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Function-Based Behavior Intervention to Decrease Off-Task Behavior of a Student with ADHD in the Large Music Classroom

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Function-Based Behavior Intervention to Decrease Off-Task Behavior of a Student with ADHD in the Large Music Classroom

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May 10, 2015

Submitted in partial fulfillment of the requirements for a Master of Arts in Education degree.
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By

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2015
VITA

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Figure 1. Percentage of Intervals of Off-task Behavior .............................................33
The purpose of this study was to examine the effects of implementing function-based intervention to decrease the off-task behaviors of a 6th grade student with attention deficit hyperactivity disorder, in a large music classroom. By conducting a functional behavior assessment, the triggering antecedents and consequences maintaining the unwanted behavior were examined and the function of the behavior was identified. Following, a function-based intervention plan was implemented to minimize antecedents, teach replacement behavior, and decrease consequences maintaining the target behavior. Data were collected and analyzed during baseline and intervention phase using direct observation. Results indicated that function-based intervention was successful in reducing off-task behavior in the large classroom setting and social validity results concluded that both parents and the participant were satisfied with the outcomes of the study.
SECTION ONE

Introduction

Learning is accomplished when teachers strive to create a comfortable, structured, and student-centered learning environment. Within this positive space, behavior management is crucial to the academic success of each individual. Learning becomes difficult when students exhibit off-task behaviors that are distracting not only to their own learning, but to the learning of those around them. Off-task behavior refers to any behavior that takes a student away from academic and classroom tasks. These students’ actions may be due to environmental and academic factors that can be modified or eliminated to enhance student focus and performance.

In order to ensure the academic success of all students in the classroom, teachers may need to differentiate their management plan according to individual student needs. What works well for one child in regards to classroom focus and eliminating off-task behaviors may not work well another. For this reason, teachers may decide to implement function-based behavior interventions to reach students with more intensive behavior needs. Conducting a functional behavior assessment (FBA) develops an individualized plan that informs effective intervention strategies for individual students. An FBA is to lead to comprehensive, effective, and preventative interventions that will enhance students’ success in their current environment (Ingram, Lewis-Palmer, & Sugai, 2005).

As choir director to 550 middle school students across 6 choirs, I have come to notice a variety of differences in behavior management styles between the music
classroom and a typical academic classroom. My music room is a place where large class sizes exist, typically holding between 60 and 120 students in one room. Often times, the academic structure and management style of the class varies from the typical “core subject” design. In a core subject, class sizes range between 25 and 30 and teachers are able to provide more focused attention to individual students, whereas the music room is a performance based class where the learning environment is group centered. Due to these differences in academic structure and class size, music teachers need to be strategic with their behavior management plan in regards to off-task behavior, especially in students who need behavior interventions to be successful in class. Therefore, there is a need for addressing challenging behavior in the music class, in particular, consistent off-task behavior that interferes with student learning and academic success. Thus, the question arises, how can a music teacher address the off-task behavior of a student with attention deficit hyperactivity disorder (ADHD) in the large music class?

**The Purpose of Study**

This study investigated the effects of using function-based behavior intervention to decrease off-task behavior of a student with ADHD in the large music classroom. By conducting a functional behavior assessment, the triggering antecedents and consequences maintaining the unwanted behavior were examined and the function of the behavior was identified. Following, a function-based intervention plan was implemented to minimize antecedents, teach replacement behavior, and change consequences maintaining the target behavior. The effects of the intervention were evaluated using direct observation. The purpose then, of the present study, was to evaluate the effects of
function-based behavior intervention on the reduction of off-task behavior in the large classroom setting. A secondary focus was the effects of reducing disruptive behavior as a collateral effect of the intervention.

**Research Questions**

1. What is the effect of function-based behavior intervention on off-task behavior?

2. What is the effect of function-based behavior intervention on disruptive behavior as a collateral effect?

3. To what extent do the parents find the intervention goals, procedures, and outcomes to be relevant, significant, and effective?

4. What are a participant’s responses to the intervention and is learning outcomes?
SECTION TWO

Literature Review

Importance of On-Task Behavior and Academics

Growing literature has developed strong correlations between on-task behavior and academic success. Filter and Horner (2009) document the strong connection between students with behavior needs and their learning, indicating that when an academic subject is in a student’s frustrational range, more off-task problems are to occur. The length of the instructional task, the instructional medium of the task, as well as the student’s interest in the task, have all been proven to directly affect the outcome of their behavior. As stated in a study by Kraemer, Davies, Arndt, and Hunley (2012) disruptive behaviors are among the most prevalent behavior problems in childhood and these behaviors directly affect the learning process, reduce instruction time, and make it difficult for students to succeed academically.

Classroom behavior that is independent of teacher control, or control external to the learner, is a common goal of education (Glynn, Thomas, and Shee, 1973). Attaining this goal is made possible by structured classroom procedures and routines that allow students to self-assess their classroom behavior. As stated in Glynn et al., (1973) the typical outline of self-control can be stated in three components: self-assessment, self-recording, and self-determination of reinforcement. Self-assessment refers to a student’s ability to review his or her own behavior and determine whether or not they have successfully completed that behavior. When a student self-records, they obtain the ability
to document the frequency of their behaviors or a set of behaviors. Finally, self-determination of reinforcement is when a student can decide what they need in terms of reinforcement to complete a specific set of behaviors. All of these components of self-control are crucial to a student’s ability to remain on-task in a classroom setting, yet students still feel torn about how to successfully reach these self-relying components on a daily basis.

Hofer, Kilian, & Kuhnle (2009) argue that students struggle with the choice of engaging in classroom lessons or exhibiting off-task behaviors. They suggest that teachers should help students focus on goals in the classroom in order to promote on-task behavior and optimum learning. By setting goals, students will determine what is most important for them in the classroom, promoting on-task behavior, and increasing academic growth. In addition to teachers setting clear goals in the classroom, Hofer et al., (2009) suggests that parental monitoring is related to a child’s reaction when confronted with the choice to engage in off-task or on-task behavior. Parental monitoring has been linked to desirable classroom behavior, students’ interests in school, and school related work. Since parents are not present in the classroom on a daily basis, students must be able to internalize their parents’ expectations in order for on-task behavior and academic growth to occur. By combining factors such has goal setting and parental monitoring, teachers can increase on-task behaviors in the classroom, therefore, improving academic success. Incorporating goal setting in the classroom helps students prioritize their tasks and take ownership of their learning. When you combine this self-motivating task with an external factor such as parental-monitoring, students will get a well rounded support system to help them succeed.
Off-task Behavior of Students with Disabilities

When working with students with special needs, behavior management is key to their academic success. As stated in a study by May and Howe (2013), off-task behavior is typically heightened due to the need to avoid instructional activity. Students who struggle in the learning process are more likely to avoid instructional time all together. The focus of this study was a 4-year-old African American girl, who was enrolled in a special education preschool. The classroom teachers in the study wanted to identify the hypothesized functions of her off-task behavior and used two specific questionnaires. First, they used the “Motivation Assessment Scale” (MAS), which focused on 4 criteria to determine off-task behavior (sensory, escape, attention, and tangible). Second, they utilized the “Questions About Behavior Functions” (QABF), which identified the variables maintaining problem behavior based on 5 pieces of criteria (attention, escape, tangible, nonsocial, and physical). By using these tools, the teachers could pinpoint the specific reasoning behind the participant’s off-task behavior, and therefore, plan and implement the proper interventions.

