

THE EFFECTS OF FUNCTION-BASED SELF-ADVOCACY TRAINING ON THE
PROBLEM BEHAVIOR, REPLACEMENT BEHAVIOR, AND SELF-ADVOCACY
SKILLS OF STUDENTS WITH OR AT RISK FOR EBD IN GENERAL EDUCATION
SETTINGS

by

Tosha Lynn Owens

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Approved by:

Dr. Ya-yu Lo

Dr. Charles L. Wood

Dr. David W. Test

Dr. Sejal Parikh Foxx

ABSTRACT

TOSHA LYNN OWENS. The effects of function-based self-advocacy training on the problem behavior, replacement behavior, and self-advocacy skills of students with or at risk for EBD in general education settings. (Under the direction of DR. YA-YU LO)

Students with emotional and/or behavioral disabilities (EBD) experience some of the greatest challenges among students with disabilities (Kern, Hilt-Panahon, & Sokol, 2009). These students with EBD need access to behavioral support throughout the entire academic setting in order to make progress (Gable et al., 2012), yet few actually receive the support needed due to inadequate teacher training (Billingsley et al., 2006; Simpson et al., 2011). One research-based strategy with a strong evidence base for supporting students with behavioral challenges across educational contexts is function-based interventions (FBI; Lane, Umbreit, & Beebe-Frankenberger, 1999). Although FBI has demonstrated great effectiveness as a practitioner-implemented strategy, no known studies have embedded self-advocacy skills enabling students to independently seek support based on their specific behavioral function and replacement behavior. Providing students with or at risk for EBD with instruction on how to self-advocate their needs to teachers and request specific need-based support has the potential for improving self-advocacy skills and promoting general education access. This study evaluated the effects of a function-based self-advocacy (FBSA) intervention, which provided systematic and explicit instruction to three students with or at risk for EBD on how to self-advocate their needs in regard to behavioral support, based on the function of their behavior. Using a multiple probe across participants design (Horner & Baer, 1978), participants' problem

behaviors and replacement behaviors were measured to determine effectiveness of the FBSA strategy. A visual analysis of results showed a functional relation between FBSA and reduction of problem behaviors. There was also an increase in replacement behaviors upon implementation of FBSA training. Additionally, a descriptive analysis of teachers' response to students' request for replacement behaviors, and students' ability to complete steps to self-advocate needs indicated an increase in the number of times a response was emitted or steps were completed across both primary and generalization settings. Implications for practice and suggestions for future research are discussed.

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“Now to him who is able to do immeasurably more than all we ask or imagine, according to his power that is at work within us”

Ephesians 3:20

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CHAPTER 1: INTRODUCTION

Of all subgroups among students identified as having a disability, students with emotional and/or behavioral disabilities (EBD) have exhibited the poorest post-school outcomes since the inception of the Education of All Handicapped Children Act of 1975. Unfortunately, this subgroup has been marked as having the highest dropout rates, extreme academic failure, the poorest post-school economic outcomes, and high criminal activity and arrest rates (Kern, Hilt-Panahon, & Sokol, 2009). It is apparent there has always been and continues to be a need for addressing not only how educators teach academic skills, but also how educators foster achievement of better outcomes for students with or at risk for EBD.

Since the amendment of the Individuals with Disabilities Education Act (IDEA) in 2004, a heavy push for inclusion of all students with disabilities, as required by least restricted environment, has been a heightened focus for all educators (Yell, 1995). With the push for inclusion of all students to have access to the general education curriculum, educators have seen an increase in the amount of time students with EBD spend in the general education classroom. Based on the report provided by the U.S. Department of Education National Center for Education Statistics (2016), 44% of students with EBD spend 79% or more of their school day in a general education classroom. About 18% of students with EBD spend between 40% and 79% of their school day in the general education classroom (Snyder, de Brey, & Dillow, 2016). This amounts to 62% of all

students identified with EBD spending nearly half of their academic day in the general education setting. Kern et al. (2009) noted that despite many efforts being implemented to provide individualized support to all students, with and without disabilities, the outcomes of students with EBD have remained the same or worsened over the years. Even though tiered intervention initiatives such as Positive Behavioral Support have demonstrated a positive effect on student behavior in general (Sugai et al., 2000), the educational and behavioral support offered to students with EBD has not yet yielded results needed to see a substantial decrease in the overall trend in these poor outcomes (Kern et al., 2009).

With growing concerns for students' emotional and behavioral health, researchers have begun to examine methods in which students with EBD can receive behavioral support across all school contexts. Although this is a step in the right direction, barriers exist in regard to addressing the behavioral needs of students with EBD across educational contexts. Research has determined that students with EBD require specialized behavioral interventions beyond what is typically available in general education classrooms (Gable et al., 2012; Landrum, Tankersley, & Kauffman, 2003). A major concern associated with this need is the lack of preparation of general education teachers. In general, students with or at risk for EBD do not receive the necessary behavioral supports from either special or general educators due to a deficit in educator training (Billingsley et al., 2006; Simpson et al., 2011; Wagner & Davis, 2006). Collaborative efforts between mental health clinicians and educators are being made to address this issue by providing general education teachers with training on how to better support students with behavioral challenges as a result of mental health disorders

throughout the educational setting (Dowdy et al., 2015). Although forging relationships between schools and mental health entities may serve as a long-term solution in addressing the many needs of students with behavioral challenges, this collaborative effort is often very laborious and may take years to affect the climate change within educational contexts necessary to see a larger scale impact. In the meantime, providing students with or at risk for EBD evidence-based strategies, such as function-based interventions, may serve in a way to provide immediate assistance. Given that an increasing number of school systems operate within some form of a tiered framework where students receive different levels of support based on their intensity of needs, supporting students with or at risk for EBD through function-based intervention as a Tier 2 (i.e., secondary level of support) or Tier 3 (i.e., tertiary level of support) intervention may combat some of the challenges these students experience (McIntosh, Campbell, Carter, & Dickey, 2009).

Function-based interventions for students with or at risk for EBD. Function-based interventions (FBI), defined by Dunlap and Fox (2011) as “strategies for improving behavior that are linked to and logically derived from a functional assessment (also referred to as *functional behavioral assessment*) of challenging behavior” (p. 334), have demonstrated effectiveness when applied as an intervention to address problematic behaviors of students across a variety of contexts. FBIs are developed based on the results of functional behavioral assessment (FBA), which are used to determine the environmental factors related to behavior that reliably predict and/or maintain the problem behavior (McIntosh, Brown, & Borgmeier, 2008; Steege & Watson, 2009). FBA has demonstrated effectiveness on even the most challenging behaviors spanning over 4

decades (Gable, Park, & Scott, 2014), providing invaluable information specific to student behavior that contributes to the development of FBIs. According to Stormont, Reinke, and Herman (2011), as of 2011, 400 publications with a focus of applying FBA to students with or at risk for EBD have demonstrated promising results with over 98% reporting positive changes in challenging behaviors exhibited by students. Specifically, FBIs have demonstrated effectiveness in reducing problem behaviors of students with or at risk for EBD (Blair, Umbreit, & Bos, 1999; Gage, Lewis, & Stichter, 2012; Hansen, Wills, Kamps, & Greenwood, 2014; Nahgahgwon, Umbriet, Liaupsin, & Turton, 2010; Trussell, Lewis, Stichter, 2008; Turton, Umbreit, & Mathur, 2011), especially in specialized settings such as special education classrooms (Hansen et al. 2014), alternative schools (Turton et al., 2011), juvenile detention centers (Scott & Cooper, 2013, Sprague, Scheuermann, Wang, Nelson, Jolivette, & Vincent, 2013), and day treatment facilities (Scott & Cooper, 2013; Swoszowski, McDaniel, Jolivette, Melius, 2013). Currently, there are a limited number of studies that examined the use of FBI to reduce problem behaviors of students identified with EBD who are participating in the general education setting. For example, Gage et al. (2010) used a hierarchical linear modeling meta-analytic approach to examine the effects of FBIs on problem behaviors of students with or at risk for EBD in schools. Of the 69 studies identified, no studies were identified using FBIs with students who were EBD in the general education setting. Based on the mounting success of the application of FBIs on the reduction of problem behaviors of students with or at risk for EBD, it would be advantageous to examine its effects in the general education setting particularly when more than 60% of students with EBD are served in the general education classroom for at least 40% of their school day.

One reason offered by some (e.g., Baker, 2005; Cheney & Barringer, 1995; Dutton et al., 2010; Epstein, 2006; Forness et al., 2013) for the lack of application of FBA and FBI by general education teachers in the general education setting is because the teachers do not feel prepared to do so and therefore are hesitant in openly welcoming students with persistent behavioral challenges into their classroom. General education teachers often cite the intrusiveness of a behavior plan as a reason for poor implementation fidelity (Sanetti, Collier-Meek, Long, Byron, & Kratchowill, 2015). Furthermore, providing a “blanket” intervention to all students exhibiting challenging behaviors may not be appropriately addressing the true function (i.e., purpose) of the behavior. A key feature of FBI is the flexibility offered in that individual students’ behaviors are addressed through a functional assessment or a functional analysis, and application of an intervention plan that is specific to student needs (Gann, Ferro, Umbreit, & Liaupsin, 2014; Wood, Ferro, Umbreit, & Liaupsin, 2011).

Another challenge associated with supporting students with or at risk for EBD through FBI implementation is that although effective, FBIs often do not teach students with or at risk for EBD to independently communicate their needs (Landrum et al., 2003). Teachers remain in a key role in facilitating FBI to support students with or at risk for EBD. However, as research has indicated, teachers continue to struggle with consistently supporting students with or at risk for EBD through teacher-applied strategies (Tillery, Varjas, Meyers, & Collins, 2010). One method for encouraging students to communicate their needs that has shown effectiveness is the systematic instruction of self-advocacy skills (Kleinert et al., 2010; Pocock et al., 2002; Test, Fowler, Wood, Brewer & Eddy, 2005; Wehmeyer, Bersani, & Gagne, 2000).

Self-advocacy training. Self-advocacy, noted as “a key to self-determination” by Turner (1995), undergirds as an essential skill associated with positive outcomes for all students with disabilities. Self-advocacy, or “the ability to speak and act on one’s own behalf” (Project 10, n.d), is a skill regarded as highly important, yet is rarely taught in an explicit manner. Results of the National Longitudinal Transition Study-2 support self-advocacy as one of the fundamental components leading to in-school and post-school success for students with disabilities (Newman et al., 2011; Test et al., 2009). Students with EBD often lack self-advocacy skills for a variety of reasons. As noted by Norton (1997), students with disabilities are apprehensive to advocate for accommodations. To complicate matters, students with EBD are aware of the stigma attached to their disability and may avoid drawing attention to it (Farmer, 2013). Furthermore, Test et al. (2005) assert knowledge of self, knowledge of one’s rights, and the ability to communicate that information to others are key factors necessary to be able to self-advocate, yet students with disabilities often lack the specific skills needed to be able to self-advocate (Pocock et al., 2002). Unfortunately, students with or at risk for EBD are not typically inclined to learn self-advocacy skills naturally, even though they perceive these skills as highly valuable (Houchins, 2002; Van Gelder et al., 2008). Research has provided evidence suggesting when students are given the opportunity to learn self-advocacy in an explicit manner, they are provided a foundation on which students with disabilities can build independence in inclusive settings (Pocock et al., 2002).

As mentioned previously, strong evidence supports the instruction of self-determination and self-advocacy is a key predictor in students experiencing better outcomes throughout their academic career as well as in post-school settings. Educational

settings provide a venue for teaching these skills through both accessibility and practicality. Educators have access to students at an early age and can begin embedding the teaching of these skills as early as preschool (Wehmeyer & Palmer, 2000). Furthermore, students can learn basic self-advocacy skills through direct instruction, as evidenced by studies conducted by Walker and Test (2011) and Roessler, Brown, and Rumrill (1998). Due to the complexity of the issues students with EBD face and the poor post-school outcomes, it is imperative for educators to seek out opportunities in which students with or at risk for EBD can have access to explicitly and systematically taught self-determination and self-advocacy skills (Wagner & Davis, 2006; Wagner, Kutash, Duchnowski, & Epstein, 2005).

The vast majority of empirical studies on self-advocacy instruction included students from disability categories other than EBD, such as mild intellectual disability (Sievert, Cuvo, & Davis, 1988; Test et al., 2005; Wood, Karvonen, Test, Browder, & Algozzine, 2004), or took place in settings outside of the general education classroom, including mental health treatment agencies (Picket et al., 2012; Preston, 1998) and alternative educational programs (Benitez, Lattimore, & Wehmeyer, 2005; Cuenca-Sanchez, Mastropieri, Scruggs, & Kidd, 2012). There is an emerging literature base suggesting positive outcomes for students with or at risk for EBD when taught self-advocacy skills in a systematic and explicit manner (Hatch, Shelton, & Monk, 2010; Kelly & Shogren, 2015). Because of positive outcomes associated with the attainment of self-advocacy skills (Newman et al., 2011; Test et al., 2009) and limited research investigating effects of self-advocacy instruction for students with or at risk for EBD,

further investigation is necessary to identify the benefits of self-advocacy instruction for this student population, particularly in general education settings.

One way to teach self-advocacy skills to students with or at risk for EBD is to help them learn about their disorder, the function of their behavioral challenges, and the effect of their behavior on other people and the environment. Test, Fowler, Wood, Brewer, and Eddy (2005) conducted an extensive review of literature related to self-advocacy skills and provided a conceptual framework of self-advocacy for student with disabilities. The framework included four key characteristics related to self-advocacy, which were knowledge of self, communication skills, knowledge of rights, and leadership. While knowledge of rights and leadership skills are of great importance, it is documented that students with EBD struggle with knowledge of self (Carter et al., 2010) and communication skills and often require proactive intervention to learn how to communicate their needs (Benner, Nelson, & Epstein, 2002). Test et al. (2005) noted students need to be able to understand and know themselves before they can communicate with others about their individual wants and needs. Additionally, students with disabilities need to learn how to communicate information effectively with others, which is critical for self-advocacy. Educating students about their disorder and ways in which they can cope with associated behaviors has yielded positive outcomes (Landrum et al., 2003). FBA allows educators to determine why students are engaging in problem behaviors and suggest replacement behaviors, leading to more desirable behavioral and academic performance (Carr, Langdon, & Yarborough, 1999). Blending explicit and systematic instruction of self-advocacy skills and educating students about their behaviors through FBA can result in a packaged curriculum that may provide an avenue

for students to engage in self-advocacy for their needs in settings where individuals with extensive training in behavior support strategies may not be present (such as in general education settings).

Function-based self-advocacy. Research has indicated a need for students with disabilities, including those with EBD, to be able to independently express their needs in a manner that will lead to an increased level of support through appropriate accommodations ensuring students with the best opportunity to experience success both in and out of school (Newman et al., 2011; Test et al., 2009). Traditionally, FBI begins with an FBA being conducted by a trained individual (e.g., special educator, school psychologist) to determine the function of a student's behavior, followed by determining an intervention to increase an appropriate replacement behavior that serves the same function as the target undesired behavior. Providing students with information such as an understanding of their behavioral challenges and triggers leading to undesired behaviors allows students to address these issues by engaging in replacement behaviors identified through an FBA (Landrum et al., 2003). To implement the intervention, each team member assumes a role for supporting the implementation of the plan. According to Shapiro, Miller, Sawka, Gardill, and Handler (1999), students with EBD who spend the majority of their academic day in the general education classroom are particularly susceptible to a lack of support regarding the specific function of their behavior. Students who exhibit the most challenging behaviors in the general education classroom often rely on the support of a teacher who has little to no training in FBA or FBI, resulting in a large gap in behavioral support. Although a consultative model has shown some effectiveness in cases where consultation carries more weight (Shapiro et al., 1999), a typical

consultation model between the special educator and general educator does not reflect such time intensive training and communication, widening this gap in behavioral support for students with EBD in the general education settings.

Given the research base on FBI and its influence on decreasing problem behaviors of students at risk for or identified as EBD, teaching students to self-advocate their needs based on FBA results about the behavioral function may serve as an avenue to increase student performance. A number of studies have demonstrated the effectiveness of using FBA and FBI to teach replacement behaviors (e.g., Trussell et al., 2008; Turton et al., 2011). Affording students the opportunity to better understand why they are engaging in a particular behavior promotes ownership, a sense of empowerment, and a feeling of autonomy concerning their behavioral challenges. Mental health clinicians have placed a heavy emphasis on psychoeducational practices, which informs those affected by mental health disorders and those within their support system about the mental illness and related coping strategies (Pollio, McClendon, North, Reid, & Jonson-Reid, 2005). Similarly, allowing students to interact as integral members of a team seeking a solution for undesirable behaviors through an explanation of the “why” a student engages in a problem behavior and how to potentially prevent the inappropriate behavior may lead to positive outcomes. For example, providing students who have difficulty seeking attention appropriately from peers with an instructional session on how to approach peers, topics for engaging peers, what to do when a peer is disinterested, and how to close a conversation through explicit and systematic instruction may lead to better peer interactions. Furthermore, as stated by Test et al. (2005), two key characteristics of self-advocacy are knowledge of self and the ability to communicate one’s needs/wants.

Providing students with key knowledge related to their individual behavior challenges, such as the setting events or predictors triggering the behavior, may assist students in avoiding inappropriate behaviors through basic understanding of one's self. Building communication skills through conversations with teachers initiated by students with or at risk for EBD not only may encourage students to engage in self-advocating practices, but also may establish access to behavioral support and serve as a catalyst in building interpersonal skills, which are also benefits of self-advocacy.

Although substantial evidence supports use of FBI (Gann et al., 2014; Trussell et al., 2008) and self-advocacy (Pocock et al., 2002) to reduce problem behaviors of students with or at risk for EBD, there is currently no literature examining the effects of teaching students with EBD to self-advocate their needs based on FBA results in any educational or mental health setting. A suggestion for narrowing this gap in behavior support is to provide students with the training necessary to self-advocate before problem behaviors occur. This proactive approach combines the understanding of one's problem behaviors through FBA, which is clearly and explicitly explained to the student, and a self-advocacy training program that can teach students with or at risk for EBD how to advocate for their needs based on the behavioral function(s) of problem behaviors exhibited in the general education classroom. Additionally, providing students with training in self-advocacy, which can serve as a medium for students to reach out to teachers particularly general education teachers, to inform any needs and potential supports as indicated by FBA results may serve as a means to improve overall student behavior.

Limitations of Current Research

Although there is an emerging literature base examining the use of FBA and FBI to address problem behaviors exhibited by students with or at risk for EBD in the general education classroom, to date there are no studies that have determined a practical method for students to request support from their teachers. Extensive research has demonstrated the positive outcomes associated with self-determination and self-advocacy skills, sub-skills of self-determination (Newman et al., 2011; Test et al., 2009; Wagner & Davis, 2006; Wagner et al., 2005). Additionally, both educators and mental health clinicians emphasize the importance of teaching these skills to students who otherwise would not have them (Pickett et al. 2012; Test et al., 2009). Although self-determination may be a skill that typically developing students obtain simply by observing the modeling of self-determination, students with or at risk for EBD often require individualized instruction of self-determination skills to be successful in nearly every aspect of life. Despite the extensive research suggesting the need for explicit instruction of self-determination and self-advocacy skills to all students with disabilities, few studies have extended this research to students with or at risk for EBD, particularly those served in the general education setting. Both FBI and self-advocacy instruction demonstrate positive results across a variety of settings and populations; however, to date there is no research examining the embedding of FBI in the instruction of self-advocacy skills in order for students to be able to self-advocate in settings that may not be optimal for their behavioral success, such as the general education classroom. Students who are able to engage in a proactive conversation with a general education teacher, provide key information about their problem behavior, demonstrate the ability to self-advocate their

individualized needs, which may result in improved behavior across the educational setting. In addition to students with or at risk for EBD actively engaging in self-determined behavior, this may provide a way in which students can experience autonomy and a sense of responsibility.

Purpose of the Study and Research Questions

The purpose of this study will be to examine the effects of function-based self-advocacy training on the problem behavior, replacement behavior, and self-advocacy skills of students with or at risk for EBD in general education settings. There are eight research questions.

1. What are the effects of function-based self-advocacy training on the problem behaviors of students with or at risk for EBD in general education settings?
2. What are the effects of function-based self-advocacy training on the replacement behaviors of students with or at risk for EBD in general education settings?
3. To what extent do general education teachers' responses to the problem behaviors and appropriate replacement behaviors of students with or at risk for EBD change from pre-intervention to post-intervention?
4. What are the effects of function-based self-advocacy training on the performance of self-advocacy skills of students with or at risk for EBD participating in a general education setting?
5. To what extent does students' self-assessment of self-determination change from pre-assessment to post-assessment as measured by *American Institutes of Research (AIR) Self-determination Assessment* (Wolman, Campeau, DuBoi, Mithaug, & Stolarski, 1994)?

6. To what extent are students with or at risk for EBD able to generalize skills learned from the function-based self-advocacy model to other general education teachers in a different setting?
7. How do the pre-intervention perceptions of the function-based self-advocacy strategy compare to the post-intervention perceptions of student participants?
8. How do the pre-intervention perceptions of the function-based self-advocacy strategy compare to the post-intervention perceptions of teacher participants?

Significance of the Study

This study attempts to support students with or at risk for EBD who are traditionally among those with the poorest post-school outcomes through explicit instruction of self-advocacy skills and self-awareness of behavioral functions to combat the challenges faced by students with or at risk for EBD served in the general education setting. The intervention combines two research-supported strategies into a training package that will promote self-advocacy skills, increase appropriate replacement behavior, and reduce problem behaviors of students with or at risk for EBD through requesting support from general education teachers based on student specific behavioral functions. To date, no study exists that has successfully integrated the two concepts in addressing the reduction of inappropriate behaviors and improvement of replacement behavior of students with or at risk for EBD participating in the general education setting. With successful results, this intervention has the potential to be extended to other educational settings, such as high schools or colleges. Additionally, this packaged intervention may be adapted for other populations displaying chronic problem behaviors. Furthermore, to date most studies have focused on teacher-led interventions for

decreasing problem behavior in the general education setting. The proposed intervention provides students with an opportunity to learn how to self-advocate their specific behavioral needs, based on the FBA results, and then seek out reinforcers independently. This level of independence has a potential for the skill to generalize to other areas of the individuals' life.

Delimitations

There are several delimitations in this study. A potential delimitation of the study includes resistance to the self-advocacy training by student participants as a result of the characteristics displayed by students with or at risk for EBD (e.g., oppositional) or a learned history of escape behaviors when in a one-on-one setting. Students will be involved in the discussion and planning of the intervention from the beginning of the training, in an attempt to facilitate ownership of the intervention.

A second delimitation is that the study focuses on students' behavior to self-advocate for themselves, rather than on teachers' provision of support or reinforcement. Teachers may not provide the appropriate reinforcement requested by the student or respond to student behavior in a different manner than requested (e.g., reinforcing the inappropriate behavior of seeking attention at inappropriate times by providing attention to the student every time he calls out). However, each teacher will receive a brief training on his or her role during the intervention. Students also will meet with the primary experimenter following an intervention session to determine any needs, which will be communicated to the supporting teacher by the experimenter if needed. The teacher also will be provided with a checklist indicating the steps to be conducted in the intervention for clarification purposes.

Third, attrition and school absence are common for students with or at risk for EBD; therefore, five potential participants will be identified for the study, in the event that attrition or attendance problems arise. This also will be considered in participant selection through review of attendance records, office disciplinary referrals, and a discussion with the school staff. Students will be provided positive reinforcement for their participation to increase their level of enthusiasm for the intervention.

Finally, the primary experimenter will be conducting the self-advocacy training based on previous knowledge and development procedures of the training. This will allow the experimenter to make informed decisions about the training program. The primary experimenter will make all materials available to the school staff and offer training after the study has ended. This may serve as a delimitation in that teachers may not have an invested interest in the intervention or familiarity with the intervention, which has the potential to lack implementation fidelity in regard to teacher-provided reinforcement, as requested by the student.

Definitions of Terms

Terms used in this study and their definitions are presented below. The following terms play an important role in the execution of the study, and therefore the understanding of their respective definitions is critical.

At Risk for Emotional and/or Behavioral Disability: For the purpose of this study, the term at risk for Emotional and/or Behavioral Disability (EBD) will be defined as a non-disabled student exhibiting behavioral characteristics aligning with the definition of EBD provided below, who is at a higher risk for being identified as having an EBD in the future. Additionally, in order for the student to be considered at risk, the student must

be receiving interventions beyond universal interventions in the classroom, as well as an above average office disciplinary referral rate.

Emotional and/or Behavioral Disability (EBD): For the purpose of this study, the term EBD will be used in alignment with definition coined by the Council for Children with Behavioral Disorders (CCBD), a subdivision of the Council for Exceptional Children. CCBD's definition lines up with IDEA's definition of Emotional Disturbance (ED), as well as The National Alliance on Mental Health's perspective on mental illnesses, which have the potential to affect daily functioning (Council for Exceptional Children, CCBD, n.d.). The Federal definition of ED, the same category under which EBD falls, is as follows:

A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; (e) a tendency to develop physical symptoms or fears associated with personal or school problems. Emotional Disturbance includes schizophrenia. The term does not apply to children who are *socially maladjusted*, unless it is determined that they have an Emotional Disturbance under paragraph (c)(4)(i) of this section. [U.S. Government, 2004, Code of Federal Regulation, Title 34, Section 300.8(c)(4)(i) and (ii)]

Function-based intervention: Function-based interventions refer to “strategies for improving behavior that are linked to and logically derived from a functional assessment (also referred to as *functional behavioral assessment*) of challenging behavior” (Dunlap & Fox, 2011, p. 334)

Function-based self-advocacy: For the purpose of this study, function-based self-advocacy (FBSA) will be defined as using self-advocacy skills to recruit reinforcement of appropriate behaviors from individuals in a supporting role (e.g., teacher, guidance counselor, administrator). Reinforcement to be recruited will be predetermined based the results of a functional behavioral assessment and function-based intervention for the individual presenting behavioral challenges.

Functional behavioral assessment: Functional behavioral assessment (FBA) refers to “a process of identifying functional relationships between environmental events and the occurrence or non-occurrence of a target behavior” (Dunlap et al., 1993, p. 275). FBA generally includes use of direct (e.g., observations of targeted behavior) and indirect (e.g., rating scales, interviews of teachers and caregivers of the individual of focus) measures, as well as functional analyses to determine variables contributing to problem behaviors (Dunlap et al., 1993).

General education setting: For the purpose of this study, general education setting is defined as the setting in which students (with or without disabilities) are presented the general education curriculum by a general education teacher who holds the main responsibility of teaching the general education curriculum.

Inclusion/Inclusive setting: Although IDEA does not use the term “inclusion,” the practice of including students who have been identified as having a disability who are

accessing the general education setting, or inclusive setting, are considered to be engaging in “inclusion,” as part of a least restrictive environment, as deemed appropriate by the individualized education program (IEP) team.

Least Restrictive Environment (LRE): LRE has been defined as:

“to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily”

(Wright & Wright, 2007, p. 206).

In accordance with this statement, for the purpose of this study LRE will be considered a continuum of services in which a student is engaged in the general education program as much as possible without a detriment to their educational progress.

Persistent behavioral challenges: For the purpose of this study, persistent behavioral challenges are defined as social or functional behaviors that are inappropriate and consequently impede the learning of targeted students or the learning of others over a period of time.

Replacement behavior: For the purpose of this study, replacement behavior will be defined as the behavior developed within the FBI as an appropriate behavior that will

replace the behavior targeted as the problem behavior and that will serve the same function as the problem behavior.

Self-advocacy: The four characteristics of self-advocacy, based on the conceptual framework by Test et al. (2005), are knowledge of self, knowledge of rights, communication, and leadership. Rowe et al., (2014) refined the definition of self-advocacy based on the conceptual framework developed by Test et al. (2005) as “the ability to make choices, solve problems, set goals, and accept consequences of one’s actions ... advocating on one’s own behalf” (Rowe et al., 2014, p. 121).

Self-Advocacy and Conflict Resolution (SACR) training: The Self-advocacy and Conflict Resolution (SACR) training is a program developed by Roessler, Brown, and Rumrill (1998) as a means to provide explicit instruction to students with disabilities in the college setting on how to self-advocate for their needs, as well as how to navigate through a potential conflict if it were to arise. The original training included 17 target behaviors in seven lessons covering the basics of requesting accommodations. Didactic teaching, modeling, role-playing, and feedback are strategies used in the instruction of the skills.

Self-advocacy training: Self-advocacy training refers to specific training modules in which students are taught explicit steps to self-advocate their needs. For the purpose of this study, the primary experimenter has adapted a training based on the Self-advocacy and Conflict Resolution Training for College Students with Disabilities (Palmer & Roessler, 2000), which includes the integration of function-based intervention.

Self-determination: Self-determination is defined as “acting as the primary causal agent in one’s life and making choices and decisions regarding one’s quality of life

free from undue external influence of interference” (Wehmeyer, Kelchner, & Richards, 1996, p. 632). Self-determination consists of self-determined actions, including autonomy, self-regulation, psychological empowerment, and self-realization (Wehmeyer et al., 1996)

CHAPTER 2: REVIEW OF LITERATURE

Despite the efforts of researchers, educators, advocates, administrators, and caregivers, students who are classified as having an EBD have exhibited some of the bleakest outcomes of all students identified with a disability (Bradley, Doolittle, & Bartolotta, 2008; Wagner & Davis, 2006). Although implementation of positive behavioral interventions and supports has shown effectiveness, leading to a great amount of optimism in regard to addressing problem behaviors in the school setting, students exhibiting the most challenging behaviors remain dismally unimproved, and therefore unacceptable (Kern, Hilt-Panahon, & Sokol, 2009; Lane, Barton-Arwood, Nelson, & Wehby, 2008). Based on these outcomes, Kern et al. (2008) implore the need for further improvement upon current intervention practices for students with the most intensive needs, such as those with or at risk for EBD. These authors cited possible barriers for progress of students with or at risk for EBD as limited resources available to address mental health needs, poor classroom management in general, and low student engagement. Although these factors contributed to the lack of progress, Kern et al. noted lack of understanding and discernment linking behavior to environmental factors and overall lack of teacher training are the most detrimental to the advancement of students with or at risk for EBD. With the push for inclusion of all students in the least restrictive environments through the enactment of the Individuals with Disabilities Education Act in 1997 (von Ravensberg & Tobin, 2008), a growing number of students with EBD are

being served for large portions of the academic day in the general education classroom (Wagner et al., 2006). Although this is a great step in the right direction for the equality of students with disabilities, students with EBD are often left with very little or no behavioral support while in the general education setting (Wagner et al., 2006).

