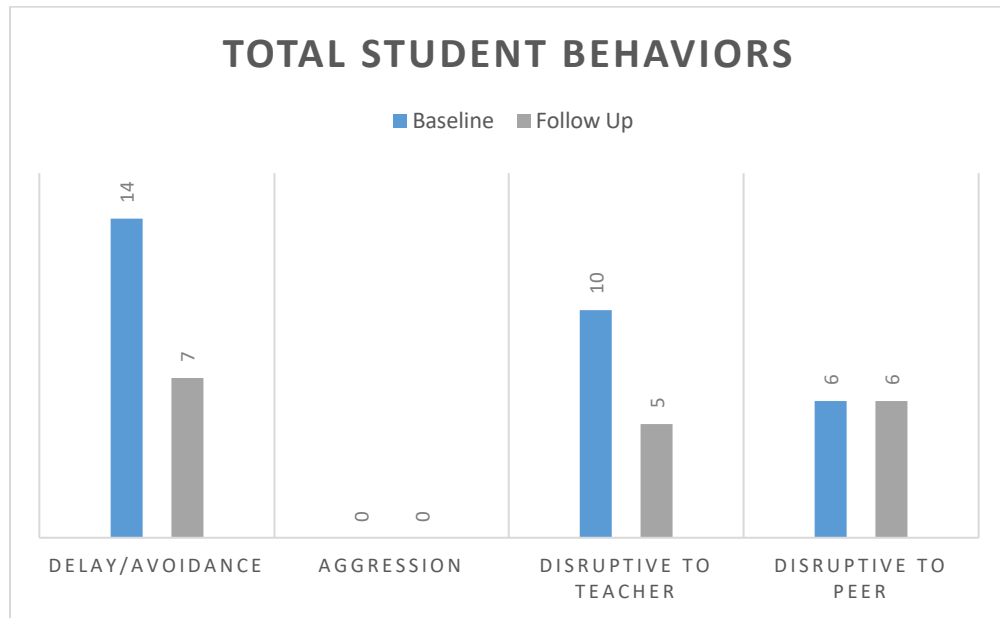


Table 5.

Total student behavior percentage change from baseline to follow-up.

	Delay/Avoidance	Aggression	Disruptive to Teacher	Disruptive to Peer
Percentage Change	-50%	no change	-50%	no change

Discussion

Summary of Major Findings

The first question that the researcher set out to answer was if the implementation of TCIT decreased certain types of challenging behavior more than other types. It was hypothesized that all four types of challenging behavior would be decreased after receiving TCIT. The data shows a decrease for two of the challenging behavior types, delay/avoidance and disruptive to teacher

after receiving TCIT intervention. The other two types of challenging behavior, aggression and disruptive to peer, showed no change after receiving TCIT intervention.

The second research question was which type of challenging behavior would have the greatest decrease in frequency after receiving the TCIT intervention. It was hypothesized that the disruptive to teacher type of challenging behavior would be decreased the most after TCIT. The disruptive to teacher type did have the lowest frequency at the follow-up observation, with 5 incidents. However, both disruptive to teacher and delay/avoidance decreased at the same rate of 50%.

Limitations of the Study

Due to time constraints, the data was only collected during the CDI phase of the TCIT intervention. There was only a small sample size of target students with one classroom teacher. Another limitation to this study was that none of the students exhibited any aggressive behaviors, so one entire type of challenging behavior is missing from the data set. Scheduling challenges were another limiting factor of the study, so only two data points were used for analysis. The students were all observed on the same day for baseline and follow-up, but relationships and challenging behavior cycles are deeply personal, and each student has a different daily experience in the classroom that might contribute to the behaviors they exhibit (Lippard et al., 2018; Williford & Vitiello, 2020). It is noted that the researcher was the active classroom teacher at the time of observations, and therefore may have inadvertently missed occurrences of challenging behaviors from the target students.

Further Study

In future studies, researchers should consider including both the CDI and TDI phases of TCIT. Observing both phases would allow for more data points for the types of challenging behaviors exhibited by the children. A larger sample of students and teachers would allow for better understanding of the percentage changes for each of the four types of challenging behavior. Researchers could survey teachers or caregivers as to what types of behaviors are a concern, in order to ensure representation for each type of behavior would be present in the data. The researcher is interested in seeing how well their TCIT skills are maintained a year after the initial coaching cycles were implemented. The researcher is also eager to compare the data from this current study to data collected for students who receive TCIT intervention from the beginning of the school year.