“When contingencies are identified, function based interventions can be developed to alter the occurrence of problem behavior” (May & Howe, 2013). Such interventions might include antecedent manipulation to prevent behavior or finding creative ways to require higher rates of engagement during instruction. Through the use of the MAS and QABF questionnaires, the participant’s teachers were able to determine that escape was the source of her off-task behavior. While physical proximity and re-
direction by teachers increased her behaviors, they were able to determine through their research that differential reinforcement and an increase in engagement stimuli were keys to her success. Thus, a treatment package was developed to meet the participant’s specific needs. In the end, the researchers provided stimuli that prompted interaction with the participant and facilitated appropriate behavior before escape from the activity became an option (May & Howe, 2013). Functional assessments, such as the questionnaires used in this study were useful tools in developing interventions for students with behavior and learning needs.

In a research study by Smith et al., (2002), a small group of fourth and fifth graders with mild disabilities were assessed to determine best self-practices in decreasing off-task classroom behaviors. Two teachers in differing schools implemented self-monitoring techniques during reading, mathematics, and language arts. The study found that self-monitoring techniques decreased off-task behaviors whereas self-reflection and self-evaluation did not. Self-monitoring refers to a student’s ability to record his or her own behaviors, usually taught be using direct instruction and modeling (Lloyd & Hilliard, 1989). In this specific study, students were given a card to record their behavior, providing columns for on-task behavior, off-task behavior, and a column to rate the behavior. When a generated tone went off during class time, the students knew it was time to assess their behavior. Then, at the conclusion of each 40-minute class, the students were asked to rate their behavior for the day, using a 1 through 4 scale rating. The results of this study showed improvements in the decrease of off-task behavior over the 6-week implementation, when using the self-monitoring strategy.
**Off-task Behavior in the Large Classroom Setting**

Off-task behavior affects learning and interrupts instructional time. Implementing class wide interventions can help increase academic goals and decrease off-task behavior. In a study by Kraemer, Davies, Arndt, and Hunley (2012), two 5th grade classes were selected from an elementary school to study the impacts of two systems and their effect on off-task behavior. One intervention being the “Mystery Motivator.” This lottery style intervention system allows students to choose between various prizes, scaled in relation to their positive behavior choices. This intervention works by continually keeping student interest with the anticipation of their reward. The Mystery Motivator works well with positive behavior supports (PBS) due to its emphasis on encouraging and seeking positive performance instead of punishing negative performance. One of its benefits is allowing teachers to use the system as a class-wide intervention or on an individual basis.

The second intervention implemented in the two classrooms was a computer signaling game called, “Get ‘Em On Task.” In comparison to the “Mystery Motivator,” this program allows teachers to focus rewards on individual students and/or entire classes. The intervention works by utilizing an auditory signal system that helps to track student behavior. Teachers use a classroom computer to generate signals that can go off anywhere form 0-100 times per hour. When the signal sounds, teachers will stop what they are doing, look around the room, and assign predetermined points to students who are on task (Kraemer et al., 2010). Students strive to get points for positive behavior with the intrinsic motivation of a reward.
The study hypothesized that there would be a decrease in off-task behaviors in the classes that were using the interventions. Two weeks of baseline data were collected, and then the researchers began implementing the interventions. The “Mystery Motivator” was implemented during a 45-minute class period for 2 weeks. A chart was created to keep track of class points. When students maintained their behavior goals, they were allowed to fill in a blank on their “Mystery Motivator” chart, which they could translate into a class reward. Similar to the first intervention, the “Get ‘Em On Task” computer program was implemented during a 45-minute class period for 2 weeks. Each student was given their own point card and was instructed to mark an “X” if they were off-task when the computer signaled its alarm. Students would add their points at the conclusion of each day and tally their total. After a structured schedule collecting and analyzing baseline data and post intervention data, the study indicated that both the “Mystery Motivator” and “Get ‘Em on Task” effectively decreased off-task behaviors (Kraemer et al., 2010).

**Need of Behavioral Management Skills for Teachers**

Classroom management is essential for a well-run and organized classroom to exist. The term can be defined as, “The decisive, proactive, preventative teacher behaviors that minimize student misbehavior and promote student engagement, and strategic, respectful actions that eliminate or minimize disruption when it arises, to restore the learning environment” (O’Neill & Stephenson, 2011). Although studies have documented the importance of classroom management and its effects in the classroom, teachers frequently report their lack of readiness when it comes to the subject. Research has documented that beginning teachers have been complaining for many years regarding the inadequacy of their pre-service preparation in the area of classroom and behavior
management (O’Neil & Stephenson, 2011). In fact, a recent review conducted by the National Council on Teacher Quality (2014), indicated that teacher programs in the US are leaving first-year teachers inadequate knowledge to thrive in the classroom in regards to management skills. With increasing diversity in our schools, and the strong focus on special education in our classrooms, a solid foundation in management skills is needed to provide students with academic success.

Off-task and disruptive behavior in schools has been a source of concern for school systems for many years. In fact, the single most common request for assistance from teachers is related to behavior and classroom management (Rose & Gallup, 2005). Research has indicated that students who consistently exhibit disruptive and off-task behaviors not only limit their own educational gains, but the gains of their classmates. With the current high stakes in our education system, teachers are finding it more and more difficult to manage their classrooms and to meet their instructional demands at the same time (Oliver, Wehby, & Reschly, 2011).

In a research article by Jackson et al. (2013) the authors focused on what pre-service teachers, in their final year in their undergraduate degree, feel they need to know in regards to classroom management. The responses from these teachers, in both surveys, revealed their concern for classroom management and their lack of preparedness to manage a classroom. When the participants were questioned about their reasoning for joining the study, the overwhelming response was to gain knowledge on best practices and classroom management strategies. The soon-to-be teachers all agreed to inadequate preparation in their undergraduate degrees. In addition to gaining an overall knowledge on management strategies, the participants expressed a strong interest in gaining
confidence both in teaching and behavior management techniques. “Pre-service teachers wanted strategies and skills that are shown to work. In particular, they wanted to know which strategies were best to ‘use and avoid.’ These results align with previous study findings that teachers want practical tools they can use in the classroom that allow them to teach (Jackson et al., 2013). The findings in this study speak to concerns that not only preservice teachers are facing, but educators that are currently in the field. Thus, it is important for us to discover what interventions are researched and proven to work in the classroom and how we can use them to improve the education of our students with special needs. Research has highlighted a few best practices when it comes to examining and implementing behavior management in the classroom.