Use of functional behavioral assessments (FBAs) have been determined to be an effective method for determining factors affecting student behavior (Blair, Umbreit, & Bos, 1999; Dunlap & Fox, 2011; Filter & Horner, 2009; Fox & Davis, 2005). Upon determining variables affecting student behavior, function-based interventions (FBIs) can be developed and implemented to decrease student behaviors that negatively affect their academic, social, and emotional skills. A number of studies have demonstrated effectiveness of FBIs in reducing problem behaviors across a variety of settings (Conroy, Dunlap, Clarke, & Alter, 2005; Kern et al., 2004; Lane, Robertson Kalbert, & Shepcaro, 2009); however, limited training and resources available to teachers and students serve as barriers to developing and executing FBIs in setting with individualized contextual fit. Despite the growing evidence of the effectiveness of FBI, students with EBD served in the general education setting continue to make limited progress, or no progress at all (Bradley et al., 2008).

Another concern possibly contributing to poor post-school outcomes of students with or at risk for EBD is the lack of crucial skills such as self-determination and self-advocacy, which has been identified as a predictor for positive post-school outcomes for students with disabilities (Newman et al., 2011). One reason students with or at risk for EBD often lack these skills is that they have not been explicitly taught how to demonstrate self-determination or self-advocacy (Carter, Trainor, Owens, Sweden, &

Sun, 2010). Both skills are highly critical for individuals who will most likely experience a lifetime of needing to self-advocate or practice self-determination (e.g., expressing medication changes, proactively sharing needs with employers, disclosing possible behaviors affected by mental health disorders). Through embedding the teaching of self-advocacy skills at the school level, students with or at risk for EBD can begin to practice these skills in a safe environment, which will provide the supports necessary for improvement leading to successful self-advocacy in generalized settings. This can easily be embedded within positive behavioral support interventions, which have a long history of success in educational settings (Carr et al., 2002; Horner, Sugai, & Anderson, 2010).

Research has shown evidence that students with some of the most challenging disabilities can be taught to self-advocate their needs using systematic and explicit instruction (Cuenca-Carlino & Mustian, 2013; Cuenca-Sanchez, Mastropieri, Scruggs, & Kidd, 2012; Hatch, Shelton, & Monk, 2010; Kelly & Shogren, 2014; Preston, 1998). Furthermore, educational research has demonstrated that application of FBI to address even the most difficult and persistent behaviors can yield positive and lasting results (Trussell, Lewis, & Stichter, 2008; Turton, Umbreit, & Mathur, 2011). In an effort to support the continuation of inclusion of students with or at risk for EBD while maintaining the level of support necessary for making adequate academic, behavioral, and emotional progress, this study seeks to tie these two components together to positively change the behaviors of students with or at risk for EBD through the teaching of self-advocacy of their specific behavioral support needs (e.g., antecedent, function, replacement behavior) to their general education teacher.

To this end, this chapter will consist of three strands that provide a foundation for intervention which embeds FBI within a self-advocacy training program. The three strands include: (a) characteristics of general education classroom supports for students with or at risk for EBD; (b) functional behavioral assessment and function-based intervention, and (c) self-advocacy skills and associated post-school outcomes of students with disabilities, including students with or at risk for EBD. The intervention has been developed on the premise of these three concepts with the anticipation of decreasing inappropriate behavior and increasing appropriate replacement behavior of students with or at risk for EBD participating in the general education setting, and increasing teacher support, based on the self-advocated requests provided by student participants. In sum, the intervention has been developed in order to promote the successful inclusion of students with EBD in general education settings. See Figure 1 for the diagram for providing function-based self-advocacy training to students with or at risk for EBD.

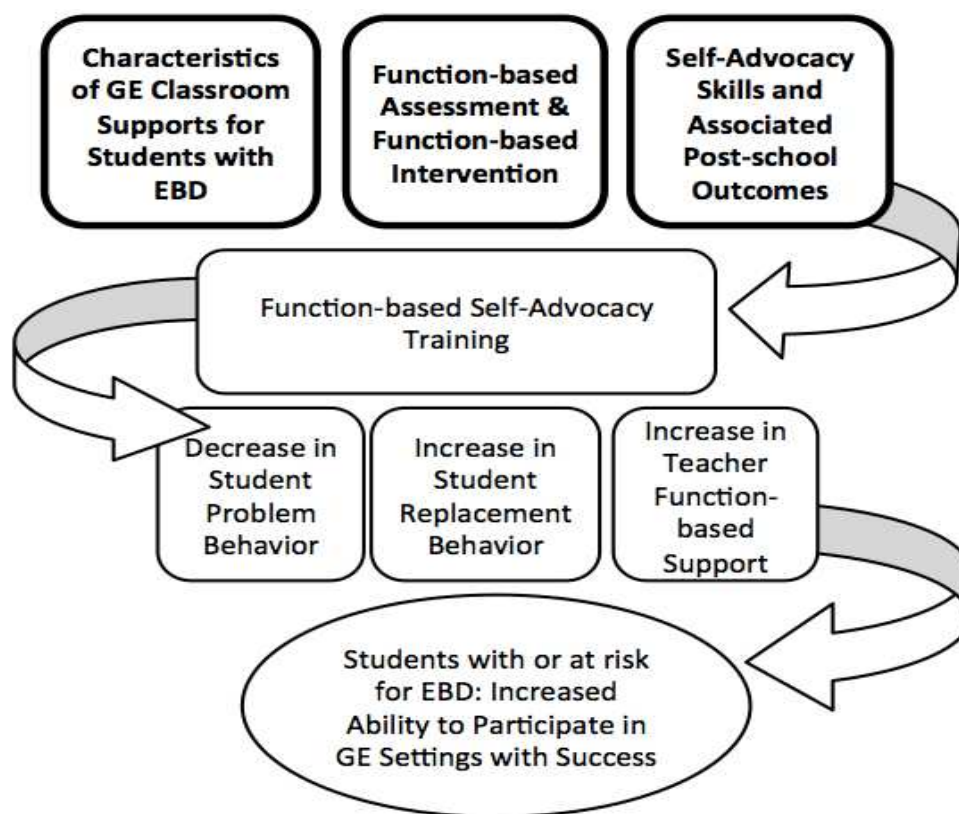


Figure 1. Diagram for providing function-based self-advocacy training to students with EBD.

Students with EBD in the General Education Classroom

Perhaps one of the greatest challenges educators have faced since the establishment of the Individuals with Disabilities Education Act (IDEA, 2004) is how to address the needs of students with the most challenging behaviors. IDEA has categorized an area of eligibility considered Emotionally and/or Behaviorally Disabled (EBD) to meet the needs of students exhibiting persistent problematic behaviors that have an adverse effect on their educational performance. There is some debate about the variability of EBD definitions; however, the majority of states adhere to the federal definition when determining eligibility for special education services under the EBD

category (Becker et al., 2010). The federal definition of Emotional Disturbance, the federal category under which students with EBD are served, is as follows:

A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; (e) a tendency to develop physical symptoms or fears associated with personal or school problems. Emotional Disturbance includes schizophrenia. The term does not apply to children who are *socially maladjusted*, unless it is determined that they have an Emotional Disturbance under paragraph (c)(4)(i) of this section. [U.S. Government, 2004, Code of Federal Regulation, Title 34, Section 300.8(c)(4)(i) and (ii)]

Initiatives such as Child Find, Response to Intervention (RTI), and Multi-tiered Systems of Supports (MTSS) have increased identification of students meeting eligibility requirements for EBD; however, more often than not these students are not identified until they are well into their school career (Conroy & Brown, 2004). Within a tiered support system, such as MTSS, all students are provided with support at their level of need. Students at the universal tier, which includes the majority of students (approximately 80% or more), are able to make adequate progress with typical teacher-provided supports within the general education setting. Upon ongoing progress monitoring, approximately 10-15% of students require additional support beyond

traditional teaching methods, meeting criteria for the secondary tier, or Tier 2, of MTSS. These students may benefit from small group instruction, differentiated assignments, peer tutoring, and other research-based practices. At the third tier, or Tier 3, students who have not demonstrated documented progress after receiving additional supports at the second tier may require additional supports that further individualize instruction. At this point students may also be referred for educational and psychological testing to determine if there is a presence of a disability (Fuchs & Fuchs, 2006; Fuchs & Fuchs, 2007; Fuchs, Mock, Morgan, & Young, 2003). One benefit of models such as RTI and MTSS is that struggling students will have the opportunity to access support needed to make the academic and behavioral progress as a preventative measure.

Researchers note the importance of early identification and intervention of students with EBD (Walker et al., 1996). Intervening as early as possible increases the likelihood students will respond to interventions and is notably one of the most critical ways to make lasting effects over a lifetime (Kern et al., 2009). Despite a clear understanding that early intervention is key in supporting students with EBD, Conroy and Brown (2004) noted an overall failure in the identification of students at risk for developing an EBD at an early enough age for optimal intervention. Furthermore, Bradley et al. (2008) reported that many students who would qualify for services under the EBD category go without services. The estimated prevalence rates of students with diagnosable mental health disorders ranges is around 20%, with approximately 12% of unidentified students meeting eligibility requirements for EBD. Currently, the prevalence rate of students with EBD served in special education hovers around 1%, resulting in an astounding gap between those in need of services and those who actually receive them

(Bradley et al., 2008; Forness, Kim, & Walker, 2012; Snyder, de Brey, & Dillow, 2016).

When the formidable challenges posed by the general characteristics of students with EBD are combined with a low number of students being identified, it is clear why the trajectory for this population has appeared dismal. The implications for this are vast.

With an approximate 10% of students with EBD receiving little to no behavioral support, reports on the individuals with EBD and incarceration involvement, poor post-school employment, co-morbid drug and alcohol abuse, and an overall negative impact on our society as a whole should come as no surprise.

Characteristics of and Challenges Faced by Students with EBD

School leaders and educators have grappled with how to best serve students with or at risk for EBD, and often come up short with effectively implemented interventions that lead to positive long-term outcomes. Students with EBD are among the least successful in regard to in-school and post-school outcomes (Bradley et al., 2008; Kern et al., 2009). Due to the nature of the disability itself, when paired with poor identification for early intervention and low rates of fidelity in implementation of intervention strategies, students with EBD experience higher rates of retention, absenteeism, office disciplinary referrals, suspension and expulsion while in school (Kern, Hilt, & Gresham, 2004; Landrum, Tankersley, Kauffman, 2003; Lane et al., 2008). Unfortunately, these in-school experiences lead to poor school completion rates. According to the National Longitudinal Transition Study-2 (2011), students with EBD had the second lowest high school completion rate (36.7%) and highest dropout rate (44.9%) among students with disabilities. Post-school experiences extend the disconcerting trajectory with low employment rates and lower wages (Bradley et al., 2008; Simpson, Peterson, & Smith,

2011). Three to five years after leaving school, nearly half of all students with EBD are unemployed (Bradley et al., 2008). With these outcomes, educational researchers have been charged with identifying the underlying characteristics that impede the progress of this vulnerable population by intervening with the most effective practices that yield long-term results. There are many factors contributing to the overall outcomes of students with EBD. Students with EBD often exhibit inappropriate behavior, academic learning problems, and interpersonal relationship issues requiring a high level of individualized intervention (Bradley et al., 2008; Becker et al., 2011; Landrum et al., 2003; Snyder et al., 2016; Wagner et al., 2006). As mentioned previously, students with EBD often go without identification until they are further along in their school career, often leaving them with a long history of behavioral infractions before being identified to receive specially designed services (Landrum et al., 2003). Although researchers are aware that educators cannot “cure” the vast number of disorders affecting students with EBD, it has been determined that alleviation of some of the symptoms by reducing the problem behaviors through research-based interventions is quite possible (Landrum et al., 2003).

Access to General Education Classrooms

IDEA is built on the presumption that every student, regardless of ability, is entitled to a free appropriate public education (FAPE) in the least restricted environment (LRE) (Katsiyannis, Yell, & Bradley, 2000). Although there is some debate about what the term “inclusion” actually means, IDEA is clearly in support of assessing individual needs regarding access to education in a continuum of placements alongside their peers without disabilities to the maximum extent possible, while maintaining academic appropriateness (Yell, 1995). For students with EBD, this becomes quite challenging due

to the level of support needed for their behavioral challenges. Provision of FAPE and LRE becomes even more challenging when the majority of general education teachers are underprepared in supporting students beyond general classroom management (Shapiro, Miller, Sawka, Gardill, & Handler, 1999). Behaviors exhibited by students with EBD while accessing the general education setting, such as verbal and physical aggression, failure to comply, disrespect of the teacher and/or peers, outbursts, withdrawal, or perseveration, become overwhelming obstacles in the face of a general education teacher with little to no expertise in providing supports for students with the most challenging behaviors. Regardless, multidisciplinary teams formed to plan and facilitate appropriate access for students with or at risk for EBD to the general education curriculum are confronted with this challenge on an ongoing basis.

According to the U.S. Department of Education National Center for Education Statistics (2016), 44% of students with EBD spend 79% or more of their school day in a general education classroom. About 18% of students with EBD spend between 40% and 79% of their school day in the general education classroom (Snyder et al., 2016). This totals to 62% of all students identified as EBD spending nearly half of their academic day in the general education setting. A framework that has demonstrated great potential for positive change at the individual level (Heineman, Dunlap, Kincaid, 2005; Sugai & Horner, 2009) up to the district and state level (Arcia, 2006, Barrett, Bradshaw, & Lewis-Palmer, 2008) is positive behavioral interventions and supports (PBIS). PBIS is a framework that features tiered interventions to address challenging behavior in a proactive manner, implementing research-based strategies to support students in making behavioral progress. Although initiatives such as PBIS have made great gains in

supporting students at the universal and secondary levels in regard to an overall reduction in office disciplinary referrals and chronic problematic behaviors (Carr et al., 2002; Horner, Sugai, & Anderson, 2010), students requiring behavioral support at the tertiary level, such as students with EBD, continue to exhibit persistent behavior challenges when placed in general education settings with minimal or no individualized behavior support (Simpson et al., 2011).

Through exploration of the barriers presented for students with EBD when accessing general education classrooms, researchers have determined that even with the implementation of the most detailed service delivery plan in place, support often falls short of meeting the students' behavioral needs, or deteriorates over time (Blood & Neel, 2007). From a legal standpoint, Yell (1995) noted students with disabilities are to have access to education in the least restrictive environment, with a legal preference of integrated settings. It is important to note that students with or at risk for EBD often require very individualized behavior planning, for which the majority of special education teachers are not able to develop and implement (Wagner et al., 2006). Even fewer general education teachers have the ability to support students with EBD in their classroom (Gable, Tonelson, Sheth, Wilson, & Park, 2012; Wagner et al., 2006). Unfortunately, students with EBD are at high risk for not receiving their education in the least restrictive environment due to the lack of supports offered in the general education classroom. Courts have supported a more restricted placement in two instances: (a) when the student with EBD is not benefitting from the general education classroom academically and nonacademically, and (b) when a student's behavior disrupts the learning environment (Yell, 1995). The obvious need for an increase in all pre-service

training in supporting students with behavior challenges often hinders the level of access students with EBD may have to the general education setting. Coleman, Webber, and Algozzine (2000) assert until general educators reform their curricula to include goals addressing mental health needs, students with EBD will continue to experience difficulty in inclusive settings.

Another barrier to students with EBD accessing the general education setting is overgeneralizations and realities of general education classroom characteristics (Kauffman, Lloyd, Baker, & Reidel, 1995). Although nearly all teachers have had experience with a student who was considered EBD, teachers may overgeneralize what they have experienced in the past, not considering the individual needs of the student. Whereas one strategy may have worked well with a previous student, the same intervention may fail with another. Lack of understanding about functions of behaviors and replacement behaviors leave teachers with limited ability to intervene appropriately (Blood & Neel, 2007). Kauffman et al. (1995) urged educators not to make overgeneralizations or “become detached from the realities of classroom teaching” (p. 546). Based on this information, it is critical to be mindful of the typical challenges of the general education classroom and keep these in mind when developing strategies and behavior intervention plans to support students with or at risk for EBD in inclusive settings. The average classroom consists of 21.2 students at the primary level and 26.8 at the secondary level with a pupil-teacher ratio of one to 16 (Snyder et al., 2016). The level of responsibility placed on a general education teacher to meet the individual needs of typically developing students, as well as students with disabilities, is nothing short of a challenge in itself. Adding to the complexity of higher numbers of students in

classrooms, general education teachers often face the daunting task of meeting high stakes testing achievement, providing differentiated instruction, and communicating with parents on an ongoing basis. With this in mind, it is important to consider that although students come to the general education classroom with a behavioral intervention plan, and possibly a completed FBA detailing the behavioral needs of the student, general education teachers often lack the skills needed to implement the supports recommended within the behavioral intervention plan. Furthermore, behavioral intervention plans are often developed with a “one size fits all” mentality, yet in order for students to make behavioral progress, it is crucial that behavioral interventions are developed individualized for the contextual setting in which the student will be served.

Although a great number of challenges exist when integrating students with EBD in general education settings, there are many positive aspects to consider. For instance, students are able to engage in social interactions with typically developing peers, access the general education curriculum as appropriately stated on their IEPs, and engage in enrichment activities that may not be available in special education classrooms. In the article by Coleman et al. (2000) presenting the point and counterpoint of inclusion of students with EBD, the authors agreed the key to supporting students’ needs is through collaborative effort between general educators, special educators, and mental health professionals. Sadly, nearly two decades after this article was published, little progress has been made from a statistical standpoint, and there exist relatively limited collaborative relationships between mental health agencies and educational entities (Cooper, Evans, & Pybis, 2016). It is important to note that students with EBD can have a

positive experience in inclusive settings, but appropriate planning and implementation is critical.

Historically, students with EBD have not received the supports necessary from both special and general educators due to a deficit in educator training (Billingsley et al., 2006; Simpson et al., 2011; Wagner et al., 2006). Research has determined that students with or at risk for EBD require specialized behavioral interventions beyond what is typically available in general education classrooms (Gable et al., 2012; Landrum et al., 2003). Based on this information alone, it would seem the training of general education teachers serving students with or at risk for EBD would be a priority. Educators have access to a number of research-based interventions that are effective in supporting students with or at risk for EBD; however, specialized training is necessary to ensure optimum effectiveness (Landrum et al., 2003). It is critical for trained individuals with the knowledge of evidence-based practices for students with or at risk for EBD to collaborate and train general education teachers on the specific needs of each student. Furthermore, students with or at risk for EBD demand unique and individualized interventions that are implemented early and frequently, with fidelity, and sustained over time (Landrum et al., 2003). Therefore, not only appropriate training but a collaborative relationship developed to facilitate continued monitoring of progress should be forged between those trained in the implementation and sustainability of interventions provided to students with or at risk for EBD.

As would be expected, needs exist for a vast range of the level of support offered to students with or at risk for EBD being served in the general education setting. General education teachers must be prepared to support students with or at risk for EBD, yet lack

the preparation necessary to implement the most effective evidence-based practices identified for supporting students with or at risk for EBD (Gable et al., 2012; Wagner et al., 2006). Some general education teachers take it upon themselves to gain as much knowledge as possible about the student with or at risk for EBD in the classroom, but more often than not, this knowledge is gained through personal research found online or through conversations with general education colleagues with experience in teaching students with or at risk for EBD, which may or may not be supported by empirical research. Moreover, even when general education teachers are aware of the needs of students with or at risk for EBD, they rarely have access to the resources needed to do so (Coleman et al., 2008, Kauffman et al., 1995). Based on the continued bleak outcomes, the level of need of students with or at risk for EBD seemingly outweighs the level of support that has been provided by general education teachers to date. It is important for all individuals who are responsible for supporting students with or at risk for EBD to clearly understand the needs of the students. These needs are individualized and unique, and therefore require individualized and unique interventions for students to make adequate progress.

As mentioned previously, one major complication in providing the support necessary for students with EBD to make progress in the general education setting is that general education teachers do not feel competent in supporting students with EBD (Cheney & Barringer, 1995; Regan & Michaud, 2011). Given that general education teachers have few classroom management courses and even less training on students with more challenging problem behavior (Dutton, Varjas, Meyers, & Collins, 2010; Greenburg, Putnam, & Walsh, 2014), it is understandable that a general education teacher

might be hesitant or uncomfortable in providing support to a student with serious behavior challenges. According to Greenburg et al. (2014), typical classroom management training during pre-service educator programming often does not draw from research, but from what is “thought” to be the most effective classroom management practices. Gable et al. (2012) reported not only general education teachers, but special education teachers, lack the necessary preparation for supporting students with persistent behavioral challenges. This only exacerbates the problem as general educators often look to special education teachers for interventions to implement with students with behavioral challenges in general education classrooms. Research has clearly demonstrated the importance of evidence-based practices for students with EBD across all settings (Gable et al., 2012). With the inadequacy of pre-service teacher training on supporting students with any sort of behavior challenge, a lack of resources including individuals with knowledge for consultation, and overall general education classroom hardships, it is not surprising that students with EBD and those with some of the highest level of behavioral needs would remain on an unchanged trajectory. Educational leaders are aware of this issue and have begun to address it through initiatives providing hopeful outcomes such as positive behavior support strategies (Bradshaw, Mitchell, & Leaf, 2010; Freeman et al., 2015). In addition to positive behavior support strategies, educational researchers have examined ways in which interventions can be developed specific to student needs, based on the results of the FBA. As mentioned previously, this is particularly important for students with EBD, as they often require individualized interventions to be in place throughout the entire academic setting that will support their individual needs in order to make adequate progress (Wagner et al., 2006). Furthermore, IDEA requires an FBA to be

completed in a proactive manner (i.e., when a student has been displaying problematic behavior leading to suspension(s) or approaching 10 collective days of suspension) prior to a student being moved to a more restrictive environment due to disciplinary reasons. Based on the outcomes of the FBA, the IEP team is to examine ways in which the student's needs can be met in the setting(s) in which the student is experiencing challenging behavior (Jordan, n.d.). This further supports the need for function-based interventions to be developed as part of an all-encompassing behavioral intervention plan designed to support students to meet their maximum behavioral and academic potential.

Summary

Students identified with EBD face many challenges due to the complexity of their disability in general. Participation in any educational setting requires careful consideration and planning of a collaborative team with knowledge of evidence-based practices that are best suited to meet the individual needs of students with or at risk for EBD across all educational contexts. Although educational leaders have implemented promising practices such as positive behavior support, it is clear that students within the tertiary level of need require further fine-tuning to the supports provided, particularly in general education settings. Due to the lack of pre-service and in-service teacher training on how to effectively support students with or at risk for EBD in the general education setting, the outcomes of such students have remained the same over the past decade. Exploration of more efficient and effective options of how to better support students accessing inclusive settings with the most challenging behaviors is necessary if a shift in the right direction is ever to be seen. Additionally, use of FBA to inform IEP teams about student behavior, including behavioral functions and environmental factors contributing

to the problem behavior(s) is a mandate of IDEA. IDEA sought to protect students with EBD through purposefully designed behavioral intervention plans, including individualized function-based interventions, to support behaviorally challenged students across the entire academic setting in a preventative manner (Jordan, n.d.).

Functional Behavioral Assessment and Function-based Interventions

Given the need for students with or at risk for EBD to access support through individualized interventions that have the potential to facilitate the greatest amount of progress, it is imperative to implement effective research-based behavioral supports or evidence-based practices. One research-based practice with a long history of demonstrating effectiveness is functional behavioral assessment (FBA). When implemented with fidelity and in conjunction with function-based interventions, use of FBA presents a potential to make a lasting impact on student behavior across a variety of contexts and behavioral challenges.

Functional Behavioral Assessment

FBA has been well documented as one of the most effective tools used in decreasing problem behavior and increasing preferred behavior. FBA is defined as “a process of identifying functional relationships between environmental events and the occurrence or nonoccurrence of a target behavior” (Dunlap et al., 1993, p. 275). The purpose of conducting an FBA is to determine the environmental factors related to behavior that reliably predict and/or maintain the problem behavior (McIntosh, Brown, & Borgmeier, 2008; Steege & Watson, 2009). According to Gable et al. (2014), FBA is predicted based on the following principles: (a) behavior is purposeful and serves as a meaningful function for the student; (b) behavior is linked to the specific context in

which it is exhibited; and (c) assessment of these interactions (i.e., function of the behavior and environmental context) establishes an understanding that can facilitate the design of an appropriate function-based intervention for supporting the reduction of the problem behavior. This is accomplished by determining the variables contributing to the individual's behavior(s) in the environment. The reinforcement of behaviors exhibited by the student is unique to each student and should be individually examined to determine the variables affecting behavior within the given context (Gable et al., 2014).

Conducting an FBA may include indirect and direct methods for collecting information regarding student behavior. Indirect methods include collecting information related to the possible factors contributing to the student's problem behavior, which may include interviews of teachers or caregivers, review of records (e.g., special education records, criminal records, medical history, disciplinary records), or behavioral rating scales (O'Neill et al., 1997). Direct methods include direct observations of the student across a variety of times and circumstances, and often include data collection of antecedents, behavior, and consequences using an A-B-C recording method. In the event of a competing hypothesis when determining a behavioral function, it may be necessary to conduct a functional analysis. A functional analysis helps pinpoint the variables contributing to the problem behavior through alternating conditions and collecting data during each of those conditions in an experiment (O'Neill et al., 1997). FBAs typically include both direct and indirect methods, but may differ in exact elements included in practice (Blood & Neel, 2007).

By conducting an FBA, educators are able to identify the specific variables that are affecting a student's behavior. By strategically manipulating antecedent variables

(e.g., changing seats, adjusting task difficulty, providing pre-correction), educators are able to establish an environment that supports a student proactively. Consequence variables can be manipulated by arranging the environments so that students' appropriate behaviors are reinforced and inappropriate behaviors are placed under extinction (i.e., no longer reinforcing the problem behavior). By identifying antecedent and consequence variables related to an individual student's behavior in a general education context, an interdisciplinary team can begin to target solutions that will allow the student to make progress needed to access the general education setting. It is also important to note the need for teaching replacement behaviors. Although a reduction in the problem behavior is important, it is equally as important to teach the student a behavior that can serve the same function as the problem behavior (Alberto & Troutman, 2003). These aforementioned individualized solutions can be formatted in a way that teaches the student appropriate replacement behaviors as a form of intervention.

FBA is known to be one of the most effective means to address more extreme problem behaviors such as those exhibited by students with or at risk for EBD (Lane, Umbreit, & Beebe-Frankenberger, 1999). With the reauthorization of IDEA in 1997, completion and application of FBAs has been adopted as a mandated standard component of the IEP and is required when an IEP team is considering placement in special education under the category of EBD (Becker et al., 2010) or implementation of a behavior intervention plan (Conroy, Davis, Fox, & Brown, 2002). Additionally, FBA must also be conducted for students with disabilities to address behavioral concerns within 10 days of an offense leading to suspension or removal to a more restrictive

alternative educational setting within the public school system (Conroy et al., 2002; von Ravensberg & Tobin, 2008).

The strong empirical support for use of FBAs extends over half a century and has been known to demonstrate effectiveness on even the most challenging behaviors (Gable, Park, & Scott, 2014). Although the focus at the inception of FBA was mostly on students with severe disabilities, the successful application of FBA and FBA-based interventions has clearly demonstrated efficacy when applied across all disabilities categories (Gable et al., 2014). According to Stormont, Reinke, and Herman (2011), as of 2011, 400 publications with a focus of applying FBA to students with or at risk for EBD have demonstrated impressive results with the vast majority, upwards of 98%, reporting positive changes in students' challenging behaviors (Gann, Ferro, Umbreit, & Liaupsin, 2014). Furthermore, FBA has demonstrated success with implementation across both specialized settings (e.g., special education classroom) and general education settings (McConnell, Cox, Thomas, & Hilvitz, 2001; Ryan, Halsey, & Matthews, 2003).

Application of FBA with students with or at risk for EBD. Educators have had great success in determining the behavioral function of problem behavior in order to support the needs of students with or at risk for EBD through the use of FBA. Lane et al. (1999) report on a review of 19 studies conducted to examine the effects of using FBA as a means to improve problematic behavior of 62 students between the ages of 45 months to 13 years, who were identified as having or being at risk for EBD across a variety of settings, including 18% in the general education setting. The review indicated a wide range of FBA procedures, with all using functional analysis. Direct observation of student behavior (95%), direct observation of teacher or parent behavior (42%), and interviews of

teachers (74%), students (32%), and caregivers (11%) were commonly used practices as part of the FBA. The two most common target behaviors were disruptive behavior (89%) and task engagement (74%), with the majority of the behavioral functions being determined as escape or attention motivated. Finally, nine of the 19 studies included an FBI as an extension of the FBA. The results of the review indicated antecedent-based assessment are effective in identifying target behaviors for students with or at risk for EBD. Additionally, authors noted promising results when FBA was conducted in the naturalistic setting (e.g., general education classrooms).

In a more recent review of literature by Kern et al. (2004) examining applications of FBA in school settings with students who were EBD, a total of 20 articles were reviewed, including 43 students between ages four through 14 who exhibited a variety of externalizing behavioral problems. The most common methodology used in conducting the FBAs were direct observation as it was naturally occurring during classroom activities. The second most commonly used methodology was interviews of the student, caregiver, and/or teacher. FBA was noted as a necessary tool needed in the development of behavioral intervention. Furthermore, authors reported the use of FBA conducted in the naturalistic setting was useful, and possibly necessary, in developing an FBI to meet the needs of the student.

Despite mounting empirical research on the usefulness of using FBA to determine behavioral function and develop interventions for students who are EBD or at risk for EBD, no studies have examined the use of FBA and function-based interventions specific to students with identified EBD in the general education classroom. However, there are a limited number of studies which include students who are at risk for EBD. For example,

Kamps, Wendland, and Culpepper (2006) conducted a reversal design study examining the effects of FBA applied in the general education setting on the inappropriate behaviors of two second grade students identified as being at risk for EBD. The FBA consisted of hypothesis development and functional analysis indicating gaining attention and escaping difficult tasks as the behavioral function. An intervention was developed including teacher attention, the potential to earn points (token economy), and self-management of appropriate responses during group time to address attention seeking behaviors. The intervention developed to address escaping difficult tasks included teacher modeling of the task, “help” tickets to request help from peers or the teacher, and social attention for task completion. Results indicated a functional relation between the function-based intervention and improved on-task behaviors and decreased inappropriate behaviors for both students.

In sum, mounting evidence has demonstrated positive effects of use of FBA in determining variables contributing to the problem behaviors of students with or at risk for EBD. Although the literature base is somewhat limited, research has demonstrated the usefulness of FBA and the positive impact on students who have been identified as EBD in separate settings or those students at risk for EBD in the general education classroom (Kamps et al., 2006; Kern et al., 2004; Lane et al., 1999). Upon completion of the FBA, it is important that appropriate interventions (i.e., FBI) based on the results of the FBA be developed and implemented with fidelity. With the appropriate application of FBI, many students with challenging behaviors have learned how to successfully navigate around and through these challenges by learning important skills that allow them to recruit

reinforcement, resulting in a great amount of success across various contexts (Dunlap & Fox, 2011; Gage, Lewis, Stichter, 2010; Gann et al., 2014).