Conclusion

The presence of challenging behaviors has been shown to negatively impact both the children and the teachers involved. This action research project examined the effectiveness of TCIT on reducing the frequency of four different types of challenging behavior. After the four-week TCIT intervention of the CDI phase, the findings showed the delay/avoidance and disruptive to teacher behavior types had a percentage change decrease of 50%. However, the other two challenging behavior types, aggression and disruptive to peer, showed no percentage change after the CDI phase of TCIT intervention. The researcher will continue the implementation of the TCIT strategies with all students in order to strengthen positive teacher-child relationships, with the aim to prevent and reduce the frequency of challenging behaviors observed in the classroom.

References

- Allday, R.A., Hinkson-Lee, K., Hudson, T., Neilsen-Gatti, S., Kleinke, A., & Russel, C. (2012). Training general educators to increase behavior specific praise: effects on students with EBD. *Behavioral Disorders, 37*(2), 87-98.
- Bessmer, J. L. (1998). The Dyadic Parent-Child Interaction Coding System II (DPICS II): Reliability and validity. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 58*, 7(B), 3961.
- Brennan, L., Shaw, D., Dishion, T., & Wilson, M. (2015). The predictive utility of early childhood disruptive behaviors for school-age social functioning. *Journal of Abnormal Child Psychology, 43*(6), 1187-1199. DOI:10.1007/s10802-014-9967-5
- Cadima, J., Verschueren, K., Leal, T., & Guedes, C. (2016). Classroom interactions, dyadic teacher-child relationships, and self-regulation in socially disadvantaged young children. *Journal of Abnormal Child Psychology, 44*(1), 7-17. DOI:10.1007/s10802-015-0060-5
- Demirkaya, P. & Bakkaloglu, H. (2015). Examining the student-teacher relationships of children both with and without special needs in preschool classrooms. *Educational Sciences: Theory & Practice, 15*(1), 159-175. DOI 10.12738/estp.2015.1.2590
- Eyberg, S., & Pincus, D. (1999). *Eyberg Child Behavior Inventory & Sutter-Eyberg Student Behavior Inventory-Revised: Professional manual*. Psychological Assessment Resources.
- Fawley, K., Stokes, T., Rainear, C., Rossi, J., & Budd, K. (2019). Universal TCIT improves teacher-child interaction and management of child behavior. *Journal of Behavioral Education, 26*(4), 635-656. <https://doi.org/10.1007/s10864-019-09337-6>

- Gagnon, S., Huelsman, T., Kidder-Ashley, P., & Lewis, A. (2019). Preschool student-teacher relationships and teaching stress. *Early Childhood Education Journal*, 47(2), 217-225. DOI:10.1007/s10643-018-0920-z
- Garbacz, L., Zychinski, K., Feuer, R., Carter, J., & Budd, K., (2014). Effects of teacher-child interaction training (TCIT) on teacher ratings of behavior change. *Psychology in the Schools*, 51(8), 850-865.
- Gershenson, R., Lyon, A., & Budd, K. (2010). Promoting positive interactions in the classroom: Adapting parent-child interaction therapy as a universal prevention program. *Education and Treatment of Children*, 33(3), 261-287.
- Hatfield, B., & Williford, A. (2017). Cortisol patterns for young children displaying disruptive behavior: Links to a teacher-child, relationship-focused intervention. *Prevention Science*, 18(1), 40-49. DOI:10.1007/s11121-016-0693-9
- Kanine, R., Jackson, Y., Huffhines, L., Barnett, A., & Stone, K. (2018). A pilot study of universal teacher-child interaction training at a therapeutic preschool for young maltreated children. *Topics in Early Childhood Special Education*, 38(3), 146-161. DOI: 10.1177/0271121418790012
- Laughlin, L. (2013). Who's minding the kids? Child care arrangements: Spring 2011. <https://www.census.gov/prod/2013pubs/p70-135.pdf>
- Lineman, C., Brabson, L., Highlander, A., Wallace, N., & McNeil, C. (2017). Parent-child interaction therapy: Current perspectives. *Psychology Research and Behavior Management*, 10, 239-256. doi: 10.2147/PRBM.S91200