In a research article by Oliver, Wehby, & Reschly (2011), the best practices in regards to classroom management have been identified into two categories, both by observing teacher’s best practices and analyzing research-based behavior procedures. First, observation studies should be used to identify how effective teachers organize and manage their classrooms, and second, experimental studies examining components of classroom management in isolation or in various combinations should be researched and reviewed. By combining these strategies, teachers can implement interventions that will work for their unique classrooms and can apply behavior techniques or, more specifically, behavior intervention plans to help individual students with special needs. One increasingly popular behavior system that has been explored in recent studies is Positive Behavior Supports (PBS).
Positive Behavior Supports

PBS is a behavior intervention strategy focused on improving student behavior with a non-punitive approach. This system has been applied throughout the United States by individual schools and entire school districts with a reported 20% to 60% decrease in negative behaviors (Hagan-Burke, Martin, Boone, Fore, & Kirkendoll, 2005). PBS strives to create a social culture within the entire classroom and/or school that will control unwanted behavior in a positive and non-punitive manner. The system is based on a three-tiered approach. The first tier focuses positive behavior techniques for the entire school body. The second tier is implemented when students do not respond to the school-wide supports, and need more focused and feedback driven interventions. Finally, the third tier is introduced when students are not responsive to tiers one and two and must receive individual interventions that are intensive and monitored (Sugai & Horner, 2009).

Scott, Park, Swain-Brady and Landers (2007) explain how PBS can be utilized in individual classrooms to reach the needs of individual students. They state that punishment and exclusion will not eliminate unwanted behavior. Rather, when effective instruction, both academically and socially, is taught to students, positive behavior is more likely to occur. They go on to describe how PBS works in the classroom setting, using four steps to achieve a well structured and managed learning environment: (1) predicting where behavior failures are expected to occur; (2) developing rules, routines, and physical arrangements to prevent problem behavior; (3) implementing rules, routines, and arrangements with a high focus of consistency and (4) evaluating whether the rules, routines, and arrangements are successful in reducing problem behaviors.
LaVignia and Willis (2012) conducted a study examining the effectiveness of PBS on the most challenging of behaviors. They explain that PBS is a comprehensive functional assessment aimed at understanding the meaning or function of a behavior from the person’s point of view. Components include, ecological strategies that remove the challenges between a person’s needs and physical or interpersonal environments, positive programing designed to teach skills, such as how to act appropriately when something does not go your way, and support strategies that help control behavior and eliminate triggers. Outcome studies that met specified criteria for PBS were selected to be a part of this study. Twelve outcome studies encompassing 423 cases were included. In the end, using the components mentioned above, results showed that PBS was an effective behavior management tool for the most severe of behaviors.

In the case of students not responding to primary tier interventions, teachers and administrators might turn to developing a Functional Behavior Assessment (FBA) to determine the best course in servicing intensive behavior needs.

Studies on Function-Based Intervention

Although an overall classroom management plan can reduce negative behaviors in most students, a small percentage of students may need more individualized and focused interventions to meet their learning and behavior needs. Before a behavior intervention plan can be developed, teachers are encouraged to conduct a functional behavior assessment (FBA). “FBAs are designed to help educators understand what problem behaviors look like (the operational definition of response class), what triggers or occasions problem behavior (antecedents), and what maintains problem behavior
(consequences) in or during particular and typical routines or situations” (Sugai, Lewis-Palmer, & Hagan, 1998). The primary purpose of an FBA is to create an effective and student-focused intervention plan that will help teachers make improvements in student behavior as well as allow students to independently assess and improve their instructional engagement. Although research has not shown what consistently constitutes an FBA and what procedures are necessary or universal, various studies have proven the effectiveness of conducting FBAs before implementing interventions.

O’Neill and Stephenson (2010) conducted a study that examined the effects of implementing school-based functional behavior assessments with students who exhibit challenging behavior. They explain that FBA is the preferred assessment method in PBS for students requiring intensive individual intervention for problem behavior as it discovers the underlying functions of a student’s behavior.

Booher et al. (2010) conducted a study utilizing the data from a functional behavior assessment to decrease the unwanted behaviors of a 1st grade student exhibiting an excessive amount of disruptive behavior. A psychiatrist consultant conducted three 1-hour (A-antecedents, B-behavior, and C-consequence) observations using a narrative recording during the student’s class time. In addition, the consultant completed three 45-90 minute direct-observation sessions, documenting the frequency of individual teacher attention the student received when positive as well as negative behavior was exhibited. After analyzing the data from the FBA, it was hypothesized that the student’s behaviors were magnified by negative teacher attention such as reprimands and redirection. With this information, they developed interventions that were designed to increase teacher-attention when the student exhibited desirable behavior. Using an A-B-A-B design, the
results showed that this form of intervention decreased the student’s overall disruptive behavior.

Ingram, Lewis-Palmer and Sugai (2005) investigated the effects of FBA assessments. In their study, classroom observations were key in gathering and recording data on the student’s behaviors. These observations gave both the researchers and the cooperating teacher a great deal of information on when behaviors were occurring, what was triggering them, and what was maintaining the behaviors. In addition to classroom observations, teacher and student interviews were also an integral part of the FBA process. These interviews highlighted teacher views and student perceptions of why the behaviors were occurring. The results of both the observations and the interviews were synthesized to develop highly effective behavior intervention for both students in the study.

In a study conducted by Ingram et al. (2005) the researchers analyzed the effects of creating behavior intervention plans utilizing a function-based assessment verses a non-function based on two middle school students showing various forms of off-task behaviors. This study utilized a single-subject ABCBC design to compare the relationships between the two intervention strategies. Ongoing visual analysis was used to compare the results of both behavior methods. Results indicated that the function-based behavior plan was more effective in changing unwanted behavior than the non-function based. By conducting a functional behavior analysis, the researchers were able to specifically identify the antecedents triggering behaviors, the patterns of the behaviors, and the consequences maintaining the behaviors. Therefore, more accurately fitting the behavior needs of the students as opposed to the non-function based plan.
Conclusion

In summary, classroom management is a crucial aspect in the academic success of our students. Although pre-service teachers have been documented stating that they feel unprepared in their education in regards to classroom management and off-task behavior, we know that there is much research for both new, and current teachers, to utilize in creating a behavior system that works for their classrooms. PBS is one intervention strategy that classroom teachers are using to aid in the reduction of off-task behaviors in their classroom. By implementing positive behavior techniques, individual student behaviors have decreased. There are various methods within PBS, such as the “Mystery Motivator” and the “Get ‘Em on Task” that have been researched to have positive effects on individual and class-wide behaviors. In addition to these tier 1 and tier 2 supports, there are a small percentage of students that do not respond to class-wide interventions. In the case of a student falling in the tier 3 categories, teachers and administrators may choose to conduct a functional behavior assessment to develop specific and intensive interventions for these students. An FBA helps to identify the antecedent, behavior, and consequence of unwanted behavior so that teachers can structure specific and student-focused interventions.
SECTION THREE

Methodology

Participant

Adam is a 6th grade, 12-year-old male, who is enrolled in special education services at a suburban middle school in Columbus, Ohio. He moved to this school district in 5th grade after attending an elementary school in Arizona for 5 years. Adam qualifies to receive special education services as a student with a specific learning disability (SLD) in the areas of math calculation and math problem solving. In addition, he is identified as a student with an emotional disability (ED) and other health impairments (OHI) with a medical diagnosis of ADHD. Adam’s test scores fall below the standard in the areas of reading fluency and reading comprehension. Adam’s writing test scores also fall below the average level for his grade. Adam was exhibiting an excessive amount of off-task behavior in his 5th period choir class. Adam is also enrolled in band class, which meets during the same period as choir. Therefore, Adam is following a rotating schedule that allows him to attend choir every other day. When in choir class, Adam frequently seems to be “in his own world.” Often times, he is not focusing on the task at hand and needs frequent verbal and physical prompting to participate.