Function-based Interventions

FBIIs have been used to decrease disruptive behaviors of students with persistent behavior challenges (Dunlap & Fox, 2011; Gable et al., 2014). FBIIs are “strategies for improving behavior that are linked to and logically derived from a functional assessment (also referred to as *functional behavioral assessment*) of challenging behavior” (Dunlap & Fox, 2011, p. 334). As with FBA, FBII has been used to address a wide range of problem behaviors for students with or at risk for EBD (Dunlap & Fox, 2011; Gage et al., 2010; Gann et al., 2014; Ingram, Palmer, & Sugai, 2005). An FBII is uniquely tied to the results of the FBA, linking appropriate replacement behaviors meeting the function of the exhibited behavior to the intervention strategy specifically developed for the individual student. Upon completion of the FBA, best practices for FBII will employ the use of research-based interventions that meet the needs of the individual student. By examining the variables that directly affect the student’s behavior within the environmental context, interventions can be developed by implementing various antecedent strategies, teaching strategies, and consequence strategies to address individual students’ behavioral needs and function(s). For example, a student who becomes frustrated easily when presented with a long worksheet of math problems exhibits escape behaviors by putting his head down to avoid completing the work. An antecedent strategy may be to present the work to the student in shortened strips. The student no longer feels overwhelmed by the assignment and completes the work. Another example for addressing a behavioral need of a student who is often seeking peer attention at inappropriate times may be to teach the

student to wait for breaks, which are built in by the teacher, to seek peer attention.

Teaching the student to wait until the appropriate time replaces the behavior of seeking attention at inappropriate times.

Use of FBI has established a firm foundation of empirical studies. Gage et al. (2010) used a hierarchical linear modeling meta-analytic approach to examine the effects of FBA-based interventions on problem behaviors of students with or at risk for EBD in schools. The study included a sample of 69 FBA studies, including 146 participants who were identified as having EBD, attention deficit-hyperactivity disorder, a learning disability, or not identified as having a disability but exhibited a behavior in need of intervention. The analysis of 206 outcomes graphs indicated a reduction of problem behavior by an average of 70.5% as a result of FBA-based interventions. Furthermore, the interventions were effective across all student characteristics, including students at risk for or with EBD.

Research has also established the use of FBI resulted in better outcomes when compared to nonfunction-based interventions (Carr & Durand, 1985; Ellingson, Miltenberger, Stricker, Galensky, & Garlinghouse, 2000; Filter & Horner, 2009; Ingram et al., 2005; Newcomer & Lewis, 2004; Payne, Scott, & Conroy, 2007). For example, in a comparison study between the effectiveness of FBI plans and non-FBI plans implementation with two students engaging in challenging behaviors that were negatively impeding their grades, Ingram et al. (2005) found that use of FBI plans yielded better outcomes in decreasing problem behaviors. Although a reduction of problematic behavior has been a focus of FBI implementation, use of FBI has also demonstrated a positive effect on academic engagement of students who exhibit persistent behavioral problems

(Lane, Rogers, et al., 2007; Lane, Smither, Husemand, Guffey, & Fox, 2007; Liaupsin, Umbreit, Ferro, Urso, & Upreti, 2006). The flexibility offered by FBI in that individual students' behaviors are addressed through a functional analysis and application of an intervention that is specific to student needs across a variety of ages and settings offers a platform on which nearly any problem area can be addressed (Gann et al., 2014; Lane, Weisenbach, Phillips, & Wehby, 2007; Wood, Ferro, Umbreit, & Liaupsin, 2011). Moreover, as educators have turned to tiered academic and behavioral systems of support, such as Multi-tiered System of Support, Response to Intervention, and Positive Behavior Support, FBI has shown efficacy when embedded within such tiered systems, providing teachers an intervention to serve as support at tiers two and three (McIntosh, Campbell, Carter, & Dickey, 2009).

Application of FBI with students with or at risk for EBD. Given the success of FBI in general, it is important to note FBIs have particularly showed a positive effect on the behaviors of students at risk or those identified with EBD in specialized settings. A number of studies have examined the application of FBI in settings such as special education classrooms (Hansen, Willis, Kamps, & Greenwood, 2014), alternative schools (Turton et al., 2011), juvenile detention centers (Scott & Cooper, 2013, Sprague, Scheuermann, Wang, Nelson, Jolivet, & Vincent, 2013), and day treatment facilities (Scott & Cooper, 2013; Swoszowski, McDaniel, Jolivet, Melius, 2013). For example, Trussell et al. (2008) conducted a multiple baseline across participants design study examining the effects of FBI and classroom targeted interventions on the reduction of problem behaviors exhibited by elementary-aged students with EBD in special education classrooms within an alternative public school. In the first phase, classroom interventions

were implemented; these classroom interventions included an improvement of overall classroom structure, recognition of individual student achievements, enhanced classroom procedures and routines, and improved teacher-directed assignments involving independent student work. In the second phase, FBIs were developed for students with exceptionally challenging behavior and added to the classroom interventions. The FBIs included teaching replacement behaviors based on the maintaining function of the behavior. For example, one participant was taught to seek attention appropriately through teacher modeling, pre-teaching, and prompting during a one-on-one session provided by the teacher. Results indicated effectiveness when classroom interventions were implemented, and even greater results when paired with FBI. Authors noted the importance of determining a replacement behavior that is more efficiently reinforced than the problem behavior. In this study, the targeted classroom supports provided prior to the FBI implementation facilitated an environment in which replacement behaviors were more easily accessed.

In an effort to broaden the context in which FBIs are applied, Turton et al. (2011) examined the effects of FBI in a self-contained classroom for three high school students with EBD at an alternative school using a multiple baseline across participants design. Upon conducting an FBA for each target student, FBIs were developed based on the systematic process described by Umbreit et al. (2007). This process included answering two questions: (a) Is the individual capable of performing the replacement behavior? and (b) Do the antecedent conditions demonstrate an effective practice? The answers to these questions led to the implementation of one of three strategies, including (a) teaching the replacement behavior, (b) improvement of the environment, or (c) adjustment of the

contingencies used. The intervention was implemented for nearly 6 weeks. Results demonstrated a functional relation between the interventions and the targeted behavior. Authors reported these particular target students were among the least successful in terms of behavior within the alternative school, yet were able to improve their behavior, as well as to maintain and generalize the newly attained skills to a nonintervention classroom after the FBI implementation. Furthermore, the students reported the interventions to be socially valid.

Despite the level of need and mounting evidence demonstrating effectiveness in specialized settings, relatively few studies have examined the effects of FBI implemented in the general education classroom for the purpose of decreasing problem behaviors of students at risk for or with EBD. In the meta-analysis conducted by Gage et al. (2012), of 69 studies examining the effects of FBI, 35% of the studies were conducted solely in the general education setting. Overall, authors reported FBI to be effective in addressing even the most challenging behaviors; however, authors emphasized the need for training for general educators and teacher assistants to be able to implement FBIs with success (Gage et al., 2012).

Umbreit (1995) used a multiple baseline across settings design examining the application of FBI on the extreme disruptive behaviors of a third grade male with ADHD, who continued to engage in disruptive behaviors despite individualized instruction in the general education setting and special education supports. Although the student in this study was not identified as EBD, the behaviors exhibited are often behaviors similar to that of a student identified as with or at risk for EBD. The FBI consisted of four elements including addressing antecedent variables through a change in location where the student

could complete independent work, strategic placement in cooperative learning group activities, providing breaks upon request, and ignoring (extinction) of any disruptive behavior that occurred during the intervention by the teaching staff. Results indicated a functional relation as evidenced by an immediate reduction in problem behavior and an increase in appropriate behavior that was sustained throughout the data collection period in all academic areas in which the student was exhibiting disruptive behaviors. It was noted that the intervention was very well received by the student and teacher.

More recently, Hansen, Willis, and Kamps (2014) used a multi-element design embedded within a reversal design to examine the disruptive behavior of a fourth grade student at risk for EBD in the general education setting. Authors evaluated the differential effects of interventions that were aligned with indicated and non-indicated functions of the participant's behavior. Upon conducting an FBA and determining the maintaining function of the behavior to be gaining attention, three interventions were developed including self-monitoring on-task behavior that had no maintaining function, self-monitoring on-task behavior with escape or gaining peer attention being the maintaining function, and self-monitoring on-task behavior with attention being the maintaining function. Results of the study indicated the intervention based on the identified behavioral function (i.e., a function-based self-monitoring plan providing students with the opportunity to earn "breaks" was implemented as a replacement for behaviors maintained by escape from academic demands) yielded the greatest increase in on-task behaviors and the greatest decrease in disruptions for the participant.

In a related study, Ingram, Lewis-Palmer, and Sugai (2005), used an ABCBC design to examine the effectiveness of FBA-based behavior intervention plans versus

non-FBA-based behavior intervention plans. The study examined the behavioral responding of two middle school students considered at risk for EBD in the general education setting who were provided instruction on recruiting reinforcement, self-reporting of difficulties, and self-monitoring. FBAs included interviews of teachers and students regarding problem behaviors in the environment in which they were most likely to occur, which were used to develop a hypothesis regarding the problem behavior. Direct observations were conducted to verify hypothesis. Two FBA-based behavior intervention plans were developed and included positive reinforcement from interventionists for appropriately displayed target behavior based on the determined behavioral function. Two non-FBA-based behavior intervention plans were developed and included reinforcement of behaviors not associated with behavioral functions. Results indicated FBA-based intervention plans were associated with better outcomes in regard to decreasing the number of problem behaviors.

In a study further demonstrating the effectiveness of FBI applied in the general education setting, Nahgahgwon, Umbriet, Liaupsin, and Turton (2010) conducted a multiple baseline across participants with an embedded A-B-A-B design study with three early elementary students at risk for EBD displaying chronic disruptive behavior in the general education classroom, despite previous efforts employed through the existing behavioral support system. Researchers conducted three phases, including completion of an FBA, design and validation of FBIs, and application of interventions during the most problematic activity. Results indicated the FBI was effective in improving the on-task behaviors of all students. Social validity surveys indicated teachers had a high approval

rating with a preference for function-based interventions over the classroom practices previously used.

Use of FBI to decrease problematic behaviors of students with or at risk for EBD has contributed to positive outcomes across various settings, including special education resource and self-contained classrooms, alternative educational placements, and general education settings. Although FBI is valued as an effective intervention for decreasing the most challenging behaviors, little to no research has examined the implementation of FBI on students with or at risk for EBD in the general education setting, implemented by the general education teacher. This may seem problematic, as general education teachers often stand in the role of the primary behavioral support for students with or at risk for EBD for a large portion of the academic day.

One issue in the implementation of FBI in the general education setting is the intervention is typically developed and implemented by an individual (e.g., a special education teacher) other than the general education teacher. This poses some issues in implementation as the individual responsible for implementation, in this case the general education teacher, was not present for the development of the FBI, and therefore did not take part in analyzing the FBA results or in the discussion about potential function-based interventions, potential barriers or hardships of a typical general education setting, or overall understanding of the student's behavior profile. Although some studies (Lane et al., 2006; 2007) offer encouraging results indicating that general education teachers are capable of developing and implementing FBAs and FBIs in the general education classroom, it has been well-documented that few general education teachers feel prepared to do so and are therefore hesitant in openly welcoming students with persistent

behavioral challenges into their classroom (Baker, 2005; Cheney & Barringer, 1995; Dutton et al., 2010; Epstein, 2006; Forness et al., 2013).

Student Involvement in FBA and FBI

A comprehensive application of FBA and FBI often involves a team approach that includes the individual of interest whenever possible. For students with or at risk for EBD, student involvement in FBA and FBI is particularly useful and important because of their verbal ability and communication skills. Research has suggested that students with a diagnosis of behavioral disorders or learning disabilities with basic verbal skills not only could identify same problem behaviors and environmental factors (such as antecedents and consequences) as reported by adults, but also could generate additional factors affecting their problem behaviors unique to adults' reports (Wehmeyer, Baker, Blumberg, & Harrison, 2004). Additionally, O'Neill, Albin, Storey, Horner, and Sprague (2015) suggested that many students can provide useful information about their preferences for activities or items, explain complaints about specific situations, suggest possible alternatives to instructional methods or supports, or identify personal distractions or difficulties affecting their behavior during FBA. Similarly, student involvement in behavioral support plans has been identified as an enabler to enhance effectiveness of the plan (Bambara, Nonnemaker, & Kern, 2009).

Many forms of FBA include a student interview as a component of the process. For example, Turton et al., (2011) implemented use of the Student Assisted Functional Assessment Interview, originally developed by Kern, Dunlap, Clarke, and Childs (1994). The assessment seeks to gain information from the student about his or her perceived triggers and variables that maintain inappropriate behaviors. The student also can provide

possible solutions or situations that can potentially be changed in the environment to assist with engaging in more appropriate behavior. The authors noted the participants provided insightful information and served as an important part in the collaborative model.

In a related study by Ingram et al. (2005), authors used an ABCBC design to examine the effectiveness of behavior intervention plans based on FBA information versus behavior intervention plans that were not based on FBA information on the rates of problem behaviors displayed by two middle school students. Components of the FBA-based interventions included direct observations of the student and teacher- and student-directed interviews that were used to identify (a) time of day behavior occurred, (b) antecedents or triggers, (c) maintaining consequences, (d) setting events associated with the problem behavior, (e) response classes, and (f) intervention recommendations. During student interviews, information was gained specific to behavioral function, which was used to develop the behavior intervention plan. Results indicated use of function-based interventions was associated with great improvements in student behavior. Authors noted descriptive FBA information, including the student interview information, was important in developing behavior intervention plans and enhanced outcomes.

Students with behavioral challenges often have the ability to provide key information about their behavioral challenges and potential behavioral support strategies (Kern et al., 1994). Although the reliability of student involvement in their own behavior support planning may have been questionable previously, research has demonstrated students are capable of providing details about their behavior and possible solutions leading to behavioral improvement. For example, Reed, Thomas, Sprague, and Horner

(1997) examined the use of student guided functional assessment interview with 10 students (four fifth-grade, four sixth-grade, and two eighth-grade students) identified as having behavioral challenges (with and without disabilities) to determine student and teacher agreement in regard to behavioral functions. Additionally, the seven corresponding students' general education or special education teachers were interviewed. During the interview process, students were asked to define behaviors that were problematic ("got them in trouble"), identify classes within their schedule where the behavior occurred most frequently and intensively, identify predictors making the behavior occur, and indicate what happened when they engaged in the behavior. Finally, students were asked to provide potential replacement behaviors and behavior support plan strategies. If prompting was necessary, some suggestions were provided. Teachers were interviewed using the same instrument used in student interviews, containing the same questions in regard to student behavior. Although behavioral support planning had a lower agreement rate, results indicated high agreement on the behavioral functions of problem behavior (85.1%), indicating student input is a valuable tool in determining behavioral function during FBA planning. Authors note despite low overall agreement on support plan recommendations, both groups identified strategies that were consistent with the functional assessment hypothesis, and therefore can be considered valuable.

In another study, Wehmeyer et al. (2004) emphasized the importance of incorporating the knowledge of the person receiving behavioral supports into the FBA process. Ten students, ranging in age 6 to 12 years old, receiving special education services, and had been identified as potentially benefitting from FBA, were interviewed using the Functional Assessment Interview form (FAI; Kern et al., 1994). The FAI was

used to determine variables contributing to problem behaviors. Additionally, a total of 14 school staff members were interviewed to report on each student regarding the student's problem behaviors. Following interviews of teachers and students, a Person-guided Functional Assessment (PGFA) was developed including the following components: (a) evaluation of specific daily routines; (b) students identifying occurrences throughout the day deemed problematic; and (c) additional information identifying potential setting events (e.g., sleep problems, illness, communication problems). Results indicated mixed responses, but overall student involvement in behavioral support planning is useful and contributed to successful interventions. Authors noted the need for students with challenging behaviors to assume greater responsibility for planning for supports, thus facilitating overcoming behavioral challenges.

A growing number of educators are recognizing the value of seeking out student input in the development of FBA and FBI. Often times students are able to provide information about themselves that may not be known by teachers. Furthermore, students are more apt to take ownership in a behavioral support plan in which they have invested through development and implementation. Providing students with a person-guided plan, individualized to meet their needs, can potentially provide students with a foundation on which they can begin to self-advocate their needs in situations where they may not have felt comfortable doing so.

Summary

Functional behavioral assessment has demonstrated a profound impact on the understanding of and intervention for challenging behavior. The flexibility offered by FBA extends to virtually any population in any context. The nature of FBA is to

individualize to the person who is in need of behavioral intervention, which is conducive for educational settings as there are a number of different variables to be considered when attempting to address challenging behaviors. Furthermore, the use of function-based interventions which are developed through careful consideration of the FBA results allows educators to teach student replacement behavior and to implement reinforcement of positive behaviors. Since both FBA and FBI are quite individualized to each student, the likelihood of success when implemented with fidelity is great. Extending the use of FBA and FBI to students with or at risk for EBD while accessing the general education setting can serve as a means to provide interventions based on individual student's behavioral functions, leading to a number of positive behavioral and academic outcomes. To date, there is a limited number of studies examining the application of FBA and implementation of an accompanying FBI for students with or at risk for EBD, especially in inclusive settings. Given the solid track record of research demonstrating the positive effects of FBA/FBI on the behaviors of students with or at risk for EBD in settings outside of the general education setting, it is necessary to include its application in general education settings. Additionally, student involvement has been recommended as a useful and important component in FBA and FBI implementation. Allowing students with or at risk for EBD to be an integral part of the FBA and FBI implementation process can promote confidence in developing their self-advocacy and gaining a sense of ownership and responsibility (Mazzotti et al., 2015).

Self-advocacy Training for Students with EBD

Although researchers have identified numerous evidence-based practices demonstrating a reduction of challenging behavior through application of interventions

such as FBI, very few students with or at risk for EBD are able to independently communicate their needs, even when being addressed through an intervention (Landrum et al., 2003). Teachers remain in an essential role in facilitating evidence-based practices to support students with or at risk for EBD; however, as research has indicated, teachers continue to struggle with consistently supporting students with or at risk for EBD through teacher-applied strategies (Tillery, Varjas, Meyers, & Collins, 2010). In their research on facilitating inclusion of students with EBD, Shapiro et al. (1999) reported teachers failed to implement self-selected interventions consistently to support students with EBD, despite extensive inservice training. For this reason, it is critical for students to understand their specific needs related to their disability and hone the ability to communicate their needs.

Even when interventions are implemented with high fidelity, the intervention will remain ineffective if a student's replacement behavior is not contacting the reinforcer. In situations where a student is engaging in a replacement behavior (i.e., a behavior that has been determined to meet the same function as the problem behavior but is more desired) yet never received reinforcement for the replacement behavior, the student may resort to the problem behavior that was receiving reinforcement initially. Students not only need to understand their own needs, but also need to be able to communicate when an intervention is not effective or needing adjustment. One method for encouraging students to communicate their needs that has shown effectiveness is the systematic instruction of self-advocacy skills (Kleinert et al., 2010; Pocock et al., 2002; Test, Fowler, Wood, Brewer & Eddy, 2005; Wehmeyer, Bersani, & Gagne, 2000).

Need for Self-advocacy Skills

Self-advocacy, noted as “a key to Self-Determination” by Turner (1995), undergirds as an essential skill associated with positive outcomes for students with disabilities. According to Test et al. (2005), self-advocacy includes four characteristics, which are (a) knowledge of self, (b) knowledge of rights, (c) communication, and (d) leadership. Test et al. (2005) assert a student must first understand his or her needs before he/she is able to communicate effectively with those in positions supporting students with disabilities. Students with or at risk for EBD often experience communication deficits, yet rarely receive explicit instruction on communicating their needs. In accordance with Test et al. (2005), Benner et al. (2002) suggested building communication skills as a beneficial task for students with EBD. As a sub-skill of self-determination, self-advocacy is defined as “the ability to make choices, solve problems, set goals, and accept consequences of one’s actions” (Rowe et al., 2014, P. 121). Although self-advocacy is regarded as highly important, it is rarely taught in an explicit manner. Norton (1997) cites students with EBD often lack self-advocacy skills due to apprehension to advocate for accommodations. Furthermore, when students do advocate needs they are often unclear in explaining in detail a means in which they can best be supported (Norton, 1997).

Results of the National Longitudinal Transition Study-2 support self-advocacy as one of the fundamental components leading to in-school and post-school success for students with disabilities (Newman et al., 2011; Test et al., 2009). Due to the complexity of the issues students with EBD face, this particular subgroup is associated with the poorest post-school outcomes in relation to their peers with and without disabilities (Kern et al., 2009). Researchers and advocates alike assert that it is imperative for educators to

seek out opportunities in which students with EBD can have access to explicitly and systematically taught skills, such as self-determination and self-advocacy, leading to better post-school outcomes (Wagner & Davis, 2006; Wagner, Kutash, Duchnowski, & Epstein, 2005).

One of the most concerning outcomes linked to students with or at risk for EBD is the rate of criminality associated with this population. Given that self-determination is a skill of which students with EBD often lack, the instruction of this self-advocacy is key for these students who are at a higher risk for future incarceration (Houchins, 2002). Houchins (2002) supported self-advocacy instruction in a study using a pretest-posttest, experimental control design, examining the self-determined knowledge of 45 incarcerated youths with ($n = 20$) and without disabilities ($n = 25$). Results showed a statistically significant difference between disability status and knowledge of self-determination in that those with a disability presented less knowledge of self-determination. Authors noted a growing concern for youths identified as having disabilities being at a disadvantage in their ability to demonstrate self-determination, leading to susceptibility to delinquent behavior and incarceration. Additionally, authors suggested a focus on teaching specific self-determination skills to students with disabilities as a preventative measure, as well as a rehabilitation measure for youths who have been incarcerated.

In a related study, Van Gelder, Sitlington, and Morrison (2008) compared the perceptions of students, parents or caregivers, and teachers of self-determination of 24 students with EBD between the ages of 16 and 19 across three settings (i.e., a community high school, a separate educational facility, and a residential facility). Results indicated individuals attending the residential facility rated the highest in perception of self-

determination. Authors attributed these results to a structured setting with a streamlined focus, as well as a positive rapport built between the residents. The studies by Houchins (2002) and Van Gelder et al. (2008) showed that individuals with EBD or those with delinquent behavior often lack naturally attained self-determination and self-advocacy skills, yet perceive these skills to be highly valuable. The ability to demonstrate such skills may lead to lower risk for delinquent behavior and better post-school outcomes. Factors such as higher teacher-student ratio have the potential to negatively influence students with EBD being served in the general education setting in that their needs are often overlooked due to the limited availability of the teacher. For this reason, among others, instruction of self-advocacy and self-determination is especially important for students with or at risk for EBD. The need for teaching self-determination and self-advocacy skills to students with EBD is further supported by Carter et al. (2010), who examined the self-determination prospects of 196 students with disabilities through use of the *AIR Self-Determination Scale* (AIR scale; Wolman, Campeau, DuBois, Mithaug, & Stolarski, 1994). These authors found that students with EBD had a much lower engagement level in self-determined behavior than any other disability sub-group. Specifically, Carter et al. identified self-awareness, decision making, and self-evaluation as the most difficult skills for students with EBD to demonstrate, and articulated two possible reasons why students with EBD lack self-determination skills. First, teachers often place more emphasis on the remediation of problem behaviors rather than the more effective alternative of explicit teaching of skills such as self-determination. Second, students with EBD who are placed in alternative settings (e.g., self-contained behavior classrooms) generally have fewer opportunities to observe others demonstrating self-

determination skills and fewer opportunities to engage in practicing self-determination skills. Authors suggest placing a higher instructional focus on self-determination for students with EBD and emphasizing training students on self-awareness, decision making, and self-evaluation as skills necessary for successful behavior remediation. All of these skills are critical for developing self-determination and self-advocacy skills for students with EBD (Newman et al., 2011).

Zionts, Hoza, and Banks (2004) also report on the importance of self-determination and self-advocacy for students with EBD. These researchers discussed that teaching students about their disabilities and the supports they need is a key component to better life outcomes. Additionally, Zionts and colleagues urge educators and advocates of students with EBD to seek out ways to teach self-determination and self-advocacy skills, due to the complexity of the self-determination process involving higher levels of cognitive and emotional thinking. Further, given the ever changing dynamic of the brain and hormones of adolescents affected by emotions during this critical period of development, further conceptual understanding of how to teach older students with EBD these skills is essential (Zionts et al., 2004).

In sum, strong evidence supports the instruction of self-determination and self-advocacy is a key predictor in students experiencing better outcomes throughout their academic career as well as in post-school settings (Newman et al., 2011). Educational settings provide a venue for teaching these skills through both accessibility and practicality. Educators have access to students at an early age and can begin embedding the teaching of these skills as early as preschool (Wehmeyer & Palmer, 2000). Furthermore, educators can easily embed the teaching of skills such as self-determination

and self-advocacy within academic content in a manner that evolves into a natural element of instruction.

Assessment of Self-advocacy Skills

With heightened awareness of the necessity of teaching self-determined behaviors, several rating scales have been developed to determine the level of self-determination or self-advocacy one currently exhibits. For example, the *AIR Self-Determination Scale* (Wolman et al., 1994) is a 30-item assessment developed by the American Institutes for Research as an easy-to-use tool used to assess and develop strategies for school-aged students leading to improved self-determination. This assessment breaks down the self-determination process into three steps of (a) thinking, (b) doing, and (c) adjusting. The assessment has been determined to be a valid and reliable measure of self-determination (Wolmen et al., 1994) based on the self-determined learning theory (Shogren et al., 2008).

Another commonly used tool used to assess self-determination is the “I’m Determined” self-determination assessment, developed by the I’m Determined organization through the Virginia Department of Education Self-Determination Project (2014) as a means to assess the level of self-determination of students with disabilities who are school-aged. This assessment provides a brief questionnaire for teachers, students, and parents. The 23-item assessment can be used to determine a student’s level of determination, set goals based on strengths and weaknesses, and access a number of resources related to making progress toward self-determination. Students rate a series of statements on their self-determined behaviors using a Likert scale (almost always/most of the time, sometimes, rarely/never). Additionally, there are three open-ended questions

related to goal setting, using resources to build self-determination skills, and accessing rights for students with disabilities.

Finally, as part of the Self-determination Assessment Project, Wehmeyer and Kelchner (1995) developed the ARC Self-determination Scale to (a) assess the strengths and weaknesses in relation to self-determination of students with disabilities, (b) promote and facilitate student involvement in their educational planning, and (c) develop goals related to self-determination. The 72-item assessment is broken into five domains including autonomy, self-regulation, psychological empowerment, self-realization, and total self-determination and can be converted into norm sample percentile scores. The assessment has been determined to be valid, based on significant levels of correlation across all domains in the areas of construct validity and criterion-related validity. The assessment has also been deemed a reliable measure of self-determination using an internal consistency calculation across all domains (Wehmeyer & Kelchner, 1995).

Self-advocacy Curriculum

In order to address the need for students with disabilities to self-advocate, curricula with the aim of teaching self-advocacy skills have been developed. Although most curricula come from the field of special education, the field of mental health also has contributed to the teaching of self-advocacy skills through curriculum development with a focus from a mental health perspective (e.g., Picket et al., 2012; Preston, 1998). Studies from both fields of special education and mental health have demonstrated students can learn how to self-advocate when explicitly taught skills leading to self-advocating behavior (Carter et al., 2010; Houchins, 2002; Picket et al., 2012; Zions et

al., 2004). The following section includes introduction of commonly used self-advocacy curricula.

Building Recovery of Individual Dreams and Goals. The *Building Recovery of Individual Dreams and Goals* (BRIDGES) program is a series of 8-10 peer-led classes designed to meet the needs of individuals who have been diagnosed with mental health disorders. Building of a support system, communication assertiveness, problem-solving skills, and advocacy skills are “tools for recovery” taught as a means to provide individuals the skill set needed to navigate through coping with their mental health disorder throughout the program (Picket et al., 2010; Picket et al., 2012).

Self-Regulated Strategy Development. The Self-Regulated Strategy Development (SRSD) was originally developed by Graham and Harris (1993) as a tool for teaching writing skills to struggling writers. Since then, the strategy has been applied in a more general sense to include the instruction of self-regulated learning for students with learning challenges (Bak & Asaro-Saddler, 2013; Ortiz Lienemann & Reid, 2006). The strategy includes six instructional stages: (a) developing mnemonic devices; (b) developing background knowledge; (c) discussing the strategy; (d) modeling the strategy components; (e) memorizing the steps of the strategy and any accompanying mnemonic devices, supporting the students' acquisition of the strategy; and (f) independent performance (Bak & Asaro-Saddler, 2013). Research of the SRSD has been further explored through the explicit instruction of self-advocacy skills embedded within the SRSD (Cuenca-Sanchez et al., 2012).

Self-Determined Learning Model of Instruction. The Self-Determined Learning Model of Instruction (SDLMI) is a model of teaching that supports teachers in

guiding students to self-regulate and self-direct the learning process, which often results in self-determined learning (Wehmeyer et al., 2000). A number of studies have examined the impact of the SDLMI on student progress, including goal attainment (Lee et al., 2008; Palmer & Wehmeyer, 2003; Wehmeyer et al., 2000) and access to the general education setting (Shogren et al., 2011).

Self-Advocacy and Conflict-Resolution training. Roessler et al. (1998) developed the Self-Advocacy and Conflict-Resolution (SACR) training as a method of teaching college students with documented disabilities how to self-advocate for classroom accommodations with their instructors. Additionally, authors taught students how to navigate through potential conflicts as a result of accommodation requests in the college setting. The SACR includes seven target skills pertaining to an interaction with an instructor including: (a) introduction (i.e., greeting, name, reference to class); (b) disclosure regarding disability; (c) solution, or offering explanation of the accommodation(s); (d) providing information about resources available and what the student will do to implement use of them; (e) agreement, or acceptability by the instructor; (f) summarizing, or restatement of the agreed use of the accommodation(s); and (g) closure including a positive statement and expression of appreciation (Roessler et al., 1998). Students also are provided explicit instruction on how to navigate through a conflict with an instructor regarding an accommodation. Use of the SACR has demonstrated effectiveness in improving the ability of students with disabilities to self-advocate upon explicit and systematic instruction of self-advocacy skills (Roessler et al., 1998).

There are potential benefits offered by use of self-determination assessments and curricula. Teachers who do not possess skills to assess students' level of self-determination, develop goals based on students' self-determination level, or teach skills related to self-determination can easily access the published curriculum readily available to educators. These curricula often offer goals tied to assessment outcomes, direct instruction of self-determination skills, lesson plan starters, and suggestions for embedding self-determined behaviors across the curriculum. Furthermore, many of these curricula are research-based and have been developed by researchers who are experts in the area of self-determination instruction.

Effectiveness of Self-Advocacy Instruction

Studies involving self-advocacy instruction conducted with students with disabilities, not specific to the EBD population, have resulted in benefits such as an increase in social skills (Carter, 2010), ability to better deal with overt and covert behaviors within contexts (Houchins, 2002), and overall improvement in goal setting, decision making, and problem solving (Wehmeyer et al., 2000). Although there are several studies clearly indicating the effectiveness of teaching self-advocacy skills to students with mild intellectual disability (Sievert, Cuvo, & Davis, 1988; Test et al., 2005; Wood, Karvonen, Test, Browder, & Algozzine, 2004), research examining effects of self-advocacy instruction with students who are identified with or at risk for EBD is scarce. The effectiveness of teaching self-advocacy skills to students with disabilities, as evidenced by research (Carter et al., 2010; Houchins, 2002; Zionts et al., 2004), provides a foundation on which students with or at risk for EBD can build independence in general education settings.