- Lippard, C., La Paro, K., Rouse, H., Crosby, D. (2018). A closer look at teacher-child relationships and classroom emotional context in preschool. *Child & Youth Care Forum*, 47(1), 1-21. DOI:10.1007/s10566-017-9414-1
- McDermott, P., Rovine, M., Reyes, R., Chao, J., Scruggs, R., Buek, K., & Fantuzzo, J. (2018). Trajectories of early education learning behaviors among children at risk: A growth mixture modeling approach. *Psychology in the Schools*, 55(10), 1205-1223. DOI:10.1002/pits.22145
- Milledge, S., Cortese, S., Thompson, M., McEwan, F., Rolt, M., Meyer, B., Sonuga-Barke, E., & Eisenbarth, H. (2019). Peer relationships and prosocial behavior differences across disruptive behaviors. *European Child & Adolescent Psychiatry*, 28, 781-793.
- Moen, A., Sheridan, S., Schumacher, R., & Cheng, K. (2019). Early childhood student-teacher relationships: What is the role of classroom climate for children who are disadvantaged? *Early Childhood Education Journal*, 47(3), 331-341. DOI:10.1007/s10643-019-00931-x
- Pas, E., & Bradshaw, C. (2014). What affects teacher ratings of student behaviors? The potential influence of teachers' perceptions of the school environment and experiences. *Prevention Science*, 15(6), 940-950. DOI:10.1007/s11121-013-0432-4
- Polick, A., Carr, J., & Hanney, N. (2012). A comparison of general and descriptive praise in teaching intraverbal behavior to children with autism. *Journal of Applied Behavior Analysis*, 45(3), 593-599. doi: 10.1901/jaba.2012.45-593
- Querido, J. G., & Eyberg, S. M. (2003). Psychometric properties of the Sutter-Eyberg Student Behavior Inventory-Revised with preschool children. *Behavior Therapy*, 34(1), 1-15. DOI: 10.1016/S0005-7894(03)80018-7

- Rhoad-Drogalis, A., Justice, L., Sawyer, B., & O'Connell, A. (2018). Teacher-child relationships and classroom-learning behaviors of children with developmental language disorders. *International Journal of Language & Communication Disorders, 53*(2), 324-338. DOI: 10.1111/1460-6984.12351
- Sulik, M., Blair, C., & Greenberg, M. (2017). Child conduct problems across home and school contexts: A person-centered approach. *Journal of Psychopathology and Behavioral Assessment, 39*(1), 46-57. DOI:10.1007/s10862-016-9564-8
- Williford, A., & Vitiello, V. (2020). Who's in charge? Child behavior predicts teacher subsequent classroom management practice for preschoolers reported to display disruptive behavior. *School Psychology, 35*(5), 299-310. DOI:10.1037/spq0000402

Appendix A

Data Collection Sheet for Baseline and Follow-Up Student Observations

TARGET CHILD # _____ DATE _____

TYPE OF BEHAVIOR	FREQUENCY	TOTAL
<p>Delayed/Avoidance</p> <p>Dawdles in obeying rules or instructions, refuses to obey instructions, easily distracted, fails to finish tasks</p>		
<p>Aggression</p> <p>Physically fights/harms another student, damages property, physically fights/harms a teacher</p>		
<p>Disruptive to Teacher</p> <p>Demands teacher attention, interrupts teacher, sasses teacher, argues with teacher about rules or instructions, difficulty accepting criticism or correction, acts defiant when told to do something, talks excessively</p>		
<p>Disruptive to Peer</p> <p>Teases/provokes another student, acts bossy to other student, blames others for own behavior, verbally fights with another student, interrupts another student, bothers other on purpose</p>		

Appendix B

TCIT Coding Sheet for Baseline and Follow-Up Teacher Observations



TCIT Coding Sheet

Educator Name: _____ Title: _____ Date: _____ Time: _____
 Coaches Name: _____ School Name: _____ Grade: _____
 Coding Only (5 minutes) _____ OR Coding and Coaching (5 min code & 25 min coach) _____
CIRCLE ONE: CDI CDI/TDI **CIRCLE ONE:** Large Group Small Group One on One
BASELINE: Child led Instructional/Academic Transition

CDI Skills	Tally Occurrences	PRIDE skills For SESBI kids	Total	% used w/ SESBI kids	Notes
Behavior Description (Action Verbs: describes what they are Doing, de-escalation, self-regulation)					
Reflection (Shortened, Exact, Extended, Elaborated)					
Labeled Praise (Thank you FOR, I like it WHEN, Great idea, etc...)					
Unlabeled Praise (Lacks a "For What" - Good job, awesome, perfect, great)					
TDI Skills	Tally Occurrences		Total	% used w/ SESBI kids	Notes
Effective Commands (Direct Command and opportunity for compliance)					

To Avoid	Tally Occurrences	Total	Total Follow-Up %	Notes
Ineffective Commands (Indirect command OR no opportunity for compliance - Examples: Starts or ends with a Question, "Let's", *expectation is current)				
True Questions (What is this number?)				
Tag Questions (isn't it, won't it, okay, alright)				
Tip Up Questions (Inflection at the end of a statement)				
Negative Talk (no, don't, stop, quit, not)				
Neutral/Teacher Talk *speaks to the group in future tense				