As students enter the room, they are expected to collect their choir binder from the 6th grade cabinet as well as their “sight-singing” book. Adam often needs reminders after he has found his seat to collect his materials. After all students are seated and class materials are gathered, the group participates in 10 minutes of vocal warm-ups, consisting of breathing exercises and vocal scales. Adam seems to be the most engaged during this
portion of the class and needs few participation reminders. It is during sight singing, which consists of reading a new line of vocal music for the first time in their books that Adam’s off-task behavior increases. From then until the remainder of class, Adam struggles to stay seated, refrain from talking, and focus on instruction. Students who sit around Adam are often distracted from instruction due to these off-task behaviors and disruptive behaviors.

**Setting and Materials**

This study took place in one of the largest school districts in Ohio. The entire suburban district spans across 95 square miles with a total of 23 schools. Fifteen elementary schools, five middle schools, and three high schools. The research was conducted in one of the five middle schools, in Adam’s 5th period choir class, during the 2014-2015 school year. The choir room was an active environment, holding approximately 65 students in the room on Adam’s rotation day. The classroom has a holding capacity of 70 people. Students are situated on vocal risers that span in a “U” shape around the perimeter of the choir room. Students are often surrounded on both sides of the teacher as the piano sits in the center of the classroom and the risers surround her. In addition to the vocal risers, the room contains two large cabinets for student music binders, the teacher’s desk and speaker system, and a large table holding crates that contain student homework folders. There are about ten students on IEP (Individualized Education Program) and approximately 100 students enrolled in the entire 6th grade choir. There are no paraeducators or extra teachers to help in the classroom. The choir teacher is the only adult in the classroom with approximately 70 students in the room on a daily basis. The materials used in this study were a video camera and a tripod stand to record
FBA, baseline, and intervention data. In addition, a small device called a “Motivader” was also used to help the participant keep track of and monitor the target behavior during class time.

**Measurements**

**Dependent Variables**

Adam’s frequently reported behavior is labeled as off task. Therefore, off task is defined as engaging in behaviors that are unrelated to the instructional task for more than 5 sec. Examples include directing toward non-related activities, moving around and changing his seat without teacher permission, engaging in unrelated activities, and using instructional materials inappropriately. Adam also exhibited inconsistent disruptive behavior throughout class time. Although the target behavior of the intervention was off-task behavior, Adam’s disruptive behavior was also assessed in order to investigate the effects of the intervention on disruptive behavior as a collateral effect. Disruptive behavior was defined as distracting peers around him by talking, making distracting sounds with voice and body, and commenting inappropriately during class time.

**Direct Observations**

Adam’s off-task and disruptive behavior were assessed using a 30-sec partial interval recording system. Adam attends choir class on a rotating schedule and his direct observations will be planned accordingly. Week one he was observed and recorded on Monday, Wednesday, Friday, and week two he was recorded on Tuesday and Thursday. The tripod and video camera were set up in the back corner of the choir room facing Adam’s section of the choral risers. His entire class time will be recorded. In addition to the videotaped classes, a voice recorder will be set to 30-second intervals so that
behaviors can be consistently and accurately documented while reviewing the videos. Off-task and disruptive behaviors were recorded whether it was exhibited or not exhibited every 30 sec. A data collection form was utilized to record whether or not the behaviors were seen within each 30-second interval. (See Appendix A).

**Exit Tickets**

Exit tickets were administered once a week during the study to assess if Adam follows academic instruction and completes class work as a collateral effect of the intervention. An exit ticket is a short formative assessment consisting of a few questions regarding material covered in class. Completion of the assignment, as well as directions followed, was assessed.

**Social Validity**

At the conclusion of the study, parents participated in an interview to assess their satisfaction of the study. They provided information regarding their views on the goals of the study, the selected interventions, and how they affected Adam’s learning in choir class. In addition to the parent interview, Adam was also given a short questionnaire detailing his views on the study and how the new classroom intervention affected his focus and learning in the classroom (see Appendix B).

**Procedure**

**Parent and Student Interviews**

Parent and student interviews were conducted to better understand Adam’s views on school, his learning, and his behavior (See Appendix C). Adam stayed after choir class to answer some questions and explained his opinions about school and his
behavior. In addition, Adam’s parents participated in a phone interview to answer questions regarding their views on Adam’s behavior, what outcomes they would like to see from the study, and their views on Adam’s education. Results from the interviews indicated that self-confidence seems to be a struggle for Adam and his learning. When he does not feel successful, he loses motivation, which then directly relates to his lack of focus in the classroom. Adam admitted that he doesn’t always enjoy school, which makes it difficult for him to pay attention, especially when he has to focus on long tasks. Parents would like to see an increase in Adam’s confidence in regards to his learning. In addition, they would like to see proactive tools to help him stay more focused and encouraged during his school day. According to both the student and parent interviews, motivators for Adam include positive feedback from teachers and external reinforcement such as video games and super heroes.

**Functional Behavior Assessments**

In order to develop function-based behavior intervention for Adam’s off-task behavior, functional behavior assessments were conducted before the study. The purpose of the functional assessments was to obtain an understanding of how challenging behavior is influenced by ones environment (Dunlap & Fox, 2011). Functional assessments analyze what factors are causing the behavior, the type of behavior exhibited, and the consequence of the seen behavior.

To identify the function of Adam’s behavior, three sessions of functional assessments were conducted. Two videotaped lessons were analyzed during Adam’s regular choir class period. An A-B-C observation recording form was used to document antecedents (A), behavior (B), and consequences (C) while watching the video for better
accuracy of information (See Appendix C). While analyzing the antecedents, behavior, and consequences, the possible function of each behavior was also hypothesized. In addition to the two choir observations, one 45-minute classroom observation was conducted in Adam’s band class which he attends every other day in correspondence with choir. The same A-B-C recording form was used to document ABC in this complimentary music class. The information from all three classroom observations were then used to hypothesize the function of Adam’s off-task behavior and to create a function-based behavior intervention plan.

Information from all classroom observations, as well as the student and parent interview, were compiled to develop a hypothesis statement that best described the function of Adam’s off-task behavior. Based on the functional assessments, some of Adam’s triggers for behavior vary according to the difficulty of task, length of task, and learning in a large group setting. For example, when Adam is asked to sing in his sight-singing book he often finds this task challenging. Therefore, he begins to engage in various forms of off-task behavior to avoid participation. Behaviors observed include avoiding eye contact when the teacher is giving instruction, fidgeting with classroom materials and clothing, engaging in non-instructional activities, and exhibiting in forms of disruptive behavior. Consequences maintaining these behaviors were escape from instructional activity.

Disruptive behavior was also assessed. Results indicated that when the teacher was instructing other sections of the choir, or Adam was prompted to complete a challenging task, he frequently engaged in various forms of disruptive behavior. Behaviors included: talking to his neighbors, making sounds with his voice and body unrelated to instructional
activities, and making noise with class materials. Similarly off-task behavior, consequences maintaining Adam’s disruptive behaviors was the class moving on without him. As a result, the function of Adam’s behavior both off-task and disruptive behaviors were hypothesized to be avoidance of instruction. This hypothesis also matches the data and information collected from both Adam and his parent’s interviews.