Within the field of behavioral/mental health, research exists supporting the success of self-advocacy training with students who exhibit mental health disorders. For example, Picket et al. (2012) conducted a random control trial study examining the effects of a self-advocacy intervention on the self-advocacy skills of 323 adults with serious mental illness meeting federal criteria based on Public Law 102-321 (a person must have one 12-month disorder other than a substance abuse disorder meeting DSM-IV criteria). The intervention took place in community mental health centers, consumer-run centers, outpatient clinics, and homeless shelters. The primary intervention was the *Building Recovery of Individual Dreams and Goals* (BRIDGES) program, designed to increase knowledge and skills of self-advocacy and empowerment through peer-led educational sessions. Topics covered throughout the 8-week program included self-advocacy and issues associated with self-advocacy such as psychiatric diagnosis, medications and treatment, communication skills, problem solving skills, accessing social support, and crisis planning. Results showed a significant increase in overall empowerment, self-esteem, and self-advocacy skills of participants receiving the intervention in comparison to the control group. Moreover, participants in the intervention group reported significant increases in self-advocacy assertiveness as indicated by the results of the random regression analysis demonstrating statistical significance ($p = .022$).

In an earlier qualitative study on self-advocacy instruction, Preston (1998) demonstrated success implementing self-advocacy instruction to eight adults with behavioral and emotional challenges in a group setting at a mental health agency. Based on a framework developed by the author and colleagues, participants were able to

practice self-advocacy skills through guidance of the group facilitator. The framework included four stages of (a) identifying an area in need of change, (b) discussing how the change may be facilitated, (c) making an effort to work through the identified needed change, and (d) reviewing the success of the process. After 6 months of meetings, anecdotal reports noted improved self-advocacy skills, leading to leadership roles of participants including employment as self-advocacy trainers and conference attendance to speak on their experiences.

Recently, the positive outcomes yielded from self-advocacy instruction in mental health settings also have been extended to educational settings (Newman et al., 2011). To date, there are four empirical studies examining the effects of self-determination and self-advocacy of students with or at risk for EBD in educational settings, with only one study being conducted in the traditional general education setting. Benitez, Lattimore, and Wehmeyer (2005) taught five students with EBD in an alternative educational setting, using an AB design, to independently use problem-solving processes and foster self-determination skills through goal setting, development and planning for goal attainment, and adjusting to meet goals through an evaluative process. After training, participants were able to choose, plan, implement, and attain individualized employment goals. Although the AB design does not permit a functional relation, results indicated all participants made progress toward their goals, achieving their targeted goals.

In another study, Cuenca-Sanchez et al. (2012) connected self-advocacy skills to persuasive writing using the Self-Regulated Strategy Development (SRSD) model of instruction. Using a multiple probe across participants design, researchers examined the effects of the SRSD on self-determination skills and writing efficacy of nine middle

school students with EBD within a private day school for individuals with severe behavior and mental health needs. The intervention focused on teaching students to self-advocate through the medium of persuasive writing. Students were provided writing materials to support their writing (i.e., graphic organizer, transition word chart, essay examples, paragraph checklist). Additionally, students were provided self-determination materials including: (a) *The Seven Powerful Self-determined Behaviors* (including decision making, goal setting, self-awareness, problem solving, self-advocacy, self-monitoring, and self-efficacy); (b) a mnemonic chart designed to help students remember the self-determined behaviors; and (c) a chart that guided students in how to embed the self-determined behaviors within their persuasive writing. Results demonstrated a functional relation between the application of SRSD/self-determination instruction and student writing skills. Further, there is a functional relation between perceived self-determination and knowledge of self-determination. Researchers suggest explicit teaching of self-determination skills as a necessity for students with EBD.

Hatch, Shelton, and Monk (2010) examined the role of the school counselor in teaching self-advocacy skills to a small group of 11th grade students with disabilities experiencing behavioral and/or emotional problems. A school counselor implemented an intervention package including: (a) the self-advocacy intervention program (i.e., “*Why Try*” curriculum); (b) narrative counseling strategies; (c) presentations designed to enhance parent advocacy; and (d) John Gottman’s Relational Model (Gottman & Silver, 1999) to the participants. The “*Why Try*” curriculum guided student participants how to address themselves as successful learners through a focus on solutions and encouraging students to “take charge of their lives and feel responsible for creating positive changes in

their lives” (p. 8). Other strategies included encouraging students to change the way they perceive themselves (Narrative Counseling) and leading students to grow in their roles as responsible young adults through fostering positive and healthy behaviors (Gottman’s Relational Model). Results of the study indicated students receiving the intervention package benefitted greatly compared to those who did not receive the intervention. Improved student outcomes in the intervention group included a higher percentage of attending more IEP meetings, providing more input about IEPs in meetings, feeling more comfortable asking questions in IEP meetings, and understanding their IEPs. The authors discussed the importance of teaching self-advocacy skills to students with disabilities due to the necessity to recognize when accommodations or supports are needed. Likewise, attaining self-advocacy skills will benefit students with disabilities in linking needs met to goals achieved. Given the success of interventions such as this, it may be beneficial for educators to consider the importance of teaching self-advocacy skills and basic principles of self-determination which can be easily embedded within typical instruction.

Most recently, Kelly and Shogren (2015) taught self-determination and self-advocacy skills to four high school students with EBD in the general education setting. The authors used a multiple baseline across participants design to examine the effects of teaching self-determination through the use of the *Self-Determined Learning Model* (SDLMI) (Wehmeyer et al., 2000) on the on- and off-task behaviors of the participants. The SDLMI is an instructional model, which focuses on teaching skills related to self-determination such as problem solving, goal setting, self-management, choice making, decision making, self-advocacy, and leadership skills. In this study, the SDLMI was implemented as an instructional tool to support students’ engagement in self-regulated

problem solving in general education settings. Students were taught to assess their progress through a problem solving sequence taught in a systematic manner. Findings indicated teaching of the SDLMI contributed to increased on-task behavior and decreased off-task behavior of the participants. Additionally, all students made progress toward meeting a student-developed goal and were able to generalize the skill to another classroom setting. Authors suggested use of the SDLMI as a research-based intervention in teaching students with EBD self-determination skills, including self-advocacy, which has a strong potential to reduce problem behaviors.

In summary, empirical research on the positive effects of self-advocacy training of students with disabilities continues to grow. Research has demonstrated the explicit instruction of self-advocacy skills can lead to an increase in student self-determination and self-advocacy (Carter et al., 2010; Houchins, 2002; Zionts et al., 2004). At this time there is only an emerging amount of empirical evidence on the instruction of self-advocacy skills for students with EBD who are served in inclusive settings. Given the lack of evidence of self-advocacy instruction supporting this population, further investigation is necessary to examine the effects of self-advocacy instruction applied by students with or at risk for EBD in inclusive settings. Based on poor post-school outcomes of students with EBD to date, the barriers that currently exist in regard to the level of ongoing, comprehensive, and individualized support needed and the level of training necessary for implementation with fidelity, an alternative method for providing students with or at risk for EBD the skills necessary to make behavioral and academic progress is needed.

Function-based Self-advocacy

FBA is one way for educators to determine why students are engaging in problem behaviors and suggest replacement behaviors, leading to more desirable behavioral and academic performance (Carr et al., 1999). Characteristics of self-advocacy, such as communication skills and knowledge of self (Test et al., 2005), are often found to be skill deficits among students with or at risk for EBD. Blending self-advocacy instruction and function-based interventions into one packaged curriculum may provide an avenue for students to engage in self-advocacy for their needs in settings where individuals with extensive training in behavior support strategies (such as general education teachers) may not be present. Currently, there is no empirical research demonstrating the consideration of behavioral functions within the self-advocacy instruction, nor is there research that examines inclusion of self-advocacy skills within FBIs as a means to address student behavior through recruitment of reinforcers.

Research has indicated a need for students with EBD to be able to independently express their needs in a manner that will lead to an increased level of support through appropriate accommodations, therefore ensuring students the best opportunity to experience success both in and out of school (Newman et al., 2011; Test et al., 2009). Traditionally, FBI begins with an FBA being conducted by a trained individual (e.g., special educator or school psychologist) to determine the function of a student's behavior, followed by determining interventions to teach the student a replacement behavior for the undesired behavior. Based on the FBI, each team member assumes a role in implementation. Although students are considered part of this team, unfortunately they are often excluded from the development of the FBI. Students with EBD spend the

majority of their academic day in the general education classroom are particularly susceptible to a lack of support regarding the specific functions of their behavior (Shapiro et al., 1999). Students who exhibit the most challenging behaviors in the general education classroom often rely on the support of a teacher with little to no training in FBA or FBI, resulting in a large gap in behavioral support. By offering students with or at risk for EBD a more involved role in the planning and implementation of their plan, students may be more likely to “buy in” to taking ownership when it comes to behavioral change.

Given the research base on FBI and its influence on decreasing problem behaviors of students at risk or identified as EBD, teaching students to self-advocate their needs based their success with FBI may serve as an avenue to increase student performance. Providing students with valuable information about the function of their behavior, or why they engage in a particular behavior based on an FBA, can possibly serve as one way to provide ownership and a feeling of autonomy concerning their behavioral challenges. Mental health clinicians have placed a heavy emphasis on psychoeducational practices, which informs those affected by mental health disorders and those within their support system about the mental illness and related coping strategies (Pollio et al., 2005). Similarly, allowing students to interact as an integral member of a team seeking a solution for undesirable behaviors through an explanation of the “why” and “how to prevent” of their behavior may lead to positive outcomes. For example, providing students who have difficulty seeking attention appropriately from peers an instructional session on how to approach peers, topics for engaging peers, what to do when a peer is disinterested, and how to close a conversation through explicit and systematic instruction

may lead to better peer interactions. Furthermore, providing a student with key knowledge about their behavior challenges, such as the setting events or predictors triggering the behavior may assist students in avoiding inappropriate behaviors. Conversations with teachers initiated by students with or at risk for EBD not only encourage students to engage in self-advocating practices, but also establish access to behavioral support and serve as a catalyst in building interpersonal skills, which are also benefits of self-advocacy.

Although not within FBA or FBI literature, related studies have demonstrated the proactivity of students in asserting self-advocacy through recruitment of teacher attention. For example, using a multiple baseline across students design, Alber, Heward, and Hippler (1999) examined the effects of teaching four middle school students with learning disabilities how to recruit teacher attention in general education classroom settings on teacher interaction with the student (i.e., teacher praise, instructional feedback). The authors also examined the effects of the intervention on the completion and accuracy of academic work. The intervention involved training of students to recruit teacher attention including (a) instruction and role play, (b) morning prompts, and (c) end-of-the-day check and reward. An increase in the rate of teacher praise and instructional feedback provided to students, as well as an increase in the accuracy of work completion by students, were demonstrated as a result of student recruitment. Authors cited self-recruiting as a possible means to facilitate improved outcomes for students with disabilities in integrated settings. A year later, Alber and Heward (2000) conducted a comprehensive review of the instruction of students on how to recruit positive attention. Research findings reported students in grades preschool to grade 12,

with mild and moderate disabilities, can be taught to recruit attention. The recruitment of attention was associated with improved work performance by students. Additionally, teachers may view students who recruit their attention in an appropriate manner as more capable and likable (Alber et al., 1999). Given that students across a variety of ages and ability levels have demonstrated the ability to recruit reinforcement (particularly adult attention), it seems plausible that students may be able to exhibit self-advocacy in the same manner when being involved in the FBA and FBI process.

After students are aware of the functions of their behavior and what supports are necessary for success, the problem then becomes who will serve in the role to support in times of need. As mentioned previously, students with EBD are often in the general education classroom for a large portion of the day, with only consultative behavioral support from the special education teacher. Although substantial empirical evidence supports use of FBI and self-advocacy to reduce problem behaviors of students with or at risk for EBD (Haber et al., 2015; Gage et al., 2010; Mazzotti, Test, & Mustian, 2014; Rowe et al., 2014), there is currently no literature examining the effects of teaching students with or at risk for EBD to self-advocate their needs based on FBI in any educational or mental health setting. Much of the literature on FBI has a focus of teaching alternative replacement behavior skills. For example, in the study conducted by Kern, Delaney, Clarke, Dunlap, and Childs (2001) using a reversal design to examine the effects of FBI on the targeted problem behaviors (off-task behaviors and disruption), determined as escape behaviors related to completing spelling assignments, of two second grade boys with EBD being served in self-contained classrooms. The intervention consisted of presenting both students with a preferred medium of task completion (typing

spelling words), and a non-preferred medium of task completion (writing spelling words). Results indicated a much higher level of task completion during preferred medium of task completion over non-preferred medium of task completion. Additionally, authors noted disruptive behavior demonstrated a substantial decrease. Although this is important and key in making behavioral progress, FBIs do not typically address teaching students to self-advocate their needs in regard to the intervention that has been developed. In a typical FBI, the individual responsible for implementing the plan rarely communicates on the effectiveness of the plan with the student. When a student is encouraged to advocate for his or her needs in a proactive manner, changes to environmental variables may be able to be adjusted to support progress.

A suggestion for narrowing this gap in behavior support is to provide students with the training necessary to self-advocate before problematic behaviors occur. This proactive approach promotes the understanding of one's problem behaviors through FBA, which is clearly and explicitly explained to the student. Additionally, providing students with training in self-advocacy, which can serve as a medium for students to reach out to teachers particularly general education teachers, to inform any needs and potential supports as indicated by FBA/FBI results may serve as a means to improve overall student behavior. The benefits of embedding self-advocacy within FBI has the potential to extend throughout students' life by providing key information about their behaviors, which increases self-awareness, thus empowering students to take ownership of their behaviors rather than allowing their behaviors to dictate their interactions.

Summary

Extensive research has demonstrated the importance of self-determination and self-advocacy, a sub-skill of self-determination, as these skills have been identified as predictors for achievement of the most successful post-school outcomes (Haber et al., 2015; Mazzotti et al., 2014; Rowe et al., 2014). Both educators and mental health clinicians emphasize the importance of teaching these skills to students who otherwise would not have them (Pickett et al. 2012; Test et al., 2009). Although self-determination may be a skill that typically developing students obtain simply by modeling, students with or at risk for EBD often require individualized instruction of self-determination skills to be successful in nearly every aspect of life. Providing students with information such as an understanding of their behavioral challenges and triggers leading to undesired behaviors allows students to address these issues by engaging in replacement behaviors identified through an FBA (Landrum et al., 2003). Given the lack of training and experience general education teachers have in regard to supporting students with EBD (Tillery et al., 2010), perhaps one way to address student need is through teaching self-advocacy skills based on the results of FBA. Strategies such as student recruitment of reinforcers can serve as a means to proactively meet the needs of students with behavioral challenges (Alber et al., 1999). With strong evidence supporting student recruitment of reinforcement, such as attention, including this strategy in the development of FBIs of students with behavioral challenges can provide an avenue for student success, rather than reactive disciplinary measures. Students with or at risk for EBD who are able to engage in a proactive conversation with a general education teacher and provide key information to the educator may be able to contribute to the success of support provided

by the teacher. In addition to students with or at risk for EBD actively engaging in self-determined behavior, this may also provide a way in which students can experience autonomy and a sense of responsibility.

Summary of Review of Literature

Since the amendment of IDEA in 2004, a heavy push for inclusion of all students with disabilities, as required by least restricted environment, has been a heightened focus for all educators. With this change, the role of the general education teacher in supporting students with significant behavior challenges has shifted. Meeting the needs of students with the most severe behavior challenges, particularly of those who have been identified as being with or at risk for EBD, has been a growing concern of general education teachers for a number of years. Although there has been some research in this area, a need for determining an effective means for supporting students with the most challenging behaviors across all settings, including general education classroom, remains.

FBA and FBI have a long standing history of effectiveness leading to improved behaviors across a variety of contexts (Blair et al., 1999; Dunlap & Fox, 2011; Lane et al., 1999). Application of interventions based on the outcomes of FBA has served as a means to decrease even the most challenging behaviors exhibited by students. Despite the effectiveness of the FBA and FBI, implementation by general educators is not typical and may not even be feasible when considering the many additional responsibilities held by a general education teacher.

Given that students with EBD are the most prone to experience poor post-school outcomes, it seems imperative to determine ways in which self-determination and the associated sub-skills (e.g., self-advocacy) can be taught in a systematic method in the

most impactful settings. Educating students about their disorder and ways in which they can cope with associated behaviors has yielded positive outcomes (Landrum et al., 2003). With self-determination and self-advocacy identified as key predictors associated with positive post-school outcomes (Haber et al., 2015; Mazzotti et al., 2014; Rowe et al., 2014), researchers have implored explicit instruction of the skills as a necessity. One possible solution is teaching students how to self-advocate their needs based on individualized function-based interventions. By teaching students to self-advocate needs regarding variables associated with behavioral challenges exhibited in the general education classroom, researchers and educators may be able to shift the responsibility of general education teachers facilitating FBI to students who will then become the facilitator of their own FBI.

CHAPTER 3: METHOD

In this study, a multiple probe across participants design (Horner & Baer, 1978) was used to determine the effects of a function-based self-advocacy training package on persistent problem behaviors of students with or at risk for EBD being served in the general education setting. The study was conducted with upper elementary students who have been identified as being with or at risk for EBD in a suburban school in the Southeastern United States. The sections to follow will include the participants, setting, experimental design, dependent variables and measurement, procedures, data analysis, and potential threats to validity.

Participants

Selection criteria. Students were selected to participate in the study through convenience sampling based on the following inclusion criteria: (a) has been identified with EBD based on state or federal eligibility criteria or considered at risk for EBD (i.e., exhibits behaviors across the academic setting requiring an additional level of support beyond the universal level of classroom management); (b) participates in at least one general education setting to access general curriculum instruction daily for at least 40% or more of instructional time; (c) receives a high level of Office Disciplinary Referrals (ODR), within the top 30% of students referred for ODR during the previous school year; (d) displays inappropriate behaviors that interrupt the learning of the student himself or herself, and/or the learning of others; (e) exhibits inappropriate behaviors occurring

during more than 30% of intervals of problem behaviors across one 30-min observational sessions in the targeted core content class in a general education classroom based on pre-baseline data (described under Dependent Variables); (f) has good attendance (i.e., no more than seven absences in the previous year); (g) receives written parental consent (see Appendix A); and (h) provides student assent (see Appendix C). Students identified as EBD received support provided by a special education teacher for a portion of the academic day in the special education classroom, according to the IEP service delivery plans. Potential students were first nominated by their general education and/or special education teachers by considering the following information: (a) school performance (e.g., state assessment results, grade report, progress report toward meeting the IEP goals and objectives, behavioral observations, ODR data); (b) most recent special education evaluation results, if applicable; and (c) level of instructional support or “at risk” status for drop out factors. Potential students nominated by teachers were then verified by the experimenter through record reviews and a detailed discussion with teachers about the nominated students’ behavioral challenges, the level of disruption caused by the student to himself/herself or others in the general education classroom, and student’s ability to recognize own behavioral challenges and the need for improvement. Upon selection of potential students and signed parental consent, the experimenter observed the students for 30 min in the general education classroom to determine level of problem behavior for verification purposes. If more than five students met the aforementioned inclusion criteria, a preference was given to select students who: (a) are in a recent transition such as self-contained classroom (partial or full-day) to a general education setting, elementary school to middle school, or returning to the public school setting from a day treatment

facility; (b) have a history of criminal activity; or (c) have documented mental health disorders.

Targeted student participants. Five upper elementary students (grades third and fifth) with or at risk for EBD were selected to participate in the study; however, one participant withdrew after the third day of Baseline 1 condition. The participant requested to no longer participate in the study and was withdrawn. Additionally, the fifth student was involved in behavioral incident resulting in a long-term suspension, which did not allow for completion of the intervention. The remaining three students participated in the study.

Phillip. Phillip was a Caucasian male in the fifth grade. He was considered to be at risk for EBD, as he was receiving interventions at tier two within an MTSS model implemented by the school at the time of the study. He spent the entire academic day in the general education setting. His problem behaviors were mostly related to persistent off-task behaviors such as putting his head down, talking to peers, or playing with nearby objects, when presented with a non-preferred task, particularly when the task involved extensive writing or reading. His ODR records included three in-school suspensions, one out-of-school suspension, and multiple interactions with administration for disciplinary consultation not formally documented.

Ryan. Ryan was a Caucasian male with an identified EBD and a documented mental health disorder in the third grade. At the beginning of the study, Ryan was participating in the general education classroom for nearly the entire academic day (96%), with the exception of check-in and check-out with his special education teacher in the behavior support classroom. However, shortly after beginning the second baseline

phase, his teachers decided to reduce his time in the general education setting to 90 min daily (22%) due to escalating behaviors across his academic day. The behavior support classroom has a low student to teacher ratio (one teacher, one assistant, six students), designed to support students with behavioral challenges who have been identified as having a disability under IDEA. Problem behaviors exhibited by Ryan included off-task behaviors when given non-preferred tasks such as staring at his paper or around the room, wandering around his classroom, playing with objects nearby, or putting his head down. His ODR records indicated two official disciplinary referrals resulting in removal for the remainder of the school day. He also had multiple informal disciplinary referrals which did not result in disciplinary action. In these instances intervention involving the behavior support teacher was necessary, which typically resulted in removal from the general education classroom to the behavior support classroom for a period of calming down or regrouping. This period of time typically lasted between 30 min to 3 hours. Ryan's IEP included goals developed to support him in making behavioral progress. Specifically, he had goals that focus on refraining from arguing with the teacher when he is upset, expressing his feelings and communicating with the staff when he is upset, and following teacher directions with no more than one verbal prompt.

Cory. Cory was an African American male in the fifth grade who recently moved to the school 3 months prior to the study beginning. He was considered to be at risk for EBD due to reports from his previous school, his behaviors exhibited in class, as well as his high number of ODRs received since transitioning to the school three months previously. His ODR included six in-school suspensions, two out-of-school suspensions, and upwards of 20 informal interactions with administration for behavioral consultation.

While in class, his problem behaviors included persistent off-task behaviors when presented with a non-preferred task, which resulted in escape behaviors including talking to peers across the room, putting his head down, walking around the room, and working on preferred tasks (i.e., computer games, reading). At the time of the study, he was receiving tier two interventions within MTSS for his behavior, which has been negatively affecting his academic performance and has been disruptive to others in his classroom.

Setting

The study took place in a suburban city in the Southeastern United States. At the time of the study, the school housed students in grades PreK-5 and served 903 of students within the entire school program. The school included 19 students with identified EBD within a diverse mix of ethnicities (17% African American, 48% Caucasian, 28% Hispanic, and 7% Other), with a total of 130 students who are considered to be English language learners. Approximately 60% of students qualified for free or reduced lunch. There were two classrooms contained within the school designed to support students with significant behavioral challenges, and not limited to those identified as EBD.

The FBA, FBI, teacher-student interaction (intervention), and direct observations of participants' problem behaviors and replacement behaviors occurred in the target general education classroom(s) during the class(es) within which each participant displayed the most behavior problems. The primary intervention and data collection sessions took place in each student's assigned general education classroom. Each classroom rotated classes for mathematics, English language arts (ELA), science, and social studies, which served as a generalization setting for each student. For Phillip, the primary intervention took place in his assigned general education classroom between

9:20 and 10:30 AM, during mathematics instruction and generalization took place in another fifth grade classroom during ELA instruction between 12:30 and 1:50 PM. The primary intervention setting for Ryan was his assigned general education classroom between 8:30 and 9:30 AM during mathematics instruction. The generalization setting for Ryan was in another third grade classroom during social studies instruction, between 9:50 and 10:30 AM. For Cory, the primary intervention took place in his assigned general education classroom during ELA instruction between 9:30 and 10:50 AM, with generalization data collection taking place in another fifth grade classroom during mathematics instruction between 12:30 and 1:50 PM. The teacher spoke with each student in a discrete location to ensure privacy for the self-advocacy intervention, such as the hallway or in a conference room. The self-advocacy training took place in a conference room within the school to minimize distractions and maximize the comfort of student participants when engaging in role-playing activities.

Experimenter

The experimenter was a former special educator and program specialist with 12 years of experience in urban elementary, middle, and high schools educating students with mild to severe disabilities. The experimenter is certified in Special Education, General Curriculum and General Education K-6, and is National Board Certified in Special Education. At the time of the study, the experimenter was pursuing a doctoral degree in special education. The experimenter has had extensive experience in the conducting FBAs and developing FBIs in the public education setting, as well as with individuals outside of the education setting. This intervention was developed by the experimenter and was piloted at a day treatment center prior to the development of this

study. The experimenter served as the primary data collector, conducted all FBA procedures, developed the FBI in collaboration with each student participant, and served as the primary trainer of the function-based self-advocacy training.

Experimental Design

The experimental design was a multiple probe across participants design (Horner & Baer, 1978), with experimental conditions being FBA, Baseline 1, FBI development, Baseline 2, function-based self-advocacy training, function-based self-advocacy implementation, and maintenance. Upon concurrent completion of FBA with each student, there was at least three baseline data collection sessions (i.e., Baseline 1) with all participants. Following data collection of the initial baseline condition, each student was involved in the development of the FBI through student feedback about specific behavioral function through collaboration with the experimenter. After the FBI was developed, a second baseline condition was conducted with a minimum of five baseline data points per participant with slightly prolonged baseline 2 periods for the second and third students to show staggering across participants. The participant with the most stable and highest baseline 2 level of problem behavior entered the function-based self-advocacy training and implementation condition first. When the first participant showed a consistent decrease in the level of problem behaviors across at least four intervention sessions, the second participant with the most stable and highest problem behavior baseline level entered the intervention condition. Prior to the second participant entering the intervention condition, there were at least two consecutive baseline probes implemented with this participant, when concurrent intervention sessions were conducted with the first participant. The third participant was administered intermittent baseline

probes at least once every four data collection sessions. Decisions made to change a condition were dependent upon the students' level of problem behaviors. The intervention was discontinued upon a participant reaching criteria to enter the maintenance condition, by completing 11 or more of the steps of the self-advocacy strategy during intervention with a consistent decrease in problem behavior mean by 20% from baseline over a minimum of five intervention sessions. During the maintenance condition, data were collected once per week for 3 weeks.

Generalization data were collected across all experimental conditions. Data were collected to determine the percentage of intervals of problem behaviors demonstrated in a generalization setting determined by the experimenter and general education teacher as an area within the general education setting, but outside of the targeted general education class period (e.g., a class with a different general education teacher, different content area instructional period). Generalization was measured at least once during Baseline 1, Baseline 2, intervention condition, and the maintenance condition.

Dependent Variables and Measurement

There were five dependent variables. The primary dependent variables included (a) the students' level of problem behavior, (b) students' appropriate replacement behavior, and (c) general education teachers' responses to students' problem behavior and appropriate replacement behavior; whereas the secondary dependent variables include (d) students' self-advocacy skill demonstration and (e) students' scores on a self-determination self-assessment. The primary dependent variables of students' level of problem behavior and appropriate replacement behavior were evaluated using the multiple probe across participants design. Teachers' responses to the students' behaviors

were evaluated descriptively. The secondary dependent variables also were analyzed descriptively to determine changes over time or as pre- and post-intervention measures.

Problem behavior. The first dependent variable was students' targeted problem behavior, which was operationally defined during the FBA process. Based on the results of the FBA conducted in the general education setting, the most prevalent problem behavior, or class of behaviors, exhibited in the general education classroom were targeted for each participant. Only high frequency problem behavior was targeted for this study due to the likelihood that general education teachers would encounter such behaviors, which could be highly disruptive to the student exhibiting the behavior, as well as other students. Additionally, high frequency problem behaviors allowed for data collection and decision making in a more apparent manner within the experimental design. An example of inappropriate peer-seeking behavior during instruction was defined as seeking attention from peers during teacher instruction in whole group or small group settings by talking to peers resulting in a distraction from the student himself or herself, or other students.

Phillip. Phillip's problem behavior was determined to be off-task behaviors with a function of escaping a non-preferred task. His problem behavior was defined as: (a) not working toward assigned task completion, (b) engaging in conversation not related to the task to be completed, and (c) not reacting to teacher direction within 10 sec.

Ryan. Ryan's problem behavior was determined to be engaging in off-task behaviors, with a function of escaping a non-preferred task. His problem behavior was defined as: (a) not working toward assigned task completion, (b) touching objects nearby to escape completing a task, (c) walking around the room to escape completing the task.

Cory. Cory's problem behavior was determined to be engaging in off-task behaviors, with a function of escaping a non-preferred task. His problem behavior was defined as: (a) not working toward assigned task completion, (b) not remaining in his work area, seated appropriately (i.e., sitting in his seat, work on his desk or work space), (c) talking to peers about non-task related topics.

Target problem behavior data for each participant was collected using a 10-s partial interval recording and 5-s recording method during a pre-selected 30-min period during a core content instruction in the general education setting. Within each 30-min observational period, observers listened to an iPhone app (i.e., BX Timer) that provided two different tones prompting observers for the start and end of each observational interval through audio cuing. Observation continued until the participant was observed for 120 intervals. Within each 10-s observational interval and using an experimenter-created observation form (see Appendix D), the observers recorded a "+" by circling if the student engaged in the target problem behavior at any time during the interval and recorded a "-" by circling if the student did not engage in the target behavior at any point during the entire interval. The percentage of intervals of target behavior being observed was calculated for graphing and data analysis; specifically, the number of intervals during which a student displayed the target problem behavior (with "+") was divided by the number of observational intervals (i.e., 120) and multiplied by 100.

Appropriate replacement behavior. The second dependent variable was students' appropriate replacement behavior serving the same function as the targeted problem behavior, which was operationally defined during the FBA process. An example

of a replacement behavior for peer-seeking behavior during instruction was defined as requesting a break to talk to a peer upon completing a task provided by the teacher.

Phillip. The replacement behavior selected for Phillip was asking for a break after working for a given period of time. Since Phillip had great difficulty remaining on task when provided with non-preferred or difficult tasks, he often spent time with his head down, talking to peers, or walking around the room without permission. Specifically, Phillip was taught to self-monitor his behavior, which assisted in on-task behavior and gave Phillip smaller benchmarks to meet within a longer timeframe. Upon meeting his goal, he was to ask his teacher for a short break (i.e., 5 min) to engage in a preferred activity (i.e., computer game, talk with a peer).

Ryan. The replacement behavior chosen for Ryan was asking for a break upon completing a non-preferred task for a given timeframe. Ryan often struggled with remaining on task when provided a non-preferred task, which resulted in avoidance behaviors such as asking to go to the bathroom, walking around the room without permission, playing with objects nearby, or gazing. He was also provided with a self-monitoring intervention that would allow him to track his progress and meet goals at shorter benchmarks to encourage progression toward meeting his goal. Upon meeting his targeted goal (i.e., completing work for four out of five, two minute sessions), Ryan asked for a short break to engage in a preferred activity (i.e., computer time, drawing).

Cory. Cory's behavioral function was determined to be escape from a non-preferred task which was often very disruptive to himself and those around him. When engaging in problem behavior, Cory would often lay under his desk or lay across his chair facing upward. He would also walk around the room without permission, engaging

with peers. Cory was very aware of his behavior and need to improve, as he was able to verbalize his problem behaviors and the need for improvement with great detail. The replacement behavior selected for Cory was to request a break upon completing a task for a given amount of time. It was important the Cory be provided an opportunity to move or engage in social interaction during his break, therefore upon meeting his goal, he was provided an opportunity to “run an errand” for the teacher (i.e., take a note to the office with a peer of choice). He was provided a self-monitoring strategy to assist with remaining on task for 15 min, with a five minute break to “run an errand”. The self-monitoring strategy allowed Cory to self-monitor his behavior every three minutes for 15 min. When Cory met four out of five intervals, he requested a break from the teacher.

Replacement behavior data were collected using an event recording during the same pre-selected 30-min observational period during a core content instruction in the general education setting. Each time the targeted replacement behavior occurred, the observers recorded a tally (/) during the observed 10-s interval to ensure precision of data collection and for comparison purpose. For example, if a student exhibited the targeted replacement behavior twice during the first 10-s interval used to record the problem behavior, observers marked two tallies for this interval. The cumulative number of replacement behavior was plotted on the graph for analysis.

Teacher behavior. In order to account for the effects of teacher behavior on both student problem behavior and replacement behavior, teacher’s response to students’ problem behavior and replacement behavior demonstration were recorded. A coding system was used to indicate the type of response provided by the teacher to the student when he or she engaged in problem behavior or the replacement behavior. Codes were

developed based on the operationalized definition of the problem behavior and replacement behavior determined during the FBA. For example, a teacher who failed to respond to a student requesting a break after working for a period of time, as part of the FBA, would be coded as “NR”, or “no response.” When the teacher reinforced the inappropriate behavior within 5 s, such as the teacher responding to a student calling out to seek attention by asking him to be quiet, data point was coded on the data collection sheet by recording an “ITR” for inadvertent teacher reinforcement. ITR was only recorded when the teacher reinforced the inappropriate behavior in a clear and observable manner. When the teacher reinforced the pre-determined replacement behavior within 5 s, a “TR” was recorded, indicating teacher reinforcement of the replacement behavior. Teacher behavior was measured using an event recording method and data were analyzed descriptively.

Self-advocacy skill. A secondary dependent variable was the number of steps of the self-advocacy skill each participant completed correctly during the interaction with the general education teacher. There were up to 14 total steps each participant was to complete in the teacher-student interaction; the steps were adapted by the experimenter from the *Self-advocacy and Conflict Resolution Training for College Students with Disabilities* (Palmer & Roessler, 2000) to address students’ behavioral needs based on FBA results. Although there are 14 total steps, only 13 were applicable. Step two (i.e., “Identify self & relationship to teacher”) was removed from the original checklist, as it was deemed unnecessary at the time of the study since students had been in the class for several weeks and providing an introduction or relationship to the teacher was not needed. For step three, students considered at risk for EBD were not required to disclose

their disability, as they were not identified as having a disability. In lieu of disclosing their disability, students considered at risk identified their behavioral challenges. These steps were specifically aligned with the skills to be taught in the self-advocacy training including a breakdown of the following skills: (a) greeting the teacher respectfully; (b) disclosing disability and/or specific behavior challenges; (c) offering suggestions for how the teacher can support him in the behavioral challenges; (d) sharing how the accommodation is effective for supporting positive behaviors (i.e., selected replacement behaviors); (e) identifying resources that may help in using the accommodation; (f) stating his role in accessing the accommodation; (g) asking if this is agreeable with the teacher; (h) affirming the agreement, (i) restating the accommodation that will be used, the student's role, and the teacher's role; and (j) closing by making a positive statement about the accommodation and thanking the teacher for his time. Refer to Appendix E for the Self-advocacy Strategy Steps Checklist. The experimenter completed the 13-step checklist indicating the steps completed correctly during the self-advocacy interaction between the student and the general education teacher. Anecdotal notes were used to document any additional information that may have been pertinent. The self-advocacy skill demonstration was collected throughout the first session of the Baseline 1 condition and Baseline 2 condition, and once during the initial day of the function-based self-advocacy implementation. For students who failed to demonstrate 11 of the self-advocacy skill steps, there was an additional data collection session upon retraining. All students met mastery for the self-advocacy skill steps, therefore additional data collection was not necessary.

Self-determination student self-assessment. Students completed the *American Institutes for Research (AIR) Self-Determination Assessment* (Wolman et al., 1994) at the beginning of the study and at the conclusion of the study for comparison purposes. Based on administration of the assessment to 450 teachers and students with and without disabilities, the *AIR Self-determination Assessment* has been determined to be reliable; specifically, reliability tests conducted on the instrument included an alternative-item correlation for consistency ($r = .91$ to $.98$), a split-half test for internal consistency ($r = .95$), and a test-retest measure to determine stability of results over time ($r = .74$). The measurement has also been determined to be a valid measure of self-determination through conducting a factor analysis of score on the 30 items examining capacity, opportunity, knowledge, ability, and perception which yielded results that were consistent with the conceptual structure of the assessment (Wolmen et al., 1994) based on the self-determined learning theory (Shogren et al., 2008). The *AIR Self-determination Assessment* is a 30-item assessment designed to provide educators an easy-to-use tool to assess students' skills and develop strategies for improving self-determination for students of all ages and abilities. The assessment included six statements using a five-point Likert scale (1-never, 2-almost never, 3-sometimes, 4-almost always, 5-always) broken into four subcategories including (a) Things I do, (b) How I Feel, (c) What Happens at School, and (d) What Happens at Home. Additionally there were four open-ended questions addressing goal setting (see Appendix F). The assessment provided information about students' self-determination skills, including self-advocacy skills, that can lead to better planning, instruction and training, and awareness of student strengths and limitations. Each assessment took approximately 30 min for students to complete.

Interobserver Agreement

For the problem behavior, replacement behavior, and teacher responses, interobserver agreement (IOA) was collected by a secondary observer for at least 30% of the sessions (including generalization measure) across Baseline 1, Baseline 2, intervention, and maintenance conditions. The second observer was a second year doctoral student in the same program as the experimenter. The experimenter trained the second observer collecting IOA data on the target problem behavior, replacement behavior, and teacher responses, the 10-s partial interval and event recording methods, use of the data collection sheet, and use of the timing device prior to any data collection. All target behaviors were operationally defined and listed at the top of each data collection sheet for reference. These behaviors were reviewed with the second observer for clarification purposes. Training was conducted in the target setting prior to IOA data collection to ensure quality data collection procedures were conducted by the second observer. Training continued until the IOA reached at least 95% agreement. The experimenter and the second observer independently and simultaneously conducted in vivo observations for the IOA data in the classrooms, or by observing video footage obtained through use of a GoPro Hero4, which recorded a 360-degree view of targeted participant behavior and teacher behavior.. The BX Timer App was used to alert by providing two different tones prompting observers for the start and end of each observational interval through audio cuing (10-s observe, 5-s record intervals) the observers of the start and ending of each interval. During review of the video recorded sessions, both observers used the BX Timer App, a computer for viewing the videos, and data sheets indicating the operationally defined problem behavior and replacement

behavior of targeted students. IOA was measured using the interval-by-interval comparison method (for problem behavior) or the occurrence-by-occurrence comparison method (for replacement behavior and teacher responses) and calculated by the number of agreements divided by the number of agreements plus disagreements and multiplied by 100.

For the self-advocacy skill, IOA was collected by the second observer during an interaction prompted by the experimenter at the onset of both baseline conditions and during the first intervention sessions for all participants. The experimenter trained the second observer collecting IOA data using the 13step self-advocacy strategy checklist. The experimenter and the second observer independently and simultaneously conducted in vivo observations for the IOA data in the classrooms, or through viewing video footage obtained through use of a GoPro Hero4. IOA was measured using the item-by-item comparison method and calculated by the number of agreements divided by the number of agreements plus disagreements and multiplied by 100.

For the self-determination self-assessment, IOA was collected by completing a permanent product comparison. Using two copies of each student's completed self-assessments, two observers scored/rated the self-assessment. The scores/ratings were then compared using the item-by-item comparison method and calculated by the number of agreements divided by the number of agreements plus disagreements and multiplied by 100.

Social Validity

Social validity was measured at the beginning of the study and upon completion of the intervention comparing pre- and post-intervention self-advocacy perception and

skill level. Using a four-point Likert scale (1-none/not at all likely, 2-very little/fairly likely, 3-some/likely, 4-a lot/very likely) and open-ended questions, social validity was gathered from student participants and their general education teachers using questionnaires. The pre-intervention questionnaire for teachers consisted of 11 statements in a four-point Likert scale, whereas the post-intervention questionnaire consisted of 18 statements in a four-point Likert scale (with the first 11 statements being the same as those in the pre-intervention questionnaire) and five open-ended items (see Appendices G and H). Teachers responded to questions addressing the usefulness, practicality, and effectiveness of the function-based self-advocacy strategy.

The questionnaire for student participants consisted of statements in a four-point Likert scale (1-completely disagree, 2-slightly disagree, 3-slightly agree, 4-completely agree) and open-ended items, addressing their views on the usefulness of learning how to self-advocate their own behaviors for assisting them to decrease inappropriate behaviors in the general education setting. The pre-intervention questionnaire consisted of six statements and two open-ended questions; whereas the post-intervention questionnaire consisted of 16 statements (including the six statements from the pre-intervention questionnaire) and four open-ended questions (see Appendices I and J).

Materials

The materials included functional behavioral assessment forms and the self-advocacy training curriculum. These materials are described below.

Functional behavioral assessment materials. A functional behavioral assessment was conducted using a selection of materials from the *Practical Functional Behavioral Assessment Training Manual for School-Based Personnel* (Loman &

Borgmeier, n.d.). The selected materials included: (a) assessments and interviews for determining the student's strengths and specificity about the topography of the problem behavior (e.g., where, when, with whom behaviors occur); (b) assessments for determining and summarizing the routines and/or setting events, antecedents, and consequences related to the target behavior; (c) observation forms for documenting observable behaviors for further analysis; (d) behavior support planning forms including "Competing Behavior Pathway" used to determine the nature and function of the behavior; and (e) forms for identifying an alternate behavior or replacement behavior. A function-based intervention was then developed based on the FBA results and implemented in the general education classroom. For example, when the results of the FBA determined a student engaging in off-task behavior with the function of the behavior being to escape a non-preferred task, a replacement behavior was engaging in on-task behavior for 15 min and then asking for a short break, with positive reinforcement provided by the general education teacher when the student sought a break after remaining on task in lieu of persistent off-task behaviors throughout the entire lesson. All of the materials were included in the *Practical Functional Behavioral Assessment Training Manual for School Personnel, Participant's Guidebook* (Loman & Borgmeier, n.d.). See Appendix K for selected forms within the manual for this study.

Self-advocacy training curriculum. The self-advocacy training curriculum for the study was adapted by the experimenter from the *Self-Advocacy and Conflict Resolution Training for College Students with Disabilities* (SACR) (Palmer & Roessler, 2000). SACR consisted of five lessons intended to explicitly and systematically teach students with disabilities self-advocacy and conflict resolution skills. The adapted

curriculum, named as Self-advocacy Training-Adapted for Students with EBD for the study, included only self-advocacy training and had a focus of requesting accommodations specific to decreasing problem behaviors and supporting students with or at risk for EBD in general education settings. The adapted curriculum featured six lessons including teaching students to: (a) introduce themselves to the teacher and disclose their disability and/or behavioral challenges, and how the disability affects their behavior in the classroom setting; (b) offer a solution that may be helpful in supporting students when their behavior becomes difficult to manage, such as an accommodation or recruitment of reinforcement from the teacher; (c) identify resources that will assist the student and the teacher in arranging accommodations; (d) ask the teacher if he or she find the suggestions provided by the student agreeable; (e) summarize the agreed upon information and persons who will be responsible for the plan; and (f) close the conversation in a positive manner expressing appreciation for the teacher's support. See Appendix L for the lessons.

Additional materials for the study included: (a) a schedule for the self-advocacy training; (b) pre-made note cards specifying student needs based on the FBA results; (c) partial interval data collection form (see Appendix D); (d) a checklist for self-advocacy strategy steps completed correctly (see Appendix E); and (e) the *American Institutes for Research (AIR) Self-Determination Assessment* (Wolman et al., 1994; see Appendix F).

Procedures

Functional behavioral assessment. Prior to the first baseline condition, an FBA was conducted with all students respectively in the general education setting. If a functional analysis was necessary, it would be conducted to verify the function(s) of the

behavior deemed as problematic in the general education setting. In this study, all data obtained from FBAs provided clear information about student's behavioral function, and therefore a functional analysis was not required. As a part of the FBA, interviews were conducted with general education teacher(s), special education teacher(s), the student participant, and any other individual who might have insight about the target participant's behavior using the Functional Assessment Checklist of Teachers and Staff (FACTS) contained within the *Practical Functional Behavioral Assessment Training Manual for School Personnel, Participant's Guidebook* (Loman & Borgmeier, n.d.). Specifically, interviews were conducted with each participant's assigned general education teacher, the teacher assigned to the generalization setting within general education, and students. Additionally, each student's parent was contacted at the beginning of the study for the experimenter to introduce herself, as well as gain some insight from the parent's perspective on their child's behaviors at school and home. The informal interview included basic questions about what the parent perceived to be the greatest challenge for their child in school and at home. Parents were provided contact information should they be interested in sharing more information with the experimenter at a later date. The interview process with teachers provided information about the student, including but not limited to strengths, limitations, behavioral challenges in the general education setting and other settings across the school context, interventions that have been attempted previously and results, and preferences regarding possible reinforcers. FACTS consists of: (a) an interview of the student and teacher(s) regarding the student's problem behavior(s); (b) an assessment of antecedent(s), behavior(s) exhibited, and corresponding consequences; (c) a summary of the behavior based on the information gathered; and (d)

behavior support planning through development of a Behavior Support Plan, including a competing pathways summary indicating a preferred replacement behavior and a plan for teaching this behavior in context. Additionally, observations of each student in both the assigned homeroom general education setting and the generalization setting were conducted as a component of the FBA to examine specific components related to the problem behavior, behavioral function, and potential replacement behavior (e.g., topography, frequency, duration). Based on these data, a competing pathways summary was completed to determine triggers and/or setting events, antecedent behaviors, and consequences tied to the targeted problem behavior. An alternate or replacement behavior was developed and used as the primary component of the FBI, which was determined using the FACTS competing pathways summary form. Results of the FBA were shared with teachers, parent(s), administrator(s), and the student. Although one student (i.e., Ryan) had an FBA on file with the school, this initial FBA and FBI development and implementation was conducted in the behavioral support classroom; therefore the experimenter conducted an additional FBA with the participant, specific to the general education setting.

Baseline 1. During baseline 1 condition, data were collected on the problem behavior, replacement behavior, and teacher responses. Students were observed using a partial interval recording method to determine the percentage of problem behavior and using an event recording method to document students' replacement behavior and teacher responses during a 30-min instructional period. Students were observed in the target general education classroom during a typical class setting and with typical behavior supports provided class-wide and individually by the general education teacher. Phillip

and Cory were provided additional behavioral supports through the Multi-tiered System of Supports at Tier 2. For Phillip, his teacher provided additional support through placement of his workspace (e.g., seated near the teacher, minimized distractions), small group instruction, increased positive reinforcement for appropriate behaviors, and peer tutoring for more difficult tasks. For Cory, his teacher provided a workspace that would allow him to move more freely, peer tutoring, small group instruction, one-to-one instruction, and frequent verbal prompts for remaining on task. As mentioned previously, Ryan had an IEP that stated specific goals that were to be practiced across the academic setting. Additionally, he participated in Boys Town, a token economy system implemented by the behavior support classroom, which carried over into his general education classroom as well. For the first and last 10 min of the academic day, Ryan was to check in with his behavior support teacher, receive his Boys Town point sheet, and report to his general education class. His behavior support teacher was available for intervention if the need should arise while Ryan was in the general education classroom. The classrooms had telephones, which were used to communicate between classrooms. At times Ryan's general education teacher called the behavior support teacher to assist with Ryan's behavior when he had escalated. No additional behavioral supports or training were provided to the target student by the experimenter during Baseline 1. For the secondary dependent variable of self-advocacy skill, immediately prior to baseline data collection the experimenter prompted each participant to share his behavioral needs to the general education teacher during the targeted class. The experimenter provided a generic prompt to the students by saying, "Remember I shared with you the reason for your difficult behavior in Mrs./Ms./Mr. _____'s class and your behavioral needs. Before

beginning class today, I would like to see how well you can talk to your teacher about your needs.” No additional prompting or training was provided. The steps completed correctly, according to the self-advocacy skill steps indicated on the checklist, were recorded. The teacher’s role for baseline was to respond to the students how they would naturally respond, without prompting students how to self-advocate.

Development of function-based self-advocacy intervention. Based on the results of the FBA, a function-based self-advocacy intervention was determined as a means to decrease problem behavior and increase the use of the replacement behavior in the predetermined general education setting. The experimenter developed an FBI, in collaboration with the student, individualized to support each participant in the general education classroom by identifying a replacement behavior that was appropriate and plausible for implementation. Additionally, it was critical that each participant understood the nature of the problem behavior, was able to explain his problem behavior, as well as to share “why” he engages in the behavior (predetermined function). This information was included as a key component of the self-advocacy training in that the student would identify the problem behavior, identify replacement behaviors, and describe how to contact reinforcers through teacher support by requesting reinforcement. The student was informed about the function of his behavior in understandable terms and provided a way to seek an accommodation from their teacher. For example, if the student’s behavioral function was determined to be task avoidance, the student was provided with a way to calmly and proactively communicate with the teacher when the assignment was lengthy or challenging by requesting the teacher to provide the student with a short break (i.e., 5 minutes) after remaining on task for 15 min of the assignment.

The teacher had the opportunity to support the student by honoring the student's request of providing a break after remaining on task for 15 min. Each development session lasted between 30 min to one hour. Data on the primary and secondary dependent variables were not collected during this condition.

Baseline 2. Procedures for the baseline 2 condition were identical to the procedures during baseline 1. The purpose of baseline 2 was to determine the extent to which students' involvement in the development of the function-based self-advocacy intervention affected their behavioral demonstration. No training or specific prompting about self-advocacy was provided.

Function-based self-advocacy training. Each student received the function-based self-advocacy training from the experimenter individually in a setting outside of the general education classroom. The Self-advocacy Training adapted by the experimenter consisted of six lessons including (a) introduction and disclosure, (b) solution, (c) resources, (d) agreement, (e) summary, and (f) closure (see Appendix L). Students were provided pre-made cue cards to complete throughout the lesson implementation, which were designed to assist with embedding FBA/FBI results. Students were then provided access to the cue cards during the interaction with the teacher. Students were asked to complete the entire strategy based on a checklist of prompts and role-playing activities at the conclusion of each session.

Lesson 1: Introduction and disclosure. The first lesson provided instruction for students on how to establish a friendly basis or interaction. The lesson began with a skill description and provided the goal of the skill. For example, in this lesson students were provided information about greeting people and how to open a conversation. The

instructor, the experimenter in this case, then modeled an introduction and explicitly explained the components that were included in the modeled introduction. The student was then provided an opportunity to practice introducing himself to the experimenter, who is role-playing as the student's teacher. The second part of the first lesson provided a disclosure or information about the student's behavior or disability, if applicable. The information gained from FBA/FBI development was embedded within this part of the lesson. For example, Phillip's behavioral function was determined to be escape from a non-preferred task. The replacement behavior developed was to request a break after remaining on task for a given period of time. During instruction, the experimenter included this information for students as a reminder to include this information to the teacher, which would assist in providing better support to the student in the classroom. After role-playing the skill with the experimenter and the student was firm in providing an introduction and disclosure statement, the lesson was summarized by providing what skills were learned and how they can be applied in the classroom setting.

Lesson 2: Solution. For the second lesson the experimenter followed the same structure as the first lesson by providing a skill description and the goal of the skill. Skill examples of how to provide a solution were modeled for the student, with explicit instructions and clear examples. Referring to the FBA/FBI development plan, the student developed a solution to provide to their teacher during class. This solution was practiced through role-playing with the experimenter. When the student was firm in the ability to offer a solution to the teacher, through role playing, the experimenter summarized the skills and goals of the lesson, with applicability for the general education classroom.

Lesson 3: Resources. For the third lesson, identifying resources to assist the student with access to the replacement behavior or accommodation, the same structure was followed as previous lessons. Lesson components included were instruction of skill description, skill goal, modeling the skill, providing opportunities for the student to practice the skill through role-playing, and a review of the skill upon closure of the lesson. The student was also taught to identify and take responsibility for his role in identifying and accessing resources, which was embedded within the instructional lesson.

Lesson 4: Agreement. For the fourth lesson, the students were taught to ask if the agreement was acceptable. Following the same format as previous lessons, students were taught to ask the teacher if they agreed to the proposed accommodations. Agreement was followed with an acknowledging statement such as “great”.

Lesson 5: Summary. In the fifth lesson, students were taught to summarize the interaction by: (a) restating the accommodation to be used in class, (b) stating their role in the implementation, and (c) stating the teacher’s role in the implementation. This lesson also followed the same format as previously taught lessons.

Lesson 6: Closure. For the sixth and final lesson, students were taught to close the interaction with a positive statement that suggested closure and express appreciation. Additionally, students were expected to be able to complete the entire interaction upon closure of this lesson, with the support of cue cards.

For this study, the training portion of the intervention was conducted over two to three sessions by combining lessons. The lessons were combined as follows for three sessions: (a) Session 1-Lesson 1 (Introduction and Disclosure); (b) Session 2-Lesson 2 (Solution), Lesson 3 (Resources), Lesson 4 (Agreement); and (c) Session 3-Lesson 5

(Summary) and Lesson 6 (Closure). If the student was able to complete the lesson in two sessions, the lessons were combined as follows: (a) Session 1-Lesson 1 (Introduction and Disclosure), Lesson 2 (Solution), and Lesson 3 (Resources); and (b) Session 2- Lesson 4 (Agreement), Lesson 5 (Summary), and Lesson 6 (Closure). Each lesson lasted between 10 min to 30 min for completion. Upon completion of each session, the student was asked to independently complete the 13 steps of the self-advocacy skills. The experimenter used the Self-Advocacy Strategy Steps Checklist (Appendix E) to determine student proficiency of the steps. When the student met at least 11 steps correctly during the training sessions, he was considered as meeting mastery and entered the intervention condition. If a student did not meet 11 steps proficiently, additional training sessions were provided to focus on steps the student showed difficulty. All students met mastery upon completion of the training session, therefore no additional training was necessary. Data on the primary and secondary dependent variables were not collected during the training condition.

Table 1. Functional Behavioral Intervention Embedded within FBSA Training by Lesson.

Lesson	Focus	Embedded FBA Component
1	Introduction and Disclosure	Student provided teacher with function-based problem behavior

2	Solution	Student provided information about a potential replacement behavior to the teacher
3	Resources	Student shared FBI (e.g., SM with MotivAider) with the teacher; Student requested reinforcement from teacher upon meeting goal
4	Agreement	NA
5	Summarizing	Student restated their role and the teacher's role in the FBI
6	Closure	NA

Function-based self-advocacy implementation. Upon meeting mastery criteria on the self-advocacy training, students were prompted to initiate a conversation with a pre-selected general education teacher. During this interaction, the student met with the general education teacher before the beginning of the target class. The student was prompted to complete the 13 steps of the Self-Advocacy Strategy-Adapted during the interaction with the teacher, referring to the cue cards (see Appendix M) as necessary. This was considered the post-intervention assessment for the self-advocacy skill. The student then completed the steps of the self-advocacy strategy, including: (a) greeting the teacher respectfully; (b) identifying self and his relationship to the teacher; (c) disclosing own disability and/or specific behavior challenges; (d) offering suggestions for how the teacher can support him in behavioral challenges; (e) sharing how the accommodation is

effective for supporting positive behaviors; (f) identifying resources that may help in using the accommodation; (g) stating his role in accessing the accommodation; (h) asking if this is agreeable with the teacher; (i) affirming the agreement, (j) restating the accommodation that will be used, the student's role, the teacher's role; and (k) closing by making a positive statement about the accommodation and thanking the teacher for his time. The number of steps completed correctly was measured by the experimenter who was nearby but in an inconspicuous location in the classroom or interaction space. If the student asked for help during the interaction from the experimenter, the experimenter would prompt the student to refer to his cue cards. If the student continued to require assistance in completing the steps, the step(s) requiring assistance would be counted as not met. If the student did not meet 11 steps correct, the experimenter briefly met with the student to review the steps of the self-advocacy strategy following the interaction attempt.

During the interaction, the teacher's role was to respectfully listen to the student, ask questions for clarification, restate statements made by the target student, and maintain a supportive rapport with the student. The experimenter held a brief training session with the teacher prior to the function-based self-advocacy implementation to share a list of expectations regarding the teacher-student interaction. The experimenter informed the general education teacher that the student would be approaching her to complete the intervention prior to class beginning. The general education teacher received a copy of the Self-Advocacy Training Strategy Steps Checklist (Appendix E) listing the steps of the self-advocacy training. The experimenter explained each of the steps necessary for the student to complete. The teacher was asked to complete the checklist immediately

following the student-teacher interaction. Teachers were encouraged to support the student through responding to his requests during the self-advocacy interaction. Teachers were provided basic information such as the general purpose of the self-advocacy intervention and that the student would be relying on their support to achieve better outcomes in the general education classroom. The teacher was provided an opportunity to clarify any information needing clarification.

In the event that a student's targeted problem behavior did not show a decreasing trend or has not been reduced by 20% of the baseline data after 5 days of intervention, the experimenter briefly met with the teacher to discuss how to better support the student during the intervention by reviewing teacher response data with the teacher. This meeting would take approximately 5-10 min. Depending on students' behavior change, a phase for additional teacher training would be added. For the current study, all students' behavior was reduced by at least 20% of the baseline data, and therefore no additional teacher training was necessary.

Maintenance. Maintenance data were collected after each student completed at least five intervention sessions, meeting the criteria of reducing problem behavior by 20% below the baseline for three consecutive data collection sessions. Data were then collected a minimum of one week following the final data point in the intervention phase. A minimum of three maintenance data points were collected, each a minimum of one week between the prior data collection session. Upon completion of the intervention phase, continuation of the FBI implemented during the intervention phase was encouraged; however, there was no specific support provided to the student or teacher following the intervention phase. During the maintenance phase, data were collected on

student problem behavior, replacement behavior, and teacher response to student behavior. Students would not complete the steps of the function-based self-advocacy strategy, as it would be unnecessary to be repeated.

Procedural Reliability

Procedural reliability on the FBA, function-based self-advocacy development, and self-advocacy training was collected during all of the sessions for all students. Procedural reliability for implementation of the function-based self-advocacy intervention was collected across at least 30% of the sessions for all student participants. Procedures for the FBA and FBI included 13 steps indicating whether or not items related to conducting each component of the FBA and development of the FBI were completed. Additionally, there were nine steps indicating the completion of each component within the self-advocacy training, including skill and goal explanation, explicit examples including modeling and role-playing, performance feedback, an opportunity for questions, and a summary of the lesson. Training lessons were video-recorded for data collection. The experimenter trained the same doctoral student used for IOA data collection on the procedures for the FBA and FBI Development and Self-advocacy Training Implementation. After training, the observer viewed video recordings of the FBA and FBI Development and Self-advocacy Training implemented by the experimenter. The observer completed an experimenter-developed checklist including the steps to be completed during FBA and FBI Development and Self-advocacy Training (Appendices N and O). For steps that were completed correctly, the observer circled “Y” for yes. For the steps not completed or completed incorrectly, the observer circled “N” for no. The total number of steps completed was tallied. To find the percentage of steps completed

correctly, the number of steps completed correctly was divided by the total number of steps (e.g., 9 or 13) and then multiplied by 100 to yield a percentage

Data Analysis

Analysis of the student data was based on visual analysis of graphs presenting occurrences of target problem behavior and replacement behavior. Trend, level, slope, variability, immediacy of effects, and similarity of data across intervention phases were examined to determine critical decisions about phase change, presence of a functional relation, as well as nuances about the study. Teacher responses to target problem behavior and replacement behavior occurrences were analyzed descriptively in a table format. The self-advocacy skill and self-determination self-assessment was analyzed descriptively by comparing pre- and post-intervention data. Social validity data were analyzed by comparing the pre- and post-intervention questionnaire ratings and determining level of perception changes descriptively based on the four-point rating scale and qualitative responses from the student participants and teachers.

Potential Threats to Validity

There are some potential threats affecting the internal validity of this study. Students may have become more accustomed to school environment and teachers may have learned student's individual needs and address those naturally, and therefore pose a potential threat to history. Students also may have matured over the duration of the study, potentially learning from the positive behaviors modeled by peers. To address these potential threats to internal validity, initial contacts and meeting with the participating school were conducted prior to the study in order to start as promptly as possible. Additionally, the specific design selected for this study (i.e., multiple probe across

participants) was selected in order to control for history with repeated measures and by replicating intervention effects across all student participants.

The population of students with or at risk EBD is transient and there was a threat of losing student participants, thus there is a potential threat for attrition. This was addressed through selecting five initial student participants to ensure sufficient replications using the multiple probe across participants design. Student participants with the highest and most stable baseline entered intervention first.

An additional potential confounding variable was teacher knowledge of the self-advocacy training. Teachers who learned too much about the strategy may have been more aware of how to support the students, not based on the advocacy provided by the student. This was addressed by limiting teachers' and administrator's exposure to the actual self-advocacy training in detail until after the intervention has been completed. The experimenter assured school staff that training and materials would be provided following the completion of the study for future use.

CHAPTER 4: RESULTS

This chapter addresses the findings of the study. Sections include results of (a) interobserver agreement, (b) procedural reliability, (c) FBA and FBI, (d) problem behavior, (e) replacement behavior, (f) teachers' responses to student behavior, (g) self-advocacy skills, (h) generalization measure, (i) social validity measure, and (j) students' self-assessment of self-determination.

Interobserver Agreement

Interobserver agreement (IOA) data were collected for the primary dependent variables (i.e., problem behavior, replacement behavior, and teacher responses) using either in-vivo data collection method (35%) or videotaped data collection method (65%). Overall, IOA data were collected for a total of 28% of observational sessions across all participants, settings (i.e., primary and generalization), and experimental conditions with a mean agreement of 97.9% and a range of 81% to 100%. IOA data were collected for 22% of Baseline 1 with a mean agreement of 98% (range of 89% to 100%), for 24% of Baseline 2 with a mean agreement of 97.8% (range of 80% to 100%), for 29% of intervention sessions with a mean agreement of 98.1% (range of 81% to 100%), for 40% of maintenance condition with a mean agreement of 85% (range of 83% to 87%), and for 50% of generalization sessions with a mean agreement of 98% (range of 89% to 100%). Table 2 shows the mean and range of IOA results on the primary dependent variables by participants.