**Function-based behavior intervention plan**

A behavior intervention plan was developed with function-based intervention strategies to decrease Adam’s off-task behavior. The interventions chosen were directly related to the components of the FBA hypothesis. Intervention strategies included altering antecedents to prevent off-task behavior, teaching new and desirable behavior, and eliminating the consequences maintaining Adam’s off-task behavior. Table 1 shows the make up of Adam’s behavior intervention plan.

To change the antecedents triggering Adam’s off-task behavior, he was provided an overview of the class’s daily lesson plans before each session began. This allowed him to be better prepared for his daily tasks. On a single sheet of paper, the teacher documented all tasks Adam would be expected to engage in during class time. In addition to the overview of each lesson, Adam was given his daily sight-singing examples in advance, so that he had time to prepare and learn the melodies before class time. His teacher would photo copy each example so that Adam had time look over the examples a day before his choir class. Finally, Adam was given access to recordings and links so that he could listen and prepare for the music he would be learning before class.

To reduce the occurrences of Adam’s off-task behavior, a replacement behavior was introduced. On-task behavior was chosen as the replacement behavior as it was the
desirable behavior that Adam would strive to achieve in order to succeed musically and academically during each class. Adam was taught what it means to exhibit on-task behavior in choir. On-task behavior included looking at the teacher while she was talking, always keeping his eyes on his sight singing book and music, singing when his section was instructed to do so, and following directions.

Finally, a self-monitoring system was set in place to encourage the replacement behavior. Adam self-assessed whether or not he was on-task during choir utilizing a “Motivader,” a small device worn at his waist, which would buzz every 5 minutes. After each interval Adam would mark on his behavior chart whether he showed on-task behaviors at the time his “Motivader” buzzed, by recording a plus or minus on his chart. In addition to Adam assessing his own behavior, the teacher also marked her observations of his behaviors accordingly. Both Adam and the teacher’s behavior assessments were analyzed to insure better accuracy of data at the conclusion of each class. Together, they would go their results together and review both positive and negative behaviors exhibited.

The function of Adam’s behavior was hypothesized to be avoidance of instructional activity. Therefore, this will be addressed by teaching Adam replacement behaviors if he feels the need for an instructional break or if he needs help with a task. Such replacement behaviors will include raising his hand if he needs help with an assignment, asking to take a 5-minute break in the hallway, or getting a quick drink from the water fountain.
Table 1. Functional Assessments and Behavior Intervention

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Behavior: Off-task</th>
<th>Consequences</th>
</tr>
</thead>
</table>
| • Whole group tasks  
• Challenging seatwork | • Does not direct gaze toward instruction  
• Makes disruptive sounds with voice and body  
• Does not complete academic tasks | • Teacher does not address behavior  
• Teacher moves on with instruction |

**Function: Escape from instructional tasks**

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Behavior: Off-task</th>
<th>Consequences</th>
</tr>
</thead>
</table>
| • Provide Adam with an overview of the lesson before class begins  
• Send links of choir music to Adam before class  
• Provide Adam with the daily sight-singing examples before class | • Teach Adam self-management strategies utilizing a “MotivAider” and checklist system  
• Teach Adam what it means to be on-task (three 10 minute sessions after class)  
• Provide Adam with 3-5 questions to check for understanding of on-task behavior after each meeting  
• Meet with Adam after class to assess his progress and what needs to be improved  
• Teach Adam to request a break | For Replacement Behavior:  
• Adam will be allowed a 5-minute break once a class when requested appropriately  
• Teacher provides positive verbal praise and feedback and provides specific examples of Adam’s positive behavior  
• Teacher utilizes a reinforcement for meeting self-management goals and parents are also included in providing reinforcement at home |

For Off-Task Behavior:
• Teacher addresses challenging behavior by utilizing redirection cues  
• Meet with Adam after class to assess his progress and what needs to be improved
As consequence strategies, new teacher redirection tools were introduced. First, if Adam was feeling overwhelmed, he was allowed to take a break when he requested so appropriately. When Adam was exhibiting his replacement behavior, positive verbal praise and feedback was given. Recognition of Adam’s on-task behavior was also made clear by providing him with specific examples of what he was doing well. In addition to verbally addressing Adam’s positive behavior, a reinforcement system was set in place when his behavior goals were achieved. When Adam met his required behavior goals, 4 out of 6 intervals, he could choose an item from his reward menu. In addition, if Adam made all of his goals for the week, he was awarded positive reinforcement at home that he could choose from his reward menu. When Adam exhibited off-task behaviors, self-proximity, eye contact, and verbal cues were given to encourage replacement behavior.

**Research Design**

A single-case study using an AB design was utilized to examine the effects of implementing a function-based behavior intervention. Baseline was conducted until the data points were stable, intervention was implemented for 8 weeks to analyze the effects of the function-based behavior intervention.

**Baseline**

During baseline, the music teacher taught the class without an intervention in his typical classroom setting. Baseline data were collected for four 40-min choir classes. No accommodations or modifications were made to address behavior or instructional activity. Adam’s assigned seat and the classroom set up were also unaltered.
**Intervention**

Intervention was conducted over an 8-week period during the months of April and May. The intervention was implemented in Adam’s regularly scheduled choir class. While implementing the intervention, ongoing data analysis was conducted through visual analysis. A “Motivader,” a small device used to track and time behavior, was also utilized. A behavior chart was also included so that Adam could easily track his behaviors during class time. The teacher would remind Adam of his “Motivader” tasks, and together, they would make sure his checklist was ready and all of his materials were prepared for class. Before each class, Adam and the teacher discussed the structure of the lesson and what was to be expected of him. In addition, instruction on how to exhibit on-task behavior during class time was consistently reviewed and discussed before the start of each class. During each class, the teacher delivered positive verbal praise and feedback and provided Adam with specific examples of his positive behavior. Physical prompts and gestures were used when Adam was exhibiting signs of off-task behavior to help him stay on track. Finally, Adam and the teacher would review their behavior charts at the conclusion of each class. If Adam met his behavior goals, positive reinforcement was provided.
SECTION FOUR

Results

This study investigated the effects of using function-based behavior intervention to decrease off-task behavior of a student with ADHD in the large music classroom. By conducting functional behavior assessments, the triggering antecedents and consequences maintaining the unwanted behavior were examined and the function of the behavior was identified. The study investigated 3 other essential questions including the effects of reducing disruptive behavior as a result of the function-based intervention, the extent of the parent’s views on the results of the study, and the participant’s views on the newly implemented interventions.