Table 2. Mean and range interobserver agreement results on the primary dependent variable by participants

Student	Baseline 1	Baseline 2	FBSA	Main	Gen
Phillip	98%	100%	100%	83%	99%
	(93-100%)	(range NA)	(99-100%)	(range NA)	(89-100%)
Ryan	97%	96%	98%	87%	-
	(89-100%)	(85-100%)	(range NA)	(range NA)	
Cory	-	100%	97%	-	92%
		(range NA)	(80-100%)		(88-95%)

Note. Numerals in parentheses represent range.

IOA data were also collected for participants' self-advocacy skills. A second observer, a doctoral student in the special education department, collected IOA data for display of self-advocacy skills for a total of 28% of the observational sessions across all participants, settings (e.g., primary and generalization), and experimental conditions. A total of 43% of sessions were observed in-vivo, whereas a total of 57% of sessions were observed via videotaped sessions. Overall, results show a mean agreement of 100%.

For participants' completion of the *AIR Self-Assessment* (Wolman et al., 1994), the second observer independently scored each participant's pre- and post-assessment according to the training manual. The assessment scoring from the experimenter and the second observer was then compared using an item-by-item analysis. Results show a mean agreement of 100% for both the pre-assessment and post-assessment across participants.

Procedural Reliability

The second observer collected procedural reliability data for FBA/FBI Development and Self-advocacy Training Implementation for 66% of sessions. The observer viewed videotaped sessions and completed the procedural reliability data collection using two experimenter-developed checklists including the steps to be completed during FBA and FBI Development and Self-advocacy Training (Appendices N and O). Procedural reliability results showed 100% (range NA) for both the FBA & FBI Development and the Self-Advocacy Training Implementation for all three participants.

FBA and FBI Results

Prior to Baseline 1, an FBA was conducted to determine the behavioral function of each participant's problem behavior. The FBA included general education teacher interview, generalization setting teacher interview, a brief phone informal interview with parents, student interview, observation of student in targeted settings, and development of antecedents, behaviors, and consequences. Following Baseline 2, an FBI was developed based on the results of the FBA and input from each participant. Replacement behaviors were determined during the FBI development phase specific to each participant's needs in regard to behavioral function. Each FBI developed sought to replace the problem behavior with a more desired behavior meeting the same behavioral function as the problem behavior. Additionally, each FBI was developed to be as efficient as the problem behavior in achieving the behavioral function, and included consideration for schedule thinning and ratio strain. For example, initially Ryan's FBI, which was a self-monitoring strategy with built-in requests for breaks, was set to 5-min intervals for 15 min and a 5-min break. During the first session, it was determined that this schedule was too stringent

for Ryan and needed adjustment. After additional observation of on-task behavior, a schedule of 3-min intervals for a total of 15 min (only meeting 80% of the intervals as on-task) was much more appropriate and efficient for Ryan to contact the reinforcer (i.e., receive a break). The results of the FBA and FBI development for each participant are below.

Phillip. The FBA results indicated a behavioral function of escape from non-preferred tasks, particularly tasks that were lengthy in reading non-preferred content. When given a non-preferred task, Phillip often put his head down, walked around the room without permission, talked to peers nearby or throughout the room, and put his hood over his head. The FBI developed to support Phillip included a self-monitoring strategy and requesting for a break after working for a targeted period of time (e.g., 15 min, with 5-min intervals). Phillip was provided a self-monitoring checklist and a MotivAider, a device that vibrates on an interval schedule set by the experimenter. Upon completing three intervals, at 5 min each, remaining on task, Phillip was to ask his teacher for a break to engage in a pre-determined preferred activity (e.g., computer game, talk with a friend).

Ryan. Ryan's FBA results indicated a behavioral function of escape from a non-preferred task. Ryan engaged in problem behavior such as walking around the room, asking to leave the room (e.g., bathroom break, go to special education classroom), play with nearby objects, or to gaze with a flat affect. His behaviors were worse when presented with a non-preferred task that was more difficult or longer in length. He also exhibited problem behaviors when there was an abrupt change in the classroom schedule or dynamic (e.g., presence of the experimenter, field trips, assemblies). For Ryan's FBI, a

replacement behavior of requesting a break was determined to be appropriate when paired with a self-monitoring checklist and a MotivAider. As noted previously, the initial self-monitoring schedule needed to be adjusted from 5-min intervals for 15 min to 3-min intervals for 15 min to prevent ratio strain. Upon meeting the self-monitoring goal of 80% of intervals on-task, Ryan requested a 5-min break to engage in a preferred activity (e.g., iPad activity, drawing, playing with a small toy).

Cory. FBA results for Cory indicated a behavioral function of escape from a non-preferred task. Behaviors exhibited by Cory were very distracting to himself and others in the classroom, such as consistent out-of-seat behavior, laying under his desk or across his chair, talking to peers across the room, calling out, and off-task behaviors. As part of Cory's FBI, a replacement behavior was identified, which was requesting a break after working toward task completion for a given amount of time. It was important for Cory to access movement or social interaction during the break in order to replace the problem behavior; therefore, Cory was asked to complete a class errand as part of his requested break. He was also given a choice to engage with a preferred peer for a short amount of time during his requested 5-min break.

Problem Behavior

Figure 2 displays the results of the problem behavior demonstrated by targeted students in a multiple probe across participants design format. A visual analysis of the results was conducted to determine the effects of FBSA on the problem behavior of the targeted students. This analysis revealed a functional relation between FBSA and participants' levels of problem behavior in that there are three demonstrations of a reduction of behavior upon implementation of the FBSA strategy. Following Baseline 1

and Baseline 2, there was a reduction in the percentage of overall problem behavior.

Although there was overlapping in baseline and intervention data points for two of the three participants (i.e., Ryan and Cory), there was an immediacy of effect across all three participants and the problem behavior displayed remained consistently well below that during Baseline 1 and Baseline 2 for all participants.

Phillip. Results of FBA for Phillip indicated off-task as the problem behavior, with a function of escape from a non-preferred task. For Baseline 1, Phillip displayed a moderate level of problem behavior ($M = 46\%$, range 42%-50%) with good stability. During Baseline 2, Phillip's problem behavior showed a steady increasing trend at a high level ($M = 88\%$, range 72%-100%). Upon implementation of FBSA, there was a substantial reduction in the percentage of intervals of problem behavior ($M = 15\%$, range 8%-23%), resulting in a clear immediacy of effect, an overall low level, with a slightly increasing trend. Phillip demonstrated a mean change of problem behavior of -31% from Baseline 1 and -71% from Baseline 2 (see Table 3), exceeding mastery criterion of 20% decrease for entering the maintenance phase. During the maintenance condition, Phillip's problem behavior showed a mean of 20% of intervals (range 18%-28%) with a low and stable level of data across 3 weeks of data collection. Overall, Phillip's problem behavior declined substantially upon implementation of FBSA and maintained over 3 weeks, supporting the effectiveness of the intervention for Phillip.

Ryan. Results of FBA for Ryan indicated off-task as the problem behavior, with a function of escape from a non-preferred task. For Baseline 1, Ryan exhibited a moderate level of problem behavior ($M = 34\%$, range 25%-46%) with slight variability. During Baseline 2, Ryan's problem behavior showed high variability with an increased level of

percentage ($M = 61\%$, range 25%-97%). Upon implementation of FBSA, there was a reduction in the level of problem behavior ($M = 27\%$, range 11%-48%), with a moderate degree of variability, an increasing trend initially followed by a decreasing trend during the last three intervention data collection sessions. Ryan displayed a mean change of problem behavior of -7% from Baseline 1 and -34% from Baseline 2 (see Table 3), exceeding mastery criterion for entering the maintenance phase. During the maintenance condition, data were only collected for one session due to student illness and necessary behavioral interventions by the special education teacher and administration. For this session, Ryan's problem behavior was 21%. Overall, Ryan's problem behavior decreased upon implementation of FBSA and maintained for one week following intervention, supporting the effectiveness of the intervention for Ryan.

Cory. Results of FBA for Cory indicated off-task as the problem behavior, with a function of escape from a non-preferred task. For the first baseline, Cory engaged in a moderate level of problem behavior ($M = 54\%$, range 42%-71%) with a decreasing trend. For the second baseline, problem behavior exhibited increased slightly ($M = 55\%$, range 21%-95%) with high variability and an overall increasing trend. Upon implementation of FBSA, there was a reduction in problem behavior ($M = 23\%$, range 10%-39%), resulting in a clear immediacy of effect, an overall lower level, and a decreasing trend. Cory displayed a mean change of problem behavior of -31% from Baseline 1 and -32% from Baseline 2 (see Table 4), exceeding mastery criterion for entering the maintenance phase. Due to disciplinary action leading to out of school suspensions and school scheduling conflicts (i.e., field trips, testing), only one maintenance data point was collection. Cory's problem behavior was 21% for the maintenance data point, which was collected one

week post-intervention completion. Overall, Cory's problem behavior declined upon implementation of FBSA and maintained for one week after the intervention ceased, supporting the effectiveness of the intervention for Cory.

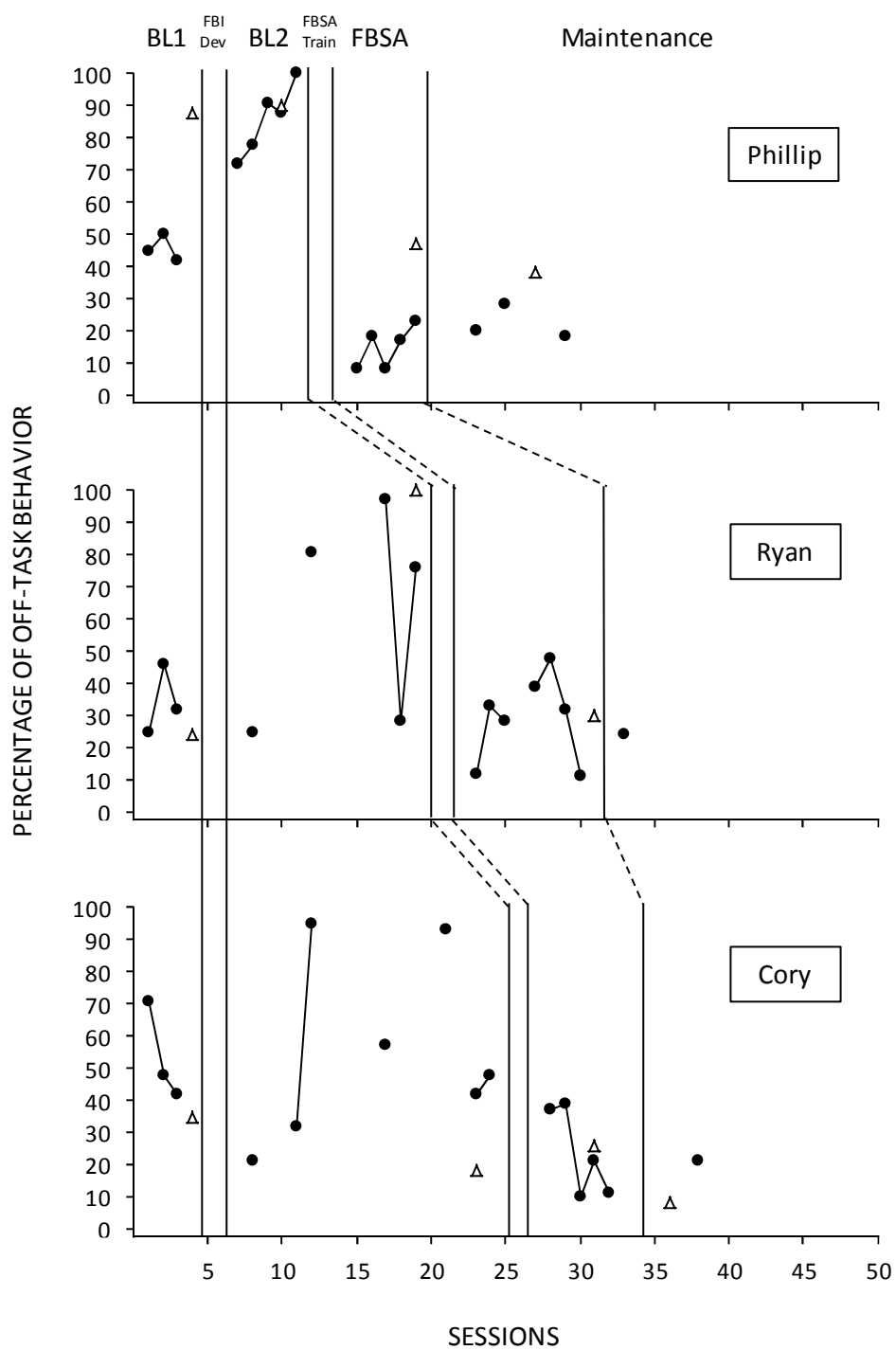


Figure 2. Percentages of intervals of participants' problem behavior across conditions in both the primary setting (solid circles) and generalization setting (open triangles)

Table 3. Mean and range of percentages of intervals of problem behavior and mean percentage change from baseline conditions

Participant	Baseline 1	Baseline 2	FBSA	Change	Change	Maintenance
				from BL1	from BL2	
Phillip	46%	86%	15%	-31%	-71%	22%
	(42%-	(72%-	(8%-			(18%-28%)
	50%)	100%)	23%)			
Ryan	34%	61%	27%	-7%	-34%	21%
	(25%-	(25%-97%)	(11%-			(range NA)
	36%)		48%)			
Cory	54%	55%	23%	-31%	-32%	21%
	(42%-	(21%-95%)	(10%-			(range NA)
	71%)		39%)			

Note. Numerals in parentheses represent range.

Replacement Behavior

Figure 3 displays the results of participants' replacement behavior. A visual analysis of pre-intervention and post-intervention results of students' display of cumulative number of replacement behavior was conducted to determine the effects of FBSA on the replacement behavior of the participants. This analysis revealed upon implementation of the FBSA, participants were more likely to engage in replacement behaviors than during baseline phases. Although participants did not engage in

replacement behaviors during every intervention session, they accumulated at least two replacement behaviors during intervention sessions.

Phillip. During Baseline 1 and Baseline 2, Phillip did not exhibit any replacement behavior. During implementation of FBSA, Phillip accumulated three occurrences of replacement behavior during intervention, suggesting an increase in his demonstration of the replacement behavior to ask for break. During the maintenance condition, Phillip continued to display the replacement behavior with three cumulative occurrences.

Ryan. During Baseline 1 and Baseline 2, Ryan did not demonstrate replacement behavior. During FBSA implementation condition, Ryan exhibited two accumulated occurrences of replacement behavior. During the maintenance condition, Ryan displayed no occurrences of replacement behavior across one data collection sessions. Data for the maintenance condition was only collected for one session due to student illness and behavioral challenges requiring teacher intervention.

Cory. During Baseline 1 and Baseline 2, Cory did not demonstrate replacement behavior. During the intervention condition, Cory engaged in the replacement behavior for an accumulated three times across five intervention sessions. During the maintenance condition, Cory accumulated one occurrence of the replacement behavior across one data collection session.

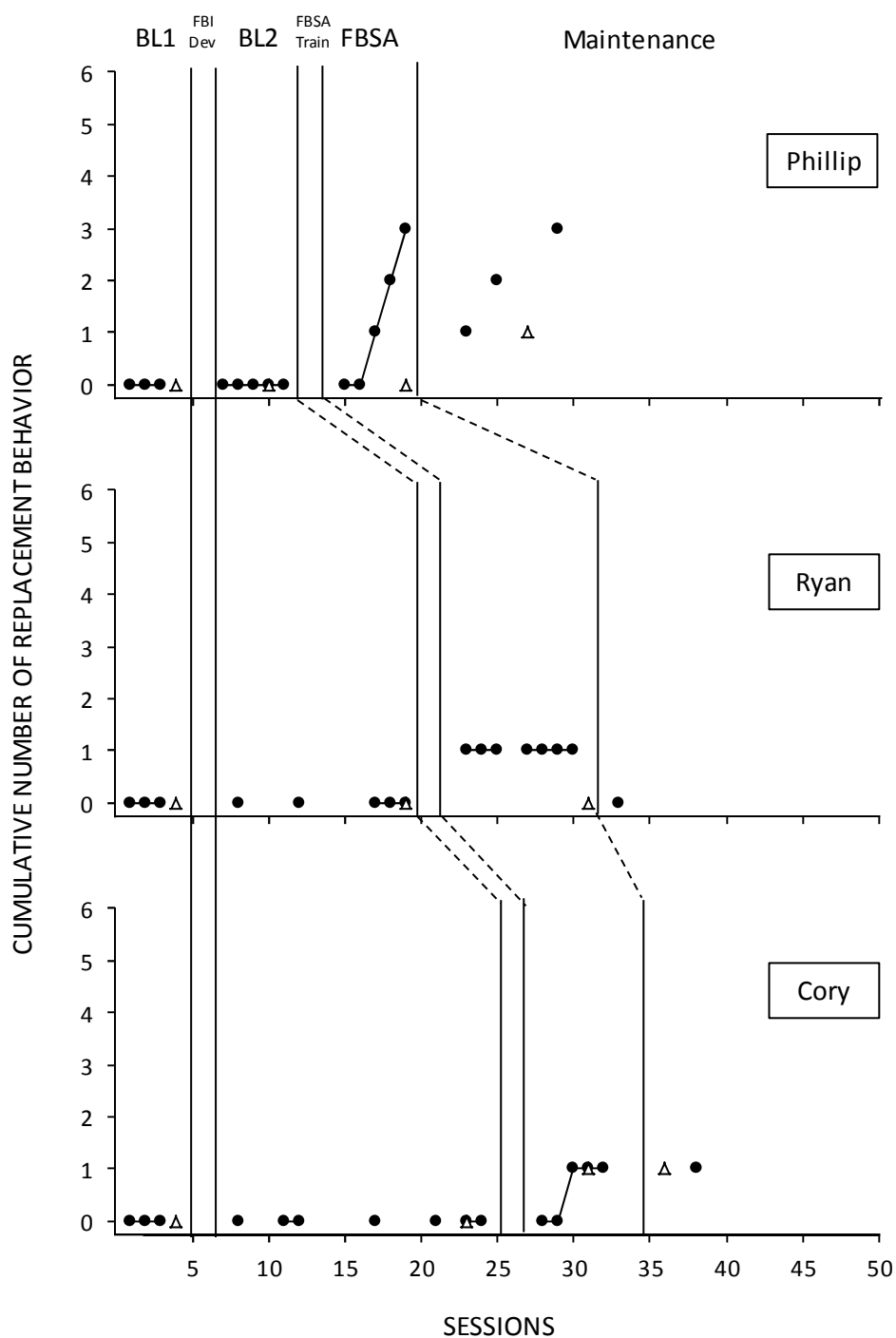


Figure 3. Cumulative number of replacement behavior by participants across conditions in both the primary setting (solid circles) and generalization setting (open triangles)

Teachers' Responses to Student Behavior

Phillip. During Baseline 1 and Baseline 2, Phillip did not display any replacement behaviors, and therefore, there were no responses recorded for positive reinforcement of the replacement behavior. At times Mrs. Clagg was preoccupied with other activities within the class and did not recognize Phillip's problem behavior, which may have provided escape from the task. During the initial interaction of FBSA implementation, Mrs. Clagg was very receptive to Phillip's request to access the replacement behavior. She asked clarifying questions about the intervention and gave him encouragement by commenting on her excitement about his decision to stay on task. Phillip requested a break during three intervention sessions. Each time Phillip completed his self-monitoring checklist and requested a break, Mrs. Clagg immediately agreed to the break and provided a positive comment (e.g., "Great job!"). There were two occasions that Phillip met his self-monitoring goal but did not want to take a break. He did not request a break or communicate with his teacher on the first occasion; however, on the second occasion he communicated with his teacher that he met his goal but did not want to take a break. Mrs. Clagg responded that she would be happy to allow him to take a break at a later time. During the maintenance condition, Mrs. Clagg continued to allow Phillip to take a break when he requested one (i.e., positive reinforcement) during three of the three data collection sessions.

Ryan. During Baseline 1 and Baseline 2 Ryan did not exhibit any replacement behaviors, and therefore his teacher, Mrs. Rivers, did not provide any positive reinforcement for replacement behavior. When Ryan was engaging in his targeted problem behavior (i.e., off-task), Mrs. Rivers prompted him to return to his task or

provided additional support, with the exception of one occasion. Specifically, during one session, Mrs. Rivers was assessing students within the class and provided Ryan with a preferred task, in lieu of the task assigned to the rest of the class, thus providing escape from the non-preferred task (e.g., independent math worksheet). Upon implementation of the intervention, Mrs. Rivers was very encouraging when Ryan requested to implement the replacement behavior in class. During the initial interaction of FBSA implementation, Mrs. Rivers provided positive feedback and expressed excitement about Ryan's potential to remain focused during class. Mrs. Rivers provided a total of two positive reinforcement for Ryan during the intervention, in responding to his demonstration of the replacement behavior. When he was engaging in the replacement behavior, he was offered encouragement and rewards (e.g., bonus points for Boys Town). Additionally, when Ryan exhibited problem behavior during FBSA implementation, Mrs. Rivers did not allow escape contingent upon his displays of problem behavior (i.e., no inadvertent reinforcement). During the maintenance condition, Ryan refused to use the self-monitoring strategy and requested breaks, therefore, Mrs. Rivers was not able to demonstrate response to his request.

Cory. Cory did not display replacement behaviors during Baseline 1 and Baseline 2, therefore no positive reinforcement for the replacement behaviors was provided by his teacher, Mrs. Marvin. At times when Cory was engaging in problem behavior his teacher would redirect him, but often failed to address the behavior due to lack of classroom management, or being preoccupied with other classroom activities or responsibilities. Upon implementation of the intervention during the initial interaction, Mrs. Marvin was responsive to Cory's requested and asked for clarification (e.g., "And this will be after

you have worked for how long?”), as well as offered encouragement. Upon meeting his self-monitoring goal during the third session of FBSA, Cory requested a break from his teacher and Mrs. Marvin responded to Cory that he needed to wait until a more appropriate time. Cory’s behavior was not impacted by being asked to wait. In the subsequent requests made by Cory, she allowed for the break immediately. Additionally, when Cory exhibited problem behavior during FBSA implementation, Mrs. Marvin did not allow escape contingent upon his displays of problem behavior (i.e., no inadvertent reinforcement). Data for the maintenance condition were collected for only one session due to student behavioral infractions resulting in disciplinary action, schedule conflicts, and limited time for study completion. During this time, Mrs. Marvin continued to allow Cory to take a break when he requested one (i.e., positive reinforcement) during the data collection session. Table 4 below shows the number of occurrences of teacher’s responses to each participant’s behavior.

Table 4. Number of occurrences of teachers’ responses to participants’ behavior in the primary setting

Participant	Baseline 1			Baseline 2			FBSA			Maintenance		
	ITR	TR	NR	ITR	TR	NR	ITR	TR	NR	ITR	TR	NR
Phillip	0	0	0	0	0	0	0	3 ^a	0	0	3 ^d	0
Ryan	0	0	0	1	0	0	0	2 ^b	0	—	—	—
Cory	0	0	0	0	0	0	0	3 ^c	1	2	1	0

Note. ITR = inadvertent teacher reinforcement; TR = teacher reinforcement; NR = no response; ^a teacher provided immediate positive reinforcement to each of the three occurrences of replacement behavior; ^b teacher provided immediate positive reinforcement for the two occurrences of the replacement behavior; ^c teacher provided

immediate positive reinforcement for two occurrences of the replacement behavior and one delayed positive reinforcement for one occurrence after initially providing no reinforcement,^d teacher provided immediate positive reinforcement for three occurrences of the replacement behavior

Self-advocacy Skill Steps

Figure 4 displays the results of the number of self-advocacy skill steps each participant completed successfully during the initial interaction with their general education teacher. During this interaction, participants attempted to complete steps providing their teacher with specific information in regard to accessing function-based support via replacement behavior engagement in the general education classroom. Overall, during Baseline 1 and Baseline 2 conditions, none of the participants performed any of the skill steps. During FBSA implementation, Philip successfully completed 12 out of 13 steps, only missing the first step, which was “to greet your teacher with friendly greeting.” Both Ryan and Cory completed all 13 applicable steps. During the maintenance condition, the number of steps completed correctly dropped substantially for Phillip to 4 steps, due to the nature of the interaction between the teacher and the student. Specifically, upon implementation of the intervention for several days, the student may have felt the teacher did not need the full explanation of the request for accommodations and only provided the basic information necessary for the student to access the replacement behavior (e.g., Phillip only provided an informal introduction, a plan for self-monitoring, and replacement behavior of requesting a break). Ryan completed no steps during the maintenance condition, as he refused to participate in the FBSA

intervention interaction. Cory completed 13 steps of self-advocacy during the maintenance condition.

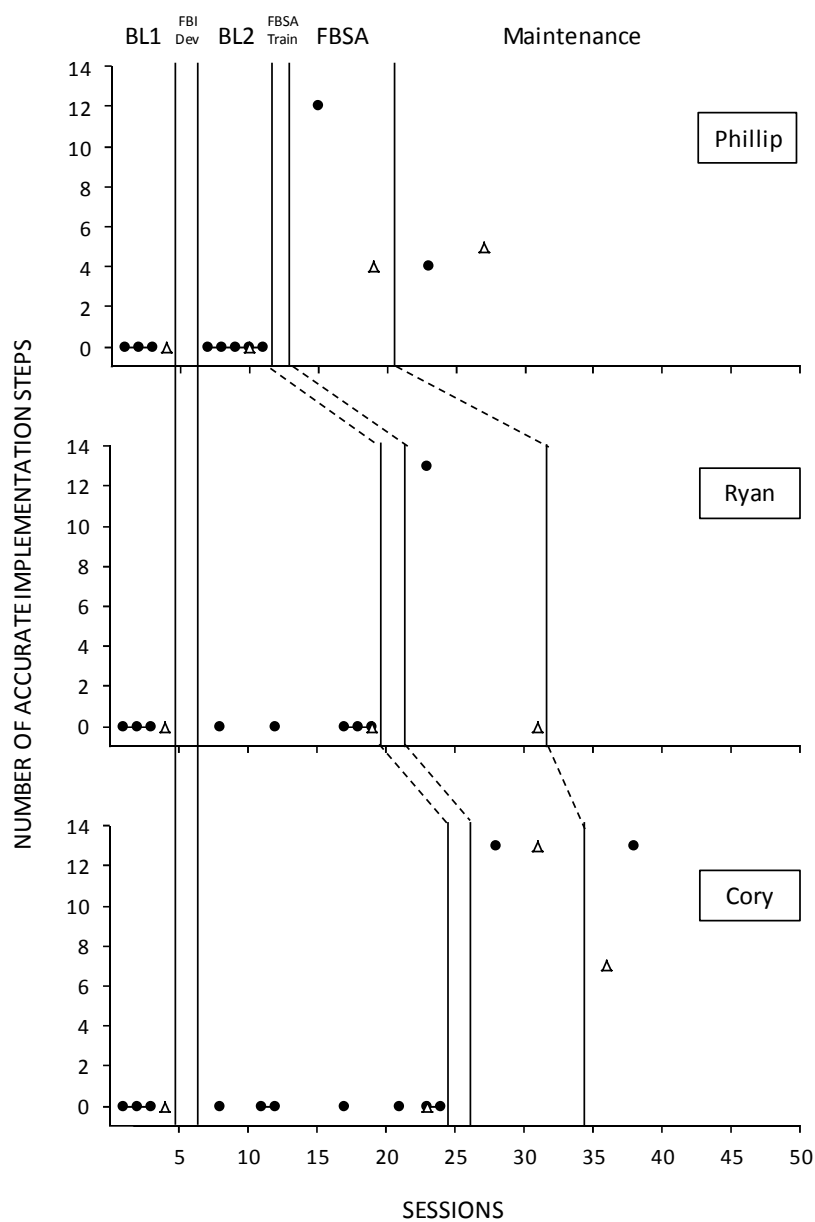


Figure 4. Results of correct number of self-advocacy steps completed by participants in both primary setting (solid circles) and generalization setting (open triangles).

Generalization

Generalization data were collected for participants' problem behavior, replacement behavior, and self-advocacy skill steps, as well as teachers' responses to student behavior once per Baseline 1, Baseline 2, FBSA, and maintenance conditions to determine the generalizability of the FBSA strategy. Figures 2, 3, and 4 present generalization data (in open triangles) for participants' problem behavior, replacement behavior, and self-advocacy skill step completion, respectively. Overall, all three participants reduced the percentages of intervals of problem behavior during FBSA implementation in the generalization setting when compared to the baseline data, and continued to perform at a lower level of problem behavior during the maintenance condition. For the replacement behavior, students demonstrated an overall increase in displaying replacement behaviors, with the exception of Ryan who refused to participate in the generalization setting during Baseline 2 and refused to use the FBSA to request support from the teacher during intervention and maintenance phases. For the self-advocacy skill steps, two of the three students demonstrated an increase in the ability to self-advocate in the generalization setting by exhibiting a mean of 5 steps completed (range 4-5).

Table 5 displays the results of the teachers' responses to participants' behavior in the generalization setting. Overall, teachers did not reinforce the problem behavior or replacement behavior in an overt manner in the generalization setting across all experimental conditions (except Philip during one occasion during Baseline 1 and the maintenance condition). During Baseline 1, the teacher began to banter back and forth with Phillip on several occasions, which inadvertently reinforced his problem behavior

(i.e., off-task). During the maintenance condition, Phillip's teacher positively responded to his request to access the replacement behavior each time he made the request (i.e., one time) and did not provide reinforcement for the replacement behavior in the times he did not request access (i.e., two times). Cory's teacher also provided reinforcement for the replacement behavior during the maintenance condition each time Cory requested the replacement behavior. Ryan failed to engage in the replacement behavior or requesting the replacement behavior during maintenance, and therefore his teacher did not provide reinforcement for the replacement behavior during the maintenance condition.

Table 5. Number of occurrences of teachers' responses to participants' behavior in the generalization setting

Participant	Baseline 1			Baseline 2			FBSA			Maintenance		
	ITR	TR	NR	ITR	TR	NR	ITR	TR	NR	ITR	TR	NR
Phillip	16 ^a	0	0	0	0	0	0	0	0	0	1	0
Ryan	0	0	0	-	-	-	0	0	0	—	—	—
Cory	0	0	0	0	0	0	0	0	0	0	0	0

Note. ITR = inadvertent teacher reinforcement; TR = teacher reinforcement; NR = no response; ^a teacher provided inadvertent reinforcement for problem behavior by bantering with the student

Social Validity Questionnaires

The experimenter collected social validity data from the targeted students and general education teachers using social validity questionnaires (see Appendixes G, H, I, and J) prior to entering Baseline 2 condition, and at the end of the study.

Target students' results on the pre-intervention social validity questionnaire (i.e., items 1-6) revealed that students reported having very little or no knowledge of self-advocacy (e.g., response of "Completely Disagree" responding to the statement "I know what self-advocacy is.") with some understanding of their behavioral challenges and ability to address those challenges with their teacher. On the post-intervention social validity questionnaire addressing the same items (i.e., items 1-6), students reported an increase in understanding of self-advocacy and an increase in confidence in displaying self-advocating behaviors to support their behavioral challenges. Overall, the mean score for the pre-intervention social validity questionnaire was 2.7 (range 1-4), and the mean score for the post-intervention social validity questionnaire was also 2.7 (range 1-4), resulting in no change from pre-intervention to post-intervention in regard to student perspective on the social validity of the FBSA strategy. Ryan responded to item one "I know what self-advocacy is" with a 1, indicating "completely disagree" on both the pre- and post-assessments. However, during the training session Ryan was able to articulate the meaning of self-advocacy and give examples related to how he could self-advocate. He also responded to item six "I know the things I need to do to behave better when I am in class" with a 1, indicating "completely disagree" for the post-assessment, which was contrary to his response on the pre-assessment of a 4, indicating "completely agree" as his response. As mentioned previously, this could be due to ongoing and escalating behavioral challenges occurring throughout the academic setting as a result of an incident that happened after beginning the study.

For items displaying post-intervention responses only (i.e., items 7-12), the mean score for these items was 3 (range 2-4), representing responses of "Agree" or

“Completely Agree” for all items in regard to student perspective on the social validity of the FBSA strategy, with the exception of a response of “slightly disagree” for seven of the 10 items reported by Ryan. As mentioned previously, Ryan was experiencing escalating difficulty in regard to his behavior across the entire academic day. During administration of the post-intervention social validity questionnaire, Ryan was not cooperative and required continual prompting to complete the questionnaire. Although he did complete the questionnaire, his responses may not reflect a true response due to challenging cooperation and should be considered with caution. Table 6 displays the results of the social validity questionnaires completed by the student participants.

Table 6. Results of the social validity questionnaire by participants

Items	Phillip		Ryan		Cory	
	Pre	Post	Pre	Post	Pre	Post
1. I know what self-advocacy is.	1	3	1	1	1	3
2. I know how to self-advocate.	1	3	1	2	1	4
3. I feel comfortable telling my teachers about my behavior problems.	2	2	3	2	3	4
4. I talk to my teachers about my disability and/or behavior challenges.	2	3	2	3	2	4
5. I know why I have problems with my behavior in class.	2	2	1	1	4	4
6. I know the things I need to do to behave better when I am in class.	3	3	4	1	4	4

7. *After the self-advocacy training, I feel this strategy is something that I can do all by myself.	-	3	-	2	-	4
8. *The self-advocacy strategy has helped me share my needs with my teacher(s).	-	3	-	3	-	4
9. *The self-advocacy strategy helped me be more successful in class.	-	3	-	2	-	4
10. *The self-advocacy strategy helped me with my behavior while in school.	-	3	-	2	-	4
11. *The self-advocacy strategy helped me feel more confident about talking to my teachers about my behavior needs.	-	3	-	2	-	3
12. *The self-advocacy strategy helped me feel more comfortable talking about my behavior needs.	-	3	-	3	-	3
13. *I think the self-advocacy strategy will be helpful in all of my classes.	-	3	-	2	-	4
14. *The self-advocacy strategy took the right amount of time to learn.	-	3	-	2	-	4
15. *I can see my peers with behavior problems being able to learn this strategy.	-	3	-	3	-	3
16. *I think learning these skills will help	-	4	-	2	-	4

me after I graduate.

Note: 1 – Completely Disagree, 2 – Slightly Disagree, 3 – Agree, 4 – Completely Agree.

Items marked with * were presented only in the post-intervention questionnaire.

The pre-intervention social validity questionnaire completed by the teachers indicated a response of “Some/Likely” or “A lot/Very Likely” for the majority of questions regarding the applicability and value of the social impact on students with behavior challenges and teachers’ ability to provide the students support in the general education classroom. For items displaying pre- and post-intervention responses (i.e., items 1-11), the mean score for the pre-intervention questionnaire was 3.6 (range 3-4), whereas the mean score for the post-intervention social validity questionnaire was 3.4 (range 2-4), resulting in a change of -.2 from pre-intervention to post-intervention in regard to teacher perspective on the social validity of the FBSA strategy. Responses to the post-intervention questionnaires completed by teachers upon completion of the intervention were similar to the pre-intervention responses of “Some/Likely” or “A lot/Very Likely” for all questions, with the exception of one response of “Very Little/Fairley Likely” by one teacher (e.g., Mrs. Clagg) regarding increasing the level of support she would provide to her students due to student self-advocacy.

For items displaying post-intervention responses only (i.e., items 12-18), the mean score for these items was 3.4 (range 3-4), representing responses of “Some/Likely” or “A lot/Very Likely” for all items in regard to teacher perspective on the social validity of the FBSA strategy. Table 7 displays the results of the social validity questionnaires completed by teachers.

Table 7. Results of social validity questionnaires by teachers

Items	Clagg		Rivers		Marvin	
	Pre	Post	Pre	Post	Pre	Post
1. I place a lot of emphasis on teaching self-advocacy to my students with or at risk for EBD.	3	3	4	4	3	3
2. I feel self-advocacy instruction is important for students with or at risk for EBD.	4	3	4	4	4	4
3. I feel the level of support I provide to students with behavior challenges would increase if they were to appropriately self-advocate their needs.	3	2	3	4	3	3
4. I feel other teachers would be more responsive to supporting students with behavior challenges if students self-advocated their needs.	3	3	4	4	4	3
5. I feel students with or at risk for EBD who possess self-advocacy skills and proactively seek assistance for problem behaviors can positively affect the overall environment of my classroom.	4	3	4	4	4	4
6. In general, my students (including non-disabled students) self-advocate.	4	2	4	3	3	4

7. I feel self-advocacy skill training can help students with EBD who are transitioning to general education settings from more restrictive settings.	4	3	4	4	3	4
8. I believe all students with disabilities will benefit from the self-advocacy training.	4	3	4	4	3	4
9. I am likely to share a self-advocacy training strategy with other educators if it were available.	3	3	3	3	3	4
10. I am likely to share the self-advocacy training strategy with parents if it were available.	4	3	4	3	3	4
11. I feel this training would be beneficial for all students (not just those with disabilities).	4	3	4	4	4	4
12. *The self-advocacy training and strategy is something that students with or at risk for EBD can do independently.	-	3	-	3	-	3
13. *The self-advocacy training and strategy helped me support the target student in addressing his/her challenging behavior.	-	3	-	4	-	4
14. *The self-advocacy training and strategy was useful in my class.	-	3	-	4	-	4
15. *I can see the self-advocacy training and	-	3	-	4	-	4

strategy as being useful in other general education classes.						
16. *I saw positive changes to the target student's classroom behavior.	-	3	-	3	-	3
17. *I saw positive learning of the self- advocacy skills from the target student with EBD.	-	3	-	3	-	3
18. *The skills learned in the self-advocacy training benefits outweighed the time the target student spent out of the classroom.	-	3	-	4	-	4

Note: 1 – None/Not at all Likely, 2 – Very Little/Fairly Likely, 3 – Some/Likely, 4 – A lot/Very Likely.

Items marked with * were presented only in the post-intervention questionnaire.

AIR Self-determination Ratings

Prior to Baseline 2 condition and at the conclusion of the study, each participant completed the *AIR Self-determination Scale* (Wolman et al., 1994), a 30-item assessment, for the pre- and post-intervention assessments of their self-determination skills. The assessment breaks down self-determination skills into two outcome categories of *capacity* and *opportunity*. Within each category, results are broken into three subcategories of (a) knowledge, (b) ability, and (c) perception. The breakdown of these categories provides a detailed assessment on a student's current level of skill, as well as level of need. Scores yielded are used to determine student level of self-advocacy and self-determination skills,

which can be used for progress monitoring or comparison to teacher or parent report of student self-advocacy skills. The scores are reported in a raw score within each category. The scores for each category are combined and converted to an overall percentage, according the assessment protocol conversion chart. Pre-intervention assessment results are compared to post-intervention results to identify change in scores as indicated in Table 8. Analysis of pre-intervention and post-intervention scores indicates a decrease in overall scores for Ryan and Cory, and an increase in the overall score for Phillip. Phillip's scores increased by 20 points, which was converted to a 17% increase, indicating an increase in his overall level of self-determination. The greatest change in regard to Phillip's level of self-determination was his ability to recognize and engage in opportunities for self-determination at school and at home, as his pre-intervention score of 27 increased to 43 post-intervention. Ryan's scores decreased by nine points, which was converted to a 6% decrease, suggesting a possible reduction in level of self-determination. Ryan's scores decreased in the area of capacity, from 43 pre-intervention to 29 post-intervention, suggesting Ryan's consideration for his ability to think about and engage in self-determined behavior decreased between the initial pre-intervention assessment and the post-intervention assessment. Cory's scores decreased by eight points, which was converted to a 5% decrease, indicating a possible reduction in level of self-determination. The greatest change for Cory was in the area of opportunity, suggesting Cory considered his opportunity to engage in self-determined behaviors to be less upon completion of the intervention than prior to implementation.

Table 8. AIR Self-Determination pretest and posttest results

Outcome	Phillip		Ryan		Cory	
categories	Pre	Post	Pre	Post	Pre	Post
Capacity	30	37	43	29	50	48
Opportunity	27	43	21	36	53	46
<i>Level of Self-determination</i>	60	80	74	65	103	94
	50%	67%	63%	57%	84%	79%
Change	-	20	-	9	-	8
		+17%		-6%		-5%

CHAPTER 5: DISCUSSION

The purpose of this study was to investigate the effects of function-based self-advocacy training on the problem behavior, replacement behavior, and self-advocacy skills of students with or at risk for EBD in general education settings. A multiple probe across participants design (Horner & Baer, 1978) was conducted to evaluate the effects of FBSA on the participants' problem behavior displayed in the general education setting. Additionally, the number of steps completed correctly of the FBSA strategy, display of replacement behavior, and teacher response to students' request to access the replacement behavior were evaluated descriptively to determine changes either over time or as pre- and post-intervention measures. Overall, the results of this study demonstrate a functional relation between FBSA and the reduction of problem behaviors of all three targeted students. In regard to social validity of the study, there was a slight decrease in student perspective and a positive change in teacher perspective on the importance of self-advocacy skills upon the implementation of the FBSA strategy. This chapter includes discussion of findings organized by research question, limitations and contributions, suggestions for future research, and implications for practice.

Primary Research Questions

Research Question 1: What are the effects of function-based self-advocacy training on the problem behaviors of students with or at risk for EBD in general education settings? Findings from this study indicate a functional relation between

FBSA training and the problem behaviors of the targeted students. Implementation of FBSA resulted in a reduction in problem behaviors displayed in the general education classroom for Phillip, Ryan, and Cory. For each participant, problem behavior was reduced greatly when compared to Baseline 1 and Baseline 2, with an overall mean reduction of 16% from Baseline 1 and 46% from Baseline 2 across all participants. Test et al. (2005) noted the importance of students understanding and knowing themselves in order to be able to communicate their wants and needs; therefore, following Baseline 1 the experimenter met with each student to provide information about their specific behavioral function. This was followed by a second baseline to differentiate the impact of providing knowledge about students' behavioral function and the FBSA package. Results indicated an overall increase in problem behavior for Phillip and Cory from Baseline 1 to Baseline 2 (40% and 27%, respectively), with a slight decrease in problem behavior (1%) for Cory, indicating providing students with information regarding their behavioral function alone did not improve their problem behavior. A possible explanation for this increase in problem behavior may have been attributed to students' awareness of the researcher in the room, presence of the video camera, or building of rapport with the experimenter during the initial FBA development (e.g., student interviews), completion of AIR Self-determination Assessment, and pre-intervention social validity questionnaire. Initially, the experimenter attempted to build a strong rapport with students during the FBA development, to provide students with a level of support and comfort during the FBSA training, as well as to ensure the most accurate collection of FBA data. The experimenter explained to students they had been selected based on the recommendation of their teacher who was confident that the student would be helpful in developing a

strategy that would help students with behavioral challenges. An analysis of the data trends upon beginning Baseline 2 revealed that Phillip's data displayed a consistent upward trend, whereas Ryan and Cory displayed more variable data with an overall higher mean during Baseline 2 than that during Baseline 1. Phillip's teacher noted he had grown accustomed to the experimenter's presence in the classroom and no longer felt the need to behave as well as he had previously, suggesting Phillip may have had a reactive effect during the initial one or two baseline observation sessions.

Upon training and implementation of the FBSA in the general education setting, problem behavior of all students decreased substantially. Additionally, students' behavior maintained at a lower level than that during Baseline 1 and Baseline 2. As a key component of the FBSA strategy, the embedded FBI likely contributed to the reduction in problem behaviors. For this study, students were heavily involved in the development of the FBI through student interviews, student input on replacement behaviors and behavior support strategies, and recruitment of reinforcement from teachers. As emphasized by Wehmeyer et al. (2004) who conducted a study interviewing individuals and teachers on the development and implementation of FBIs, allowing an opportunity for the person receiving behavioral supports to provide knowledge about the development of the FBA is key. Furthermore, authors encouraged students with challenging behaviors to assume greater responsibility for planning for supports, which has the potential to lead to overcoming behavioral challenges. By including the student in the development of the intervention, and then seeking out teacher support through recruitment (i.e., self-advocating), this study addressed some of the recommendations provided by Wehmeyer et al. (2004). By displacing the sole responsibility from teacher-developed FBI to include

students' involvement of (a) understanding their behavioral challenges (i.e., behavioral function), (b) understanding how to access a feasible replacement behavior, and (c) how to request this individualized support in academic settings that may not be conducive for supporting students with elevated behavioral needs, the FBSA empowers students in that they can facilitate change independently to improve their academic outcomes. Moreover, the results of this study are consistent with the study conducted by Kelly and Shogren (2015), who demonstrated the positive effects of teaching self-determination skills through the SLDMI on the on-task and off-task behaviors of four students with EBD in the general education setting. Through the explicit and systematic instruction of self-determination skills, the three participants in the current study were able to self-advocate their needs, which provided a means for teachers to become aware of specific student behavioral functions and to support the improvement of behaviors in the primary setting, generalized setting, as well as maintain these skills over a period of three weeks.

It should be noted that Ryan began to experience some escalating behaviors that varied from day-to-day due to an incident that occurred with another student in his general education classroom. It was determined that Ryan was attempting to avoid attending the general education class by engaging in these behaviors (e.g., growling, scratching his materials, making aggressive gestures toward another student, crawling on all fours emulating a cat). When his general education teacher or special education teacher attempted to intervene, his response varied. At times he would respond appropriately and return to completing the task assigned; other times his behavior would escalate stating phrases such as "If you try to help me, I will make it worse." During the second baseline on the first day of data collection, Ryan's teacher was completing an

assessment with individual students. It was during this time that his teacher asked him to read a book of choice in lieu of completing the task assigned to the rest of the class, thus reinforcing Ryan's escape from a non-preferred task behavior. This resulted in a low level of problem behavior displayed (25%) temporarily, but might have further strengthened Ryan's problem behavior to avoid a task. Despite the variability in Ryan's data during Baseline 2 and the slight upward trend during the initial period of the intervention condition, Ryan's overall problem behavior decreased by 7% from Baseline 1 and 34% from Baseline 2, indicating effectiveness of the FBSA on decreasing Ryan's problem behavior.

Research Question 2: What are the effects of function-based self-advocacy training on the replacement behaviors of students with or at risk for EBD in general education settings? Findings from the study indicate an increase in the number of times students engaged in the replacement behavior after the FBSA training and implementation for all three students. Prior to FBSA implementation, students did not display replacement behavior across Baseline 1 and Baseline 2. Despite student's awareness of their behavioral function, students were able to identify and request access to the replacement behavior only after the FBSA training. As reported by Houchins (2002) and Van Gelder et al. (2008), individuals with EBD often lack naturally attained self-determination and self-advocacy skills, despite being provided with information about their behavioral function. Based on this common barrier, research suggests the need for explicit and systematic instruction of self-determined behavior (Wagner & Davis, 2006; Wagner, Kutash, Duchnowski, & Epstein, 2005). The current study is consistent with the findings of Houchins (2002) and Van Gelder (2008) in that students failed to

exhibit behavioral change simply due to gaining knowledge about their behavioral function. Additionally, students only engaged in self-determined behavior specific to their behavioral needs after the FBSA training was completed, which further supports the importance of explicit and systematic instruction of self-determined behaviors (Wagner & Davis, 2006; Wagner et al., 2005).

During the intervention of this study, students only engaged in the request for the replacement behavior upon meeting their goal (e.g., 4/5 “yes” for on-task behavior in a 15-min session with 3-min intervals for self-monitoring). Due to the limited number of potential replacement behaviors accessed by targeted students during each observation session (i.e., one potential replacement behavior per session), students exhibited a low number of replacement behavior. For each student, the replacement behavior selected was a form of taking a break from the non-preferred task. For example, Phillip was to work for 15 min and upon meeting his goal of remaining on-task he was to request a break from his teacher. During the break, he would play a computer game or talk with a preferred peer for 5 min. During two of the data collection sessions, Phillip was diligently working on task and did not want to take a break, and therefore did not ask the teacher for a break, even though he had met his goal. After a short discussion reminding Phillip to inform his teacher about his performance and that he had earned a break but did not want to take it at that given time, he improved his communication with his teacher. This provided an opportunity for the teacher to support Phillip in his on-task behaviors by providing positive reinforcement and offering an alternative time for him to take a break.

During the initial development of the self-monitoring strategy (i.e., FBI), students worked toward a goal for 15 min with a prompt set for 3 min or 5 min, depending on the

student level of need, with input from the student during the initial development phase. This was done to ensure students were not seeking a break too often, with a potential to place too much strain on the general education teacher. Additionally, providing students with a momentary “break” to self-monitor (e.g., place a check on monitoring sheet) may have allowed students to contact the reinforcer of taking a break multiple times throughout the intervention, which may have resulted in student behavior decreasing substantially. Although this study sought to teach students how to self-advocate their needs to the general education teacher, it is clear that students will need assistance with long-term maintenance of the FBI. Upon the completion of the intervention phase, the experimenter met with the teacher to discuss ways to continue supporting the students by extending the time each student self-monitored prior to requesting a break. This varied for each student, based on their performance in class for on-task behaviors, as well as contextual fit for the classroom environment. The key component in this study was to reduce the overall problem behavior in the classroom. Students were able to self-advocate their needs and engage in an FBI that had a positive impact on their behavior, despite not accessing the replacement behavior in each instance of meeting their goal. This supports the suggestions for future research provided by Dwyer, Rozewski, and Simonsen (2012), specifically suggesting a means to increase the amount of engagement in instruction, resulting in less need for replacement behaviors, as well as to provide students choices among replacement behaviors as was done in this study.

Secondary Research Questions

The secondary research questions addressed teachers’ responses to the students’ behaviors, students’ ability to perform targeted skills learned during the FBSA training in

the primary and generalization settings, students' level of self-determination, as well as teacher and student perception of the FBSA strategy. These questions were evaluated using pre- and post-intervention comparison.

Research Question 3: To what extent do general education teachers' responses to the problem behaviors and appropriate replacement behaviors of students with or at risk for EBD change from pre-intervention to post-intervention?

Prior to FBSA implementation, general education teachers provide students with access to a replacement behavior, and offered varying support for displaying on-task behaviors. For example, Mrs. Marvin, Cory's teacher, often failed to redirect Cory to task completion despite a Tier 2 plan in place. In another example, Ryan's teacher, Mrs. Rivers, provided several cues and feedback to Ryan when he was completing a task, yet her efforts did not meet Ryan's needs to access the reinforcer. This is consistent with Blood and Neel (2007), which reported a lack of support provided by general education teachers to students, despite having behavioral support plans in place, such as IEP or Tier 2 intervention plan. However, following FBSA implementation, all three teachers increased the response to student request to access the reinforcer for the replacement behavior. It is important to note teachers did not provide responses or prompts to students unless the targeted students requested access to the replacement behavior. In all instances, with the exception of one, the teachers responded to participants by allowing them to access the reinforcer after confirmation of the student meeting the targeted goal (e.g., remaining on task for 80% of the intervals in a 15-min session). For one instance, Mrs. Marvin did not provide Cory with access to the reinforcer upon meeting his targeted goal and requesting access to the reinforcer (e.g., taking a break in the office). Mrs. Marvin

told Cory it was not an appropriate time for him to take a break and he would have to wait. Although it would have been ideal for Mrs. Marvin to provide positive reinforcement contingent on the replacement behavior immediately and consistently, particularly during the initial implementation, Cory's behavior was not impacted by this as his behavior did not increase or decrease substantially during data collection following the denial of access to the break. After approximately 5 min, Mrs. Marvin told Cory he could take his break. Meyer (1999) conducted a study examining off-task behavior in response to functionally relevant and irrelevant replacement behaviors of four elementary students with learning and emotional disabilities. Results indicated students demonstrated lower level of off-task behaviors during functionally relevant replacement behavior condition. For example, when the students were reinforced for requesting assistance, off-task behaviors decreased. The author highlighted the importance of teacher provided reinforcement of replacement behaviors that were functionally relevant. Although Cory's behavior was not impacted for the instance of Mrs. Marvin failing to immediately reinforce the replacement behavior, teacher reinforcement of replacement behavior remains a key component in the successful implementation and sustainability of the FBSA.

Research Question 4: What are the effects of function-based self-advocacy training on the performance of self-advocacy skills of students with or at risk for EBD participating in a general education setting? Based on the results of the study, all students met mastery criteria (i.e., 11 steps met) upon the initial interaction with the general education teacher, indicating students were capable of learning the FBSA strategy in a one-on-one training session with the experimenter and could then complete the steps

with their general education teacher independently. During the maintenance condition, students engaged in FBSA steps; however, they did not meet mastery as in the intervention phase. In some instances, such as during an interaction between Phillip and Mrs. Clagg, the student provided a brief version of the interaction by only stating the intervention plan, the replacement behavior, and asking for agreement. In another interaction between Mrs. Clagg and Cory, Mrs. Clagg interjected when Cory began to complete the FBSA steps by providing him the information about the FBI. This indicates Mrs. Clagg may have become more invested in the intervention and was willing to proactively support the student before actually requesting reinforcement.

During the training session, the students and the experimenter developed the FBI to be implemented in the classroom. With the support of the experimenter, students completed numbered cue cards pre-printed with basic information (e.g., “I have learned to _____, which helps me _____.”) to which students could refer during the training session and during the initial interaction with their general education teacher. During the training session, Phillip and Cory chose not to use the cards for cueing; however, during the initial interaction with his teacher Cory chose to refer to the cards. Phillip still did not refer to the cue cards during the interaction. Additionally, following the training Ryan requested the cue cards to remain in his behavior support classroom in the event that he would need to access them.

Given that very few students with or at risk for EBD have the ability to independently communicate their needs even when being addressed through an intervention (Landrum et al., 2003), the present study attempted to embed a way in which students could systemically learn to communicate their needs through self-advocating

(Newman et al., 2011; Mazzotti et al., 2016; Test et al., 2009). Findings on the participants' demonstration of self-advocacy steps are consistent with studies conducted by Test et al. (2005) and Wood et al. (2004) in which students identified as having a disability were able to demonstrate the ability to self-advocate upon instruction. Additionally, results of this study demonstrates FBSA can serve as a means to address three of the four key components of self-advocacy according to Test et al. (2005), including: (a) knowledge of self through the development of the FBA and FBI with heightened student involvement; (b) communication through FBSA instruction, which explicitly teaches steps for interacting and self-advocating to one's teacher; and (c) leadership through taking responsibility for one's behavioral challenges and taking action to make a positive change.

Research Question 5: To what extent does students' self-assessment of self-determination change from pre-assessment to post-assessment as measured by *American Institutes of Research (AIR) Self-determination Assessment* (Wolman et al., 1994)? Based on the results of the pre-assessment and post-assessment of the *AIR Self-determination Assessment*, Phillip's level of self-determination increased by 17 points, whereas Ryan's and Cory's level of self-determination decreased by six points and five points, respectively. The expected outcome after implementation of self-advocacy instruction would be an increase in self-determination across all three students; however, only one student's level of self-determination increased. One possible explanation for this outcome is that students may have been able to answer questions more accurately with a better understanding of each statement in regard to self-determined behavior, after gaining knowledge during the FBSA training about self-determination and self-advocacy

and how it can be directing applied to their lives. This may have been the case for Cory who scored 5% lower on his level of self-determination in the post-assessment. Another explanation is that the amount of time between the first administration of the *AIR Self-determination Assessment* and the second administration (i.e., approximately 3 weeks) may not have provided enough time for a true indication in change from pre- to post-assessment. Second, as mentioned previously, Ryan had been demonstrating some escalating behaviors, particularly when asked to complete an atypical task, such as the *AIR Self-determination Assessment*. During the administration of the post-assessment, Ryan's behaviors escalated to include talking in a voice louder than his typical voice, crawling around the assessment room on all fours, and staring blankly. As a result, his responses may not be a true indication of his level of self-determination due to interference of his problem behavior. Conversely, Phillip's outcomes are consistent with the findings in Pollio et al. (2005)'s study that asserted providing students with an opportunity to better understand why they are engaging in a particular behavior promotes ownership, a sense of empowerment, and autonomy, which may lead to higher levels of self-determination.

Research Question 6: To what extent are students with or at risk for EBD able to generalize skills learned from the function-based self-advocacy model to other general education teachers in a different setting? Two of the students in the study, Phillip and Cory, were able to generalize the skills learned in the FBSA training to another classroom and teacher within the general education setting. Both students met with their teacher in the generalization setting to complete the steps of the FBSA, specifically providing information about the FBI to the teacher. Following the initial

interaction, both students demonstrated a reduction in the problem behavior displayed in the generalization setting from Baseline 1 and Baseline 2, as well as requesting the replacement behavior upon completing the targeted goal. Ryan, however, refused to attend the generalization setting during intervention and maintenance conditions. During Baseline 1, Ryan attended the generalization setting, yet during Baseline 2 he encountered an issue with another student during his time in the generalization setting and therefore refused to attend for the weeks following Baseline 1. To promote successful generalization, some preventative measures could have been considered prior to attempting the FBSA in the generalization setting. For example, programming of common stimuli during the training session and providing a mediator responsible for implementing the intervention in the generalization setting may have increased the generalizability of the skills. Another example in which the skills may have generalized more successfully might have been to ensure the generalization setting has a high level of natural reinforcements for his replacement behavior (e.g., access to preferred tasks or peers during earned breaks). Finally, much of the focus during the FBSA training was on the primary intervention setting. Providing Ryan with explicit examples and non-examples from both settings may have provided the instruction necessary for Ryan to generalize the skill to both settings with greater success.

During the interaction between Phillip and the teacher in the generalization setting, Phillip chose not to use his cue cards, resulting in completing only four of the steps correct. Additionally, the teacher for the generalization setting appeared to question his ability to remain focused during class and did not offer encouragement, despite agreeing to allow him to request a break upon working toward completion of a task for 15

min. Following the interaction, Phillip's problem behavior demonstrated a reduction from baseline, indicating the intervention was effective; however, the level of reduction was not as substantial in the generalization classroom as in his homeroom classroom. This may be due to the difference in the reaction from the homeroom teacher (i.e., warm, welcoming, encouraging) and the generalization teacher (i.e., questioning, doubtful). Conversely, when Cory approached the teacher in his assigned generalization setting, he was received with excitement and encouragement. He demonstrated completion of all 13 applicable steps correctly. He responded to the teacher with a "high five," and exhibited a 28% reduction in problem behavior from Baseline 1 and a 27% reduction in problem behavior from Baseline 2. These results are consistent with the student conducted by Shogren and Kelly (2014), which indicated students with EBD were able to effectively demonstrate the ability to self-advocate not only in the primary setting, but in the generalized setting. Furthermore, during the final session of maintenance data collection for Phillip, he generalized his self-advocating skills to advocate for his needs beyond the training provided to him. Specifically, he requested to move to another location in the room due to a glare on the screen. Previously when encountering same situation, Phillip did not self-advocate to ensure he could remain on task. Examples such as this demonstrate the generalizability of the present study, which extends the research on applying self-determination interventions across a variety of settings (Konrad & Test, 2007; Snyder & Shapiro, 1997).

Research Question 7: How do the pre-intervention perceptions of the function-based self-advocacy strategy compare to the post-intervention perceptions of student participants? The results of the pre-intervention and post-intervention social

validity questionnaires on student perceptions of the FBSA indicate no change to the overall mean score ($M=2.7$). The greatest change from pre-intervention to post-intervention was students indicating an understanding of self-advocacy and the ability to know how to self-advocate. Prior to implementation of the FBSA, a mean score of 1 (range NA) (i.e., “Completely Disagree”) in response to the statement “I know what self-advocacy is.” indicates students had no knowledge of self-advocacy. Following the implementation of FBSA, a mean score of 1.3 (range 1-3) indicated two students increased their knowledge about self-advocacy by indicating a score of 3 (i.e., “Agree”) in response to the same statement “I know what self-advocacy is.” For the second statement, “I know how to self-advocate,” a mean score of 3 (range 2-4) on the post-assessment indicates an increase in students’ ability to self-advocate, when compared to the pre-assessment mean score of 1 (range-NA). Follow up questions regarding the applicability, helpfulness and usefulness, and impact on positive behaviors indicated all students considered FBSA to have an overall positive effect. For example, Phillip reported his problem behaviors “changed a lot by staying on task.” Cory responded to a question about what he liked most about the FBSA strategy with “I liked it. It helped me a lot. I got better at staying on task.” Ryan’s responses to the post-assessment in comparison to the pre-assessment were lower (-6%). This may be the result of Ryan’s lack of cooperation during the post-assessment session or due to an increase in knowledge about self-determination, despite his response to item 1 on the social validity questionnaire stating he did not know what self-advocacy was. One final possibility is that there was a limited amount of time (e.g., 3 weeks) between pre- and post-

assessments, which may not have indicated a true representation of Ryan's capacity for self-determination.

Research Question 8: How do the pre-intervention perceptions of the function-based self-advocacy strategy compare to the post-intervention perceptions of teacher participants?