Off-Task Behavior

During the baseline phase, four videotaped sessions were observed. During this time, a typical music class was taught with no special modifications or interventions. Results indicated that there was an increasing trend in off-task behavior throughout baseline (Mean = 64%; Range = 38% - 88%). The percentage of intervals of Adam’s off-task behavior on his first day of baseline was lower than the following data points. The lower percentage of intervals of off-task behavior may have been the result of a written music test that was administered during the first half of his class period. During his test taking, Adam showed an abnormal amount of focus and attention to finishing his assignment. Therefore, his off-task behavior was not an accurate reflection of his daily classroom behaviors. From the first to second data point, there was a steep increase in off-task behavior as the routine of the classroom proceeded as normal (38% - 66%). The second and third data points showed a steady and consistent percentage of the target
behavior (66% - 67%) as both classes were similarly structured and followed the typical routine of the class. During these two class periods, Adam was observed drawing in his music binder throughout the majority of the class periods and made a limited amount of eye contact during instruction. As the duration of the class moved on, the off-task behaviors increased. During the final day of baseline, Adam showed another increase in off-task behaviors (88%). This increase was mainly exhibited by fidgeting with his clothing and fingers throughout the duration of class time. In addition to these distractions, Adam also avoided instruction by drawing in his music binder towards the end of the class period. Very limited eye contact was given during instructional activity. On the contrary, a consistent point of on-task behavior was seen during the beginning vocal warm-ups of each class period (about 5-10 minutes), but these periods of behavior quickly faded and Adam became engaged in his drawing and fidgeting for the remainder of class. The results of baseline are represented in Figure 1.

Right after implementing the function-based intervention, Adam’s off-task behavior drastically decreased. This decrease in the target behavior may have been due to the implementation of the function-based intervention. Through the change of antecedents, the teacher was able to eliminate many elements that triggered Adam’s off-task behavior. For example, the intervention provided Adam with an overview of each class allowing him to process the class routine ahead of time. The teacher also sent him recordings of the songs in order for him to practice and become more familiar with his daily objectives. In addition, Adam was shown the daily sight singing-examples ahead of time in order for him to feel better-prepared class. Finally, Adam was taught what it means to exhibit appropriate behavior and how he can exhibit these behaviors every day.
before class. He used his self-check system and motivador to help him keep track of his on-task behavior. Incorporating a daily and weekly reinforcement system may have also encouraged the newly learned replacement behavior and may have prompted his initial decrease in off-task behavior.

Results indicated that there was a decrease in off-task behavior throughout intervention phase (Mean = 25%; Range = 10%-70%). There was a small incline between the first and fourth data points, as off-task behavior increased from 14%-37%. During this increase, Adam frequently played and fidgeted with his clothing throughout class time. He also struggled to stay still in his seat during instruction. In addition, he avoided instruction time by limiting his eye contact with his teacher while she was talking by drawing in his music binder. Although there was a slight increase in his off-task behavior, Adam still made many improvements academically. Specifically, Adam was meeting his singing standards at a much higher rate than before the intervention was implemented. Although he struggled to stay engaged for long periods of time, he made a considerable effort to sing when he was supposed to and increased his participation during warm-up and sight-singing activities.

Between the fifth and sixth interval, there was an increase in off-task behavior from 37%-70%. A break in the intervention may have initiated this increase in off-task behavior. Due to state-wide testing, there was an adjusted daily schedule and shortened class periods. During this week, Adam was unable to receive consistent intervention, and follow through with his teacher was limited. When intervention resumed the following week, Adam struggled to resume his routine. A change in his daily rehearsal schedule may have also contributed to the increase in off-task behavior. With a choir concert
scheduled for that week, the class seating arrangements and routines were changed.

Adam had to stand in a different spot in the choir room in order to be prepared for where he would stand at his concert. Class time was reserved for a concert run through and dress rehearsal, which is not typical of the regular classroom routine. In addition, Adam did not complete his self-management chart during this time because he could not find his materials before class began. The teacher did not catch that his materials were missing until the conclusion of class. During this break in intervention and change in routine, Adam resumed his earlier off-task tendencies which included fidgeting with his clothing and hands, struggling to maintain eye contact with his teacher, and his singing participation was much lower than previously documented.

After this initial change in routine and schedule, Adam began to adjust to the changes. The teacher was able to continue follow through with the function-based intervention, and there was a decrease from 70% - 17% in off-task behavior throughout the following class. The same antecedents were avoided by providing Adam with an overview of how the new daily routines would change. He was more aware of the changes in the class schedule and he better understood what was expected of him in regards to on-task behavior with his new classroom routine. Adam continued to use his self-check system to track his on-task behavior and the teacher resumed the reinforcement schedule. Although there was a slight variance in Adam’s off-task behavior between the last few data points, he made many improvements towards his on-task goals both academically and behaviorally.
During baseline phase, disruptive behaviors were observed to examine if there is any collateral effect of intervention. After analyzing the data I observed that disruptive behavior did not occur as often as previously predicted. Throughout the baseline phase, Adam showed instances of disruptive behavior that included making noises with classroom materials, throwing classroom materials, and distracting peers next to him by talking (Mean= 2%; Range= 4-8%). Table 2 shows the occurrences of Adam’s off-task behavior.

During intervention condition, disruptive behavior was lower (Mean= .4%; Range= 0-3%). Due to the intervention focusing on addressing the function of the behavior, teaching new behavior, and reinforcing new and desirable behavior, disruptive behavior was no longer an element in Adam’s desire to escape from instructional activity.
This may have been a factor due to Adam’s new desire to focus on improving his on-task behavior in choir class and collaterally eliminating his need to engage in disruptive behaviors.

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<th>Baseline</th>
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<th>Intervention</th>
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<tbody>
<tr>
<td>Mean</td>
<td>2%</td>
<td>Range</td>
<td>.4%</td>
<td>Range</td>
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<tr>
<td>Range</td>
<td>4%-8%</td>
<td></td>
<td>0%-3%</td>
<td></td>
</tr>
</tbody>
</table>

**Exit Tickets**

During baseline, exit tickets were collected to assess Adam’s follow-through with academic instruction and completion of class work as a collateral effect of his off-task behavior. Upon collection, the results indicated that Adam was able to complete assignments, although the academic content was incorrect. Due to Adam’s inability to maintain engagement during instructional time, the completion of related classwork was a difficult task. The function of Adam’s off-task behavior was escape from instruction, therefore completing assignments with a lack of engagement and focus allowed Adam to escape from these tasks with minimal effort. Due to the testing and concert schedule during intervention phase, exit tickets were not collected as often as baseline phase. However, the few assignments that were given were completed as asked, although the academic accuracy was still shown to have the same results as before intervention was implemented.
Social Validity Assessments

Parents participated in an interview to assess their satisfaction of the study. They provided information regarding their views on the goals of the study, the selected interventions, and how they affected Adam’s learning in choir class. Parent responses to the questions were extremely positive. Adam’s father mentioned that Adam seemed to be more excited about choir class and that he sounded encouraged by the new intervention strategies. When parents were asked if decreasing Adam’s off-task behavior was socially valid and significant to his education, they responded, “strongly agree.” Similarly, when asked if the interventions appropriate for Adam, if they approved of the interventions chosen, and if they would like to use the strategies in other classes, responses were scored at the highest rating. Overall, Adam’s parents were pleased with the intervention and the results and scored the questionnaire highly. (See Appendix E).

In addition to the parent interview, Adam participated in a short questionnaire detailing his views and opinions regarding the study and his new perceptions of choir class. Questions included how he liked the intervention strategies, if they helped his learning, and if he could use the new strategies in future classes. His responses were very encouraging and he mentioned that he was happy that he had the opportunity to work with his teacher during choir. When Adam was asked if he liked the new strategies to help him pay attention in choir class, if they were helpful, and if he could use them in other classes, Adam responded confidently with “strongly like” on all questions. Overall, the results of Adam’s questionnaire were extremely positive and provided quality information regarding the success of the intervention on his on-task behavior and learning in choir class. (See Appendix E).
SECTION FIVE

Discussion

The aim of this study was to determine if function-based intervention was effective in decreasing the off-task behavior of a 6th grade student with ADHD in his choir class. Results indicated that conducting functional behavior assessments to develop behavior intervention was effective in decreasing the target behaviors. In addition, the study examined the effects of disruptive behavior and the completion of exit tickets as a collateral effect of Adam’s off-task behavior intervention. Disruptive behavior was shown to have decreased during the intervention and exit tickets had the same result as baseline condition. In addition, the study assessed the social validity and concluded that the parents and participant were satisfied with the results of the intervention and the outcomes.

The results of this study supported the existing literature in the field of special education. Ingram and colleagues (2005) that examined the effects of implementing function-based and non-function based intervention with two different middle school students exhibiting excessive amounts of off-task behavior during their school day. Results from the study indicated that the function-based intervention plan had a higher-rate in decreasing the unwanted behaviors then the non-function based intervention plan. Similarly, both Ingram’s study and the current study showed a decrease in challenging behavior when implementing function-based interventions. “FBAs are designed to help educators understand what problem behaviors look like, what triggers or occasions problem behavior (antecedents), and what maintains problem behavior (consequences), in or during particular and typical routines or situations” (Ingram et al., 2005). In
comparison to the Ingram study, Adam’s function-based behavior assessment informed interventions that satisfied these requirements. By documenting the types of behaviors Adam was exhibiting, and analyzing what triggered and maintained those behaviors, an intervention plan was developed to support his needs.

In addition to Ingram et al. (2005), the current study showed similar results in comparison to a behavior study conducted by Howe and May (2013). The purpose of their research was to evaluate an escape condition and two contingent attention conditions, for off-task behavior of a young preschooler. The function of Adam’s off-task behavior was escape from instructional tasks; similarly, the young girl in Howe and May’s study addressed the same behavior. By conducting a functional analysis, the researchers were able to analyze the contingencies maintaining her off-task behaviors. Finding that a combination of positive and negative reinforcement strategies were needed to address the participant’s behavior needs. The researches explain that when these contingencies are identified, the problem behavior can be decreased through the use of function-based intervention (How & May 2013). Comparably, Adam’s intervention planned used a combination of positive reinforcement to reduce his off-task behavior and address the function of his behavior. These conclusions were based on the functional behavior assessments that developed an intervention plan to fit Adam’s personal needs.

Various research is supporting the use of functional behavior assessments in the reduction of challenging behavior in the classroom. Dunlop and Fox (2011) suggest that the conceptualizing of challenging behavior as a “function,” prompted a radical change in the way behaviors were understood. This new wave of thinking promoted a change in the implementation and development of interventions. They explain that function-based
Interventions are a strategy for improving behavior that is linked and derived from a functional assessment. (Dunlop & Fox, 2011). The current study developed intervention that corresponded to this statement. Adam’s intervention was carefully selected to meet the needs and function of his behaviors post analyzing the results of his functional behavior assessments. For example, the function of Adam’s off-task behavior was escape from instructional tasks. In order to minimize triggers, procedures were set into place to encourage and support Adam’s needs. The use of preventive and positive intervention (e.g., teacher prompts, guided lessons and listening examples, teaching new appropriate behavior, self-management, and positive reinforcement) was linked to Adam’s FBA and therefore encouraged the reduction of the target behavior.

The current study also examined collateral effects of decreasing Adam’s off-task behavior that included the decrease of disruptive behavior and the completion of exit tickets. Results indicated that decreasing off-task behavior was directly correlated to a decrease in disruptive behavior, although the competition of exit tickets remained about the same during intervention phase as it did during baseline. These results show that function-based intervention to decrease off-task behavior did meet the needs of the student and had collateral effects in improving other needs as well.

Not many studies assessed social validity, although social validity is an important factor in examining the results and effectiveness of an implemented intervention. As stated by Cooper, Heron, and Heward (1987), if behavior analysis efforts change a person’s life in a socially important way, it is said to have social validity. In the current study, the parents and the participant are directly affected by the function-based intervention and therefore, they are considered to be socially affected by the
intervention’s outcomes. The teacher surveyed the participant and his parents to assess social validity of the intervention. Three main questions were assessed including their viewpoints regarding the goals of the study, the appropriateness of the selected interventions, and the effectiveness of the selected interventions on decreasing off-task behavior. The results from the survey indicated that both the parents and the participant were satisfied with the overall success of the function-based interventions and the intervention’s influence on reducing off-task behavior in choir class. Therefore, the social validly assessment in the current study was valuable to the overall analysis of the participant’s behavior and supported in the results of the study.

**Limitations**

Although this study made many contributions to the field of special education, there were some limitations. Due to time constraints, this study utilized an AB design. AB design may not be able to distinguish the experimental effect from possible confounds that might occur at the same time that the independent variable was introduced (Cooper et al., 1987). The current study ended with the implementation of the intervention and did not remove the independent variable. If given the time, fading out the intervention gradually would have been beneficial in maintaining the behavior without the intervention. In addition, there was one class during the intervention where the teacher did not check Adam’s materials before beginning class and therefore he was not prepared for intervention. This is another limitation to the study. Disruptions in the data collection schedule could have also affected the results of the study. Due to continuous snow days, state testing days, music concerts, and the music rotation schedule (band and choir on rotating days), there was inconsistency in the implementation of intervention and
the routine of data collection. These factors may have influenced the results of the intervention. Finally, the teacher was not able to assess the generalized effects of the intervention in other settings other than the parent’s at home report.

**Implications for Practice and Future Research**

Although this study was focused on implementing intervention in the large music classroom, there are many connections between the current study and other academic areas to decrease unwanted behavior. Teachers of all subject areas can implement functional behavior assessments in their own classrooms to identify the source of a student’s undesirable behavior. Conducting an FBA does not need to cut into classroom instruction time. This valuable strategy can be implemented during regularly scheduled school day. As documented in this study, by setting up a video camera and recording your instructional, you can easily document when behaviors are occurring, what might be triggering the behaviors, and what is maintaining them. The results can be quickly analyzed and reviewed after class is dismissed. Conducting an FBA can be time effective and easy to conduct during your regular daily routine, and as shown in this study, can greatly improve undesirable student outcomes. There are many checklists and forms available that can be used in the busy classroom on websites such as teachers-pay-teachers and your state department of education websites.

In addition, other academic teachers can incorporate and utilize the reinforcement strategies and interventions in this study to increase positive behavior in their classroom. For example, teachers can utilize the behavior management self-checklist to help students with challenging behavior monitor their own behavior during class. As in Adam’s case, this intervention strategy allows students to gain a greater awareness of their behaviors
and focus in the classroom, and helps them learn to compare and analyze what is expected of them as far as desirable and unwanted behavior are concerned. In addition to the behavior checklist, incorporating a positive reinforcement system for when students meet their behavior goals provides a system that boosts student’s self-esteem and helps maintain their desirable behaviors, as it did in Adam’s case. When maintaining positive behavior, teachers must collaborate closely with parents. By adding an at home element to your reinforcement system, consistency is maintained between school and home behavior goals. In addition, it helps boost parental involvement in your behavioral efforts and encourages parents to communicate with you regarding student progress and ideas that may encourage positive results in your classroom. In regards to future research, planning and assessing generalization and maintenance may be beneficial for studying the lasting effects of function-based intervention across settings. Analyzing the differences in behavior patters in other academic content areas provides valuable information regarding the success of transferring the newly learned intervention strategies to other situations.


APPENDIX A

Data Collection Form
|   | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      | 16      | 17      | 18      | 19      | 20      | 21      | 22      | 23      | 24      | 25      | 26      | 27      | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37      | 38      | 39      | 40      |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
Student Interview Questions
Classroom Student Interview

Student________________ Date________________ Interviewer________________

Section I
Curriculum and Instructional Issues
(Circle the best response. A=Always, S=Sometimes, N=Never. Record any extra probes/responses)

1. In general, is your work in choir too hard for you? A S N
2. In general, is your work in choir too easy for you? A S N
3. When you ask for help appropriately, do you get it? A S N
4. Do you think work periods for each task are too long? A S N
5. Do you think work periods for each task are too short? A S N
6. When you do seatwork, do you do better with someone? A S N
7. Do you think people notice when you do a good job? A S N
8. Do you think you get what you deserve when you do good work? A S N
9. How can teachers help you succeed in school? A S N
10. In general, do you find your class work interesting? A S N
11. Are there things in the choir room that distract you? A S N
12. Do you understand the directions for assignments? A S N
13. Do you know how the teacher expects you to behave? A S N
14. Do you have opportunities to make choices in school? A S N
15. Does your teacher let you know how you are doing? A S N

Section II
Behavior Issues

1. When do you think you have the fewest off-task problems in school?
   Why?
2. When do you think you have the most off-task problems in school? Social Studies
   Why?
3. What changes could be made so you would have fewer off-task problems?
4. What would you like to earn for positive behavior and staying on task?
5. What are your favorite activities at school?
6. What things are you interested in? (e.g. hobbies)
7. What do you like to do in your free time?
Section III
Subject Preference/Commentary

(Rate how much you like the following subjects and comment on what you like/dislike about them.)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Not at all</th>
<th>Some</th>
<th>Very much</th>
<th>Like</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>Spelling</td>
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<td>Computers</td>
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<td>Art</td>
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<td>Other</td>
<td>1 2 3 4 5</td>
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Parent Interview

The purpose of this questionnaire is to update information regarding your child’s educational, social emotional, and/or other needs.

Interests and Activities

How does Adam work when he is alone or when he is in a group?

What are motivators for Adam?

Activities your child participates in?

Personal and Social

Describe your child’s personality, characteristics, attitudes, etc.

What is your child’s attitude toward school?

Have there been any significant changes in your child’s life that might have directly affected his/her school performance?

No

Parental Comments and Concerns

Describe specific areas in which you believe your child needs support/enrichment
What do you see as the desired outcome of this study?

What would you like to see at home?

Are there interventions that you have seen work well in the past?

Any final comments to help support the study?
APPENDIX D

FBA Data Collection Form
### ABC Observation Recording Form

<table>
<thead>
<tr>
<th>Antecedents (A)</th>
<th>Behavior (B)</th>
<th>Consequences (C)</th>
<th>Possible Function</th>
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<tbody>
<tr>
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APPENDIX E

Social Validity Assessment Questions
Adams Interview Questions

1. How do you like Miss Testa’s new approach to help you pay attention in class?

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<tbody>
<tr>
<td>1</td>
<td>Strongly Like</td>
<td>Like</td>
<td>Undecided</td>
<td>Dislike</td>
<td>Strongly Dislike</td>
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2. Do you think Miss Testa’s approaches were helpful?

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<tr>
<td>1</td>
<td>Strongly Like</td>
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3. Do you think you can use what you have learned for future choir classes?

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<td>Undecided</td>
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4. Do you think you can use what you have learned in other classes that are not music?

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Dear Parents:

I greatly appreciate that I was able to conduct this study to improve Adam’s on-task behavior and overall learning experience in choir class. I would like to ask you to evaluate the intervention in terms of the importance of the target behaviors, appropriateness of the intervention, and intervention outcomes.

Please review the information provided below and respond to the questions.

I. The Importance of Target Behavior (off-task behavior)

In order to ensure the academic success of all students in the classroom, teachers need to differentiate their teaching style and management plan according to individual student needs. The goal of the current intervention is to decrease Adam’s off-task behaviors during choir class by modifying instructional activities and teaching him expectations and self-management skills, and reinforcing positive behavior.

Please read the research questions below and indicate the extent to which you agree or disagree with each question by selecting the appropriate number:

Do you think decreasing Adam’s off-task behavior is socially valid and significant for Adam’s education?

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<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Undecided</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
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Other comments:
II. Appropriateness of Intervention

In this study, a functional behavior assessment was conducted to discover what interventions would be most effective in decreasing Adam’s off-task behaviors in choir class. The interventions chosen for the study were directly related to the components of the functional behavior assessment. The intervention procedure is described as follows:

1. Adam was provided an overview of the class’s daily lesson plans. This allowed him to be better prepared for his daily tasks.
2. Adam was given his daily sight-singing examples before class, so that he had time to prepare and learn the melodies before we started.
3. Adam was given access to recordings and links so that he could listen and prepare for the music he would be learning before class.
4. On-task behavior/appropriate behavior was taught in order to have Adam succeed musically and academically in choir class.
5. A self-monitoring system was set in place to facilitate appropriate behavior. Adam self-assessed whether or not he was on-task during choir utilizing a “Motivader,” a small device worn at his waist, which would buzz every 5 minutes. After each interval Adam would mark on his behavior chart whether he believed he showed on-task behaviors for 5 minutes by recording a plus or minus on his chart. The teacher also marked her observations of his behaviors accordingly.
6. Adam was taught to raise his hand if he needs help with an assignment, asking to take a 5-minute break in the hallway, or getting a quick drink from the water fountain.
7. New teacher redirection tools were introduced. Recognition of Adam’s on-task behavior was made clear by providing him with specific examples of what he was doing well. In addition to verbally addressing Adam’s positive behavior, a reinforcement system was set in place when his behavior goals were achieved.
8. Collaboration with parents was also a critical part of the intervention.

Please read the questions below and indicate the extent to which you agree or disagree with each question by selecting the appropriate number:

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<tr>
<th>The Acceptability of the Intervention</th>
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<tr>
<td>1. Given the Adam’s characteristics, how appropriate do you find the intervention?</td>
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<td>2. How much do you like the intervention?</td>
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<td>3. Would you like to use this intervention in the future or in future classes?</td>
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III. The Intervention Outcomes

Have you observed any positive changes at home after we implemented the interventions in choir class?

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<tbody>
<tr>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Undecided</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
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Have you observed changes regarding Adam’s opinions about learning choir class?

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<td>Agree</td>
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<td>Disagree</td>
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Comments:

Thank you for taking the time to complete this survey and work with me throughout this semester!!

Nina