The results of the pre-intervention and post-intervention comparisons of teacher perceptions of the FBSA indicated teachers considered the intervention for supporting students with or at risk for EBD to be valuable and socially valid. Although the results did not yield a substantial increase between pre- and post-assessment, teachers indicated usefulness and practicality of the FBSA to be satisfactory. Noteworthy results of the post-assessment only questions indicated teachers felt the benefits of the intervention outweighed the time students spent out of class ($M = 3.6$, range 3-4), helped teachers support students with behavioral challenges in class ($M = 3.6$, range 3-4), and considered it to be useful in their class as well as other general education settings ($M = 3.6$, range 3-4; $M = 3.6$, range 3-4, respectively). Given that teachers consistently struggle in supporting students with or at risk for EBD (Tillery et al., 2010), these results are promising in that each teacher in the study noted the importance and potential benefits of the FBSA intervention. Furthermore, teachers responded to open ended questions about the benefits of the FBSA. On the topic of continuing the strategy, Mrs. Marvin responded "I will communicate with Cory and encourage him to continue to self-advocate his needs." In response to what components Mrs. Clagg felt benefitted her student, she stated "The ability to see their own behavior." The results of the social validity questionnaires completed by teachers are consistent with results of the study conducted by Kelly and Shogren (2015), which indicated teachers having favorable

impressions of the effects of a strategy featuring the instruction of self-determination skills to students with EBD. Further, these authors emphasized the importance of teachers knowing and building rapport with students with EBD in regard to providing behavioral support as a collaborative effort. The FBSA strategy supports this charge in that it provides a way in which students and teachers can collaboratively work together on improving behavioral challenges in general education settings.

Limitations

There are several limitations in the study. First, a Hawthorne Effect may have occurred during the data collection of Ryan. Upon the initial onset of data collection, Ryan appeared to be unaffected by the presence of the experimenter; however, as data collection progressed it became apparent that his problem behavior increased as a result of the experimenter entering the classroom. This was circumvented by video recording the subsequent data collection sessions. As noted previously, Ryan's behavior became very unstable shortly after FBSA implementation due to other factors (e.g., incident involving another student resulting in Ryan harboring a grudge), therefore it is not certain that a Hawthorne Effect existed, but very possible.

A second limitation of the study is the varying level of classroom management among the three primary setting classrooms. As noted by Gable et al. (2012) and Wagner et al. (2006), few general education teachers have the ability to support students with escalated problem behaviors in their classroom, which was evidenced in the current study. The three classrooms had very different classroom management systems, as well as very different teacher communication styles. Mrs. Rivers' classroom management techniques were very consistent and methodical. Classroom expectations were posted

visibly and referred to often. She provided students with pre-correction often and praised students for positive behavior when possible. She also exhibited close proximity to students throughout the academic day, as she often monitored students during independent work time and encouraged active participation. Mrs. Rivers supported Ryan by following all IEP accommodations, and by communicating with his special education teacher frequently (i.e., multiple times a day) for support and clarification on problem behaviors exhibited. It is important to note that Mrs. Rivers strived to provide the best classroom experience, both academically and socially, for Ryan, as she was aware of Ryan's needs. Despite her positive classroom management techniques, Ryan experienced a lot of extreme problem behaviors requiring additional support from the special education teacher. In contrast, Mrs. Marvin implemented very little effective classroom management strategies. Students often walked around the room without permission, called out across the classroom, and engaged in non-academic tasks during instruction without redirection from the teacher. Mrs. Marvin felt the students in her class had challenging behavior, yet did not exhibit the desire to see behaviors improve. Cory struggled greatly in this classroom due to the lack of structure and distracting behaviors of his peers. Although the implementation of the FBSA was effective in reducing his problem behavior, given a different classroom environment he may have been able to make even greater progress. Additionally, reduction in Cory's problem behavior during FBSA implementation may potentially point to the power of the intervention in supporting student independence and behavioral needs even within an environment where structure of the class is not optimal. Mrs. Clagg's classroom management was fairly effective. She was very positive with students and had a relaxed environment in her class.

Despite her relaxed attitude, students were often on task and expected to make progress. She often drew students in by connecting academic tasks to students through personalizing examples provided in class. Classroom expectations were displayed and seldom referred to during observation sessions. Students often worked in pairs in the class, which created opportunities for Phillip and other students to engage in problem behavior. Based on the lack of classroom management uniformity across the three classes, some problem behaviors may be impacted in a way that promotes displays of problem behavior in the student participants. Contrarily, Phillip's problem behavior improved greatly in comparison to baseline in both settings, indicating the FBSA strategy may be effective regardless of classroom management.

Third, due to Ryan's refusal to participate in the generalization setting during Baseline 2, intervention, and maintenance phases, generalization data were not available for these conditions. Several attempts were made to encourage Ryan to participate in the generalization setting; however, adults' attempts often escalated his problem behavior. Although Phillip and Cory were able to generalize the FBSA, this only represents two replications of generalization and therefore presenting weak results for generalization.

Fourth, data collection may not have accurately depicted true teacher response to student behavior, specifically in regard to "inadvertent teacher reinforcement." For each student the problem behavior was determined to be escape from a non-preferred task, which resulted in off-task behaviors. When a teacher was ignoring a student's behavior that resulted in inadvertently reinforcing student's off-task behavior (i.e., allowing for escape), it was difficult to determine if this was because the teacher did not notice the problem behavior or because the teacher was implementing planned ignoring. Next, the

definition of the problem behaviors made it difficult to record teacher response to problem behavior. For example, Phillip's problem behavior was defined as "working toward completion of the assigned task." On some occasions, it may be difficult for teachers to determine if Phillip was actually engaging in the task due to the appearance of "working," thus no teacher interaction (e.g., redirection) was observed. Teacher redirection or reinforcement of appropriate behavior was more easily pinpointed when student behavior clearly observed (e.g., writing an essay). Last, teachers not responding to problem behavior for a longer period of time would have been more accurately reflected by another form of data collection, such as duration. For this reason, there are few occurrences of "ITR," as this was only recorded when a teacher was actively engaging in a clear, observable behavior reinforcing the problem behavior.

Finally, due to the design of the study, each FBI was only implemented for a maximum of 7 days. In regard to sustainability of the intervention, a second phase of the FBSA training, including a plan for a long-term intervention plan, may be considered. Upon completion of the study, teachers noted a plan to continue to implement the intervention; however, very little knowledge was provided to the teacher on how to fade supports as students increased ability to exhibit replacement behaviors. A training phase for teachers following student implementation of FBSA may have been useful in ensuring students would be provided support long term.

Contributions to the Field of Special Education and Suggestions for Future Research

The current study contributes to the field of education in several ways. First, this study attempted to identify a means to support students with or at risk for EBD in a

manner that is feasibly implemented in general education settings, as general education settings rarely provide the level of support students with persistent behavior challenges require to make the necessary progress toward lasting and impactful behavioral change (Wagner et al., 2006). In traditional behavioral support models employed in the general education classroom, the teacher is provided with the tools necessary to support the students (e.g., IEP goals, Behavioral Intervention Plans, Tier 2 and 3 plans), yet rarely implement such tools with fidelity or consistency (Landrum et al., 2003). This is often problematic due to lack of teacher training on how to properly implement the FBA or FBI (Gage et al., 2012). Additionally, teachers often fail to implement supports due to the ongoing demands occurring throughout any given day (Blood & Neel, 2007). This study sought to teach students with problem behavior in the general education classroom to take initiative to identify their problem behaviors, identify replacement behaviors, implement a strategy for accessing reinforcers through displaying the replacement behavior (i.e., FBI), and communicate the need and request support or reinforcement from their teacher (i.e., self-advocacy skills). This serves as a way to alleviate many barriers between students with or at risk for EBD and a successful experience in the general education classroom.

Second, this packaged intervention embeds function-based interventions within explicit instruction of self-advocacy skills. Both of these have been determined to be key elements necessary for students with or at risk for EBD to make progress across the entire academic setting (Wagner et al., 2006). Function-based interventions have a strong literature base demonstrating effectiveness, when implemented with fidelity, on the improvement of behavioral challenges across all educational contexts (Dunlap & Fox,

2011; Gage, Lewis, Stichter, 2010; Gann et al., 2014). Self-advocacy, a skill linked to positive post-school outcomes of students with disabilities (Newman et al., 2011; Test et al., 2009), is a skill needed across virtually all areas of a person's life. Although a number of studies have examined each of these critical components separately, to date no known studies have examined the effects of a function-based self-advocacy intervention on the behaviors of students with or at risk for EBD. Based on the outcomes of this study, it may be advantageous to consider the application of this intervention to other populations displaying chronic behavioral challenges or settings in which students may engage in challenging behavior (e.g., workplace, high schools, alternative schools).

Third, the FBSA serves as a Tier 2 intervention within an MTSS or PBS framework. Both components of the FBSA are research-based interventions promoting student success (Dunlap & Fox, 2011; Gage et al., 2010; Gann et al., 2014; Newman et al., 2011; Test et al., 2009). The FBSA individualizes student needs and provides a way for students to gain knowledge about their behavior and how to address it proactively. Additionally, the FBSA serves as a flexible intervention that can be adjusted as needed as progress or regression is documented. For example, FBIs are developed based on individual student needs and can be adjusted to meet student needs as necessary. In addition, the FBSA can be adjusted to be implemented across a variety of academic and non-academic settings (e.g., work place, home).

Finally, this study supports increasing the level of independence exhibited by students with or at risk for EBD. Individuals with EBD often exhibit problem behaviors throughout their school career, as well as post-school (Bradley et al., 2008; Kern et al., 2009). Teaching students to take ownership for their behaviors through the FBA and FBI

development process serves as a way for students to begin to recognize their problem behavior, create a plan, implement a plan, and experience positive results. Furthermore, the FBSA has a potential for skill generalization to other areas of the individuals' life, serving as a springboard for the development of additional life-long self-determination and self-advocacy skills.

In addition to contributions to the field of education, this study provides a platform for a future research examining the use of FBSA across a variety of contexts. First, the FBSA training was conducted by the experimenter, which is not a practical means for school sustainability. A recommendation for future research is to provide training for school-based staff who will serve as the trainers and implementers of the FBSA, as recommended by Landrum et al. (2003), who noted specialized training is necessary to ensure optimum effectiveness when implementing research-based interventions to support students with or at risk for EBD. This may also serve as a means to increase the confidence of general education teachers who often feel incompetent in supporting students with or at risk for EBD (Cheney & Barringer, 1995; Regan & Michaud, 2011). A second recommendation is to examine the applicability and feasibility of FBSA when applied in additional settings or to other populations with chronic behavior challenges. For example, teaching the FBSA strategy to incarcerated youth may serve as a way to develop much needed self-advocacy skills, as well as to provide key information about behavioral challenges. Another possibility to consider may be applying FBSA to a day treatment facility, in which mental health clinicians can instruct patients on the FBSA as they prepare to transition back to a public education setting. A third possibility is to teach students with behavior challenges who are transitioning from

middle school to high school. This will provide students with the skills needed to advocate their needs proactively, rather than waiting for teachers to react to problematic behaviors. A fourth suggestion for future research is to provide opportunity for developing FBIs within the FBSA package that can be sustained long term. For example, Phillip began by self-monitoring his on-task behaviors at 3-min intervals for 15 min. By the end of the intervention, he no longer required self-monitoring every 3 min. Due to the structure of the design of the study, Phillip met mastery criteria and entered the maintenance phase, and therefore his FBI was not adjusted. Inclusion of a phase to address supporting student sustainability should be considered. Fifth, in this study FBAs were not followed by a functional analysis, which may have increased the likelihood of targeting the correct behavioral function. Future research may employ the use of functional analysis as a component of the FBA to ensure targeting appropriate behavioral functions. A sixth recommendation for future research is to pre-determine data collection for teacher behavior based on the target student behavioral function. For example, “inadvertent teacher reinforcement” was difficult to measure when the behavioral function was escape from a task through event recording. Measuring teacher response with a corresponding data collection method more representative of the response may provide better insight about the impact of FBSA on teacher behavior. Finally, the design of this study focused on one-on-one instruction; however, examining the feasibility and effectiveness of staff member delivery of FBSA to a small group of students which may enhance the experience of the students involved, as they would be able to engage in role-playing and peer-interaction in an efficient manner.

Implications for Practice

The findings of this study have several implications for practice. First, it is important to note that individual lessons of the FBSA may be implemented individually as well as in a small group. First, the FBSA was designed to support students in need of support in general education settings, particularly those in transition (e.g., middle to high school, day treatment to public school, high school to post-school, new student to new school). The FBSA may be taught to students with a history of problem behaviors as a proactive means to address problem behaviors before they occur. As a result, this intervention easily fits well within a PBS or MTSS framework and may be considered as a Tier 2 or Tier 3 intervention. Second, it would be best to ensure the universal level of classroom management is consistent and implemented with success. As mentioned previously, this intervention serves as a Tier 2 or Tier 3 intervention, thus a need for a strong foundation at the universal level is necessary for optimum effectiveness. In this study, three variations of classroom management were in place, despite school-wide implementation of PBS. For example, Mrs. Rivers' consistent use of PBS principles was apparent as evidenced by her smoothly run classroom, which supported Ryan's need for structure, predictability, and consistency. Even in times when Ryan was engaging in highly disruptive behaviors (e.g., crawling on all fours and growling like an animal), Mrs. Rivers remained calm and stated the classroom expectations. Furthermore, Ryan was expected to discuss the expectations prior to returning to his general education class after being removed from the classroom. Ryan may not have been able to engage in the FBSA with the same degree of success without a strong Tier 1 in place, such as this. Third, this study sought to facilitate a change in teacher behavior to provide an increase in support

for students in a non-traditional manner. FBSA focuses on teaching students skills to communicate with general education teachers offering a way for students to exhibit independence and take initiative in communicating and request support for their needs in a proactive manner through recruiting reinforcement. This may be a powerful intervention in situations where teacher support is not available or optimal, as students who have attained self-advocacy skills may be able to self-advocate their needs regardless of teacher presence. Finally, teacher response to students varies, and therefore student engagement in the intervention varies. For example, in this study Mrs. Marvin did not provide access to the replacement behavior when requested by Cory after he met his goal. Although this did not affect Cory's behavior in this instance, it may have a negative effect on another student and ultimately the effectiveness of the interventional overall. As noted earlier, reinforcement of replacement behaviors plays a key role in student progress (Meyer, 1999). In order to ensure optimum student progress in behavioral challenges, teachers should provide immediate and specific reinforcement of the replacement behavior.

Summary

The purpose of this study was to investigate the effects of function-based self-advocacy training on the problem behavior, replacement behavior, and self-advocacy skills of students with or at risk for EBD in general education settings. The evaluation also included social validity measures of teacher and student perceptions of the FBSA, as well as the results of the pre- and post-intervention assessment of students' level of self-determination. Visual analysis of the results indicates a functional relation between implementation of the FBSA and the problem behavior of targeted students. Social

validity measures indicated social acceptance of the intervention by students and teachers, as well as a positive change in the level self-determination for one student.

Application of the FBSA serves as a means to provide students with or at risk for EBD with explicit instruction on how to self-advocate their needs to general education teachers based on their behavioral function. Providing students with a proactive way to take ownership of their problem behavior and recruit reinforcement alleviates challenges presented in general education classrooms. To this end, by placing the responsibility on the students, students are able to gain valuable skills leading to better post-school outcomes.

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Appendix A



Parental Informed Consent

Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders

Project Title and Purpose:

This letter is to ask your permission for you and your child to participate in a project called, “Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders.” This is a project to see if students who are at-risk or have been identified with Emotional or Behavioral Disorders (EBD) can learn how to self-advocate their specific needs for supporting appropriate behaviors in the general education setting. The students will participate in a training that will help them identify their problem behaviors, supports that can help them be successful in the general education classroom, and strategies to effectively communicate this information to their general education teacher in a proactive manner.

Researchers:

This study is being conducted by Ms. Tosha Owens, Department of Special Education and Child Development at the University of North Carolina at Charlotte, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. Ya-yu Lo, Professor, Department of Special Education and Child Development, UNC Charlotte.

Description of Participation:

We ask that you read this letter and ask any questions you may have before agreeing to allow you and your child to be in this study. Your child has been nominated by a staff member to participate based on meeting participant pre-qualifications (age/grade level, disability, behavioral needs, participation in general education, and attendance records). Not all individuals for whom parental permission is granted will be selected as participants in the study. Once parental consent is granted, I will review your child’s educational records and will conduct a classroom observation of your child to further assess his or her qualifications to participate in the study. There will be video recording of your child’s classroom to make sure that we capture accurate student behavior in the class.

If your child is not selected to participate in the study, the research team will destroy (shred) all collected data immediately after the selection process has concluded. If selected for the study, with the guidance and support of the administrator and classroom teacher, I will conduct a behavioral assessment of your child to find out the nature of your child’s classroom behavior and his/her behavioral needs. This may involve interviewing your child’s teacher, which will take about 30 minutes. Your child will then receive a self-advocacy training to increase self-advocacy skills based on his or her specific behavioral needs. The training will take 3-4 sessions on consecutive school days for 30-60 minutes each session. The training will take place in a

conference room within the school during a mutually agreed upon time between the primary researcher, the teacher, and administrator. We will make sure your child is not missing core academic instruction.

Your child will be observed approximately 4-5 times a week for 30 minutes in the classroom before and after the self-advocacy training. Classroom behaviors will be documented to help us determine if the intervention is effective. Some observation and training sessions may be videotaped. In addition, your child will be asked to complete a survey to give his/her opinions of the program as well as a self-advocacy assessment to determine the level of the self-advocacy skills, both at the beginning and at the end of the study. Each assessment and survey will take about 10 minutes to complete. All data collected from this study will only be shared with the research team (listed above), your child's teachers, and the school administrator. You and your child's participation will be kept confidential at all times from individuals who are NOT serving on your child's team.

Length of Participation:

Your child's participation in this project will begin in January 2017 and end around May 2017. If you decide to provide consent for your child to participate, your child will be one of four or five participants in this study.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks which are currently unforeseeable. The benefits of participation in this study include improved self-advocacy skills, behavior management skills, and increased teacher-student rapport while participating in the general education classroom. Additionally, teachers may benefit from being provided intervention strategies presented by students with emotional and/or behavioral disabilities based on behavioral assessment results, leading to more individualized behavior support.

Volunteer Statement:

You and your child are volunteers. The decision to participate in this study is completely up to you and your child. If you decide to grant permission for you and your child to participate in the study, you may stop at any time. Your child will not be treated any differently if you and your child decide not to participate, or if your child stops once he or she has started. The study will not affect any existing services and education your child is currently receiving.

Confidentiality:

The data collected by the researchers will be kept confidential. The following steps will be taken to ensure this confidentiality:

- No real names will be reported in the results of this project.
- Your and your child's identifiers will be separated from data reporting.
- All educational record information and data sheets collected will be stored in a locked file cabinet in the office of the primary researcher.
- All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- Any electronic data collected by the researchers will be stored in password-protected documents on a password-protected computer.
- All identifiable data maintained by the researchers with the exclusion of video recordings will be destroyed 5 years after the study has ended.
- Video recording may be edited and used for future professional development, but will exclude direct footage of your child's face.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871 and uncc-irb@uncc.edu) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Tosha Owens at 704-860-3714**, or **Dr. Ya-yu Lo at 704-687-8716**.

This form was approved for use on October 28, 2016 for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project.

Permission Form

Please initials to indicate your consent for the statements below.

- I consent to my child's participation in the study "*Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders.*"

_____ Yes _____ No

- I consent to the use of videotape of my child during the study. I understand that portions of my child's participation in the study may be videotaped and used for future professional development of practitioners. Direct footage of my child face will be removed.

_____ Yes _____ No

 Child's Name (Print)

 Parent's Name (Print)

 Parent's Signature

 Date

 Investigator Signature

 Date

Appendix B



Teacher Informed Consent

Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders

Project Title and Purpose:

This letter is to ask your permission for you to participate in a project called, “Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders.” This is a project to see if students who have been identified with Emotional or Behavioral Disorders (EBD) can learn how to self-advocate their specific needs for supporting appropriate behaviors in the general education setting. The students will participate in a training that will help them identify their problem behaviors, supports that can help them be successful in the general education classroom, and strategies to effectively communicate this information to their general education teacher in a proactive manner.

Researchers:

This study is being conducted by Ms. Tosha Owens, Department of Special Education and Child Development at the University of North Carolina at Charlotte, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. Ya-yu Lo, Professor, Department of Special Education and Child Development, UNC Charlotte.

Description of Participation:

As the teacher participant, you will be asked to:

- (a) Participate in an interview (about 30-60 minutes) during a functional behavioral assessment to provide information about your student’s behavior
- (b) Participate in a brief meeting (about 10-15 minutes) on your role in supporting the target student
- (c) Complete a brief checklist to indicate steps completed by the student
- (d) Support student by engaging in a brief conversation about his/her needs in your classroom
- (e) Support student by engaging in student-requested behavior supports
- (f) Complete a 10-minute survey at the beginning of the study and at the end of the study to indicate your opinions of the intervention and your role being the participating teacher

Should you give your consent, a student with EBD in your class will be identified by you and your administrator. The selected student participant will participate in a function-based self-advocacy training (FBSAT), teaching the student how to effectively communicate his/her behavioral needs in the general education classroom, based on the results of a functional behavioral assessment conducted in the general education classroom to improve individualized

needs within the general education context. Student will first participate in the training provided by the primary research in a conference room within the school building on consecutive school days, if possible. After training, student will then participate in the FBSAT for 3-4 sessions, which will last approximately 30 minutes each. Throughout the study, your student will be observed approximately 4-5 times a week for 30 minutes in the classroom for the purpose of evaluating the intervention effects. Some observation and training sessions may be videotaped.

Length of Participation:

Your participation in this project will begin in January 2017 and end around May 2017. If you decide to participate, your student will be one of four or five student participants in this study.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks which are currently unforeseeable. The benefits of participation in this study include improved self-advocacy skills, behavior management skills, increased teacher-student rapport, and student appropriate recruitment of reinforcers to increase positive behaviors while participating in the general education classroom. Additionally, teachers may benefit from being provided intervention strategies presented by students with emotional and/or behavioral disabilities based on the functional behavioral assessment results, leading to more individualized behavior supports for the students.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate or if you stop once you have started.

Confidentiality:

Any information about your participation, including your identity, will be kept confidential. The following steps will be taken to ensure confidentiality:

- Pseudonyms will be used in all reports.
- All educational record information and data sheets collected will be stored in a locked file cabinet in the office of the primary researcher.
- All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- Any electronic data collected by the primary investigator and the responsible faculty will be stored in password-protected documents on a password-protected computer.
- All identifiable data maintained by the researchers with the exclusion of video recordings will be destroyed 5 years after the study has ended.
- Video recording may be edited and used for future professional development, but will exclude direct footage of the students' faces.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871 and uncc-irb@uncc.edu) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Tosha Owens at 704-860-3714**, or **Dr. Ya-yu Lo at 704-687-8716**.

This form was approved for use on October 28, 2016 for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the Principal Investigator.

Permission Form

Please initials to indicate your consent for the statements below.

- I consent to my participation in the study “*Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders.*”

_____ Yes _____ No

- I consent to the use of videotape while participating in the study. I understand that portions of my interaction with the student in the study may be videotaped and used for future professional development of practitioners.

_____ Yes _____ No

Participant's Name (Print)

Participant's Signature

Date

Investigator Signature

Date

Appendix C



Student Assent

Effects of Function-based Self-Advocacy Training on Classroom Behavior and Self-Advocacy Skills of Students with Emotional or Behavioral Disorders

Dear _____:

My name is Ms. Tosha Owens. I am a doctoral student and researcher at The University of North Carolina at Charlotte. I am working on a study to see if teaching you how to self-advocate, or share your needs, will help you be more successful in your general education classroom.

You will receive training that will teach you how to identify your behavioral needs and things that you can ask others to do to help you increase your positive interactions in the general education classroom. I will teach you steps you can use to ask your teacher for help with your behaviors. You will have many chances to practice these skills.

You will work with me to develop a plan that will help support your behavior. You will also meet with me for the training for 3-4 days, for 30 minutes each day, to learn about how to self-advocate. We will meet in a room in your school building, but not in your general education classroom. After you are able to do the self-advocacy steps, you will then meet with your teacher to share what you have learned in the training. This will help you ask for help before your behavior becomes challenging. Your teacher will listen to you and try to support you based on the conversation you have with her/him. I will do some observations in your classroom to make sure I can provide the support and training you need. I also will ask you to complete two short surveys and two self-assessment to let me know how you feel about the training and your learning. Some of the sessions may be videotaped so that I can make sure I am doing things correctly. If at any time, you decide that you no longer want to participate in the study, you can stop and no one will be angry with you.

I hope this study will show others how to improve their self-advocacy skills and behaviors in the classroom. When we are finished, I will write a report, but I will not put your name in the report.

If you want to participate in this study, please sign your name below.

Student Signature

DATE

Investigator Signature

DATE

This form was approved for use on October 28, 2016 for a period of one (1) year.

Appendix D

Data Collection Form

Partial Interval Data Collection Form

Occurrence of Problem Behavior and Replacement Behavior Data Collection Form

Date _____ Observer _____ Class subject _____
 Teacher _____ Begin time _____ End time _____ Data _____ (Primary or IOA)

Problem behavior is defined as:

- (a)
(b)
(c)

Replacement behavior is defined as:

- (a)
(b)
(c)

Coding

ITR=teacher inadvertently provided function based reinforcement for the problem behavior within 5-sec
TR=teacher provided function based support for the replacement behavior within 5-sec
NR=teacher did not respond to replacement behavior within 5-sec

Interval	PB	RB
1	+ - ITR	TR NR
2	+ - ITR	TR NR
3	+ - ITR	TR NR
4	+ - ITR	TR NR
5	+ - ITR	TR NR
6	+ - ITR	TR NR
7	+ - ITR	TR NR
8	+ - ITR	TR NR
9	+ - ITR	TR NR
10	+ - ITR	TR NR
11	+ - ITR	TR NR
12	+ - ITR	TR NR
13	+ - ITR	TR NR
14	+ - ITR	TR NR
15	+ - ITR	TR NR
16	+ - ITR	TR NR
17	+ - ITR	TR NR
18	+ - ITR	TR NR
19	+ - ITR	TR NR
20	+ - ITR	TR NR

Interval	PB	RB
21	+ - ITR	TR NR
22	+ - ITR	TR NR
23	+ - ITR	TR NR
24	+ - ITR	TR NR
25	+ - ITR	TR NR
26	+ - ITR	TR NR
27	+ - ITR	TR NR
28	+ - ITR	TR NR
29	+ - ITR	TR NR
30	+ - ITR	TR NR
31	+ - ITR	TR NR
32	+ - ITR	TR NR
33	+ - ITR	TR NR
34	+ - ITR	TR NR
35	+ - ITR	TR NR
36	+ - ITR	TR NR
37	+ - ITR	TR NR
38	+ - ITR	TR NR
39	+ - ITR	TR NR
40	+ - ITR	TR NR

Interval	PB	RB
41	+ - ITR	TR NR
42	+ - ITR	TR NR
43	+ - ITR	TR NR
44	+ - ITR	TR NR
45	+ - ITR	TR NR
46	+ - ITR	TR NR
47	+ - ITR	TR NR
48	+ - ITR	TR NR
49	+ - ITR	TR NR
50	+ - ITR	TR NR
51	+ - ITR	TR NR
52	+ - ITR	TR NR
53	+ - ITR	TR NR
54	+ - ITR	TR NR
55	+ - ITR	TR NR
56	+ - ITR	TR NR
57	+ - ITR	TR NR
58	+ - ITR	TR NR
59	+ - ITR	TR NR
60	+ - ITR	TR NR

Interval	PB	RB
61	+ - ITR	TR NR
62	+ - ITR	TR NR
63	+ - ITR	TR NR
64	+ - ITR	TR NR
65	+ - ITR	TR NR
66	+ - ITR	TR NR
67	+ - ITR	TR NR
68	+ - ITR	TR NR
69	+ - ITR	TR NR
70	+ - ITR	TR NR
71	+ - ITR	TR NR
72	+ - ITR	TR NR
73	+ - ITR	TR NR
74	+ - ITR	TR NR
75	+ - ITR	TR NR
76	+ - ITR	TR NR
77	+ - ITR	TR NR
78	+ - ITR	TR NR
79	+ - ITR	TR NR
80	+ - ITR	TR NR

Interval	PB	RB
81	+ - ITR	TR NR
82	+ - ITR	TR NR
83	+ - ITR	TR NR
84	+ - ITR	TR NR
85	+ - ITR	TR NR
86	+ - ITR	TR NR
87	+ - ITR	TR NR
88	+ - ITR	TR NR
89	+ - ITR	TR NR
90	+ - ITR	TR NR
91	+ - ITR	TR NR
92	+ - ITR	TR NR
93	+ - ITR	TR NR
94	+ - ITR	TR NR
95	+ - ITR	TR NR
96	+ - ITR	TR NR
97	+ - ITR	TR NR
98	+ - ITR	TR NR
99	+ - ITR	TR NR
100	+ - ITR	TR NR

Interval	PB	RB
101	+ - ITR	TR NR
102	+ - ITR	TR NR
103	+ - ITR	TR NR
104	+ - ITR	TR NR
105	+ - ITR	TR NR
106	+ - ITR	TR NR
107	+ - ITR	TR NR
108	+ - ITR	TR NR
109	+ - ITR	TR NR
110	+ - ITR	TR NR
111	+ - ITR	TR NR
112	+ - ITR	TR NR
113	+ - ITR	TR NR
114	+ - ITR	TR NR
115	+ - ITR	TR NR
116	+ - ITR	TR NR
117	+ - ITR	TR NR
118	+ - ITR	TR NR
119	+ - ITR	TR NR
120	+ - ITR	TR NR

Appendix E

Self-Advocacy Strategy Steps Checklist

Participant: _____

Date: _____

Teacher: _____

Step	Description	Completed?	
1	Greet the teacher in a positive and respectful manner.	Y	N
2	Disclose disability and/or specific behavior challenges.	Y	N
3	Offer suggestions for how the teacher can support the student in his or her behavior challenges (accommodations).	Y	N
4	Share why or how the accommodation is effective for supporting positive behaviors.	Y	N
5	Identify resources that may help in using/accessing the accommodation.	Y	N
6	State his/her role in accessing/using the accommodation.	Y	N
7	Ask if this is agreeable to the teacher.	Y	N
8	Affirm the agreement with the teacher with acknowledging statement.	Y	N
9	Restate the accommodation that will be used.	Y	N
10	Restate the student's role.	Y	N
11	Restate the teacher's role.	Y	N
12	Make a positive statement about the accommodation.	Y	N
13	Thank the teacher for his/her time.	Y	N
Number of Steps Correct (number of "Y")			
Percent Correct (number of "Y" divided by total number of applicable steps)			

Note:

Appendix F

American Institutes of Research (AIR) Self-determination Assessment

Materials have been removed due to copyrights.

Wolman, J. M., Campeau, P. L., DuBois, P. A., Mithaug, D. E., & Stolarski, V. S. (1994). *AIR Self-Determination Scale and user guide*. Palo Alto, CA: American Institutes for Research.

Appendix G

Social Validity Pre-Intervention Questionnaire for Teachers

Your student will be participating in a training on self-advocacy skills. He/she will be taught how to advocate for his/her specific behavioral needs in the general education classroom. Please fill out the following questionnaire addressing components of the strategy that will be taught.

Date: _____

Teacher: _____

Items	1 None/ Not at all Likely	2 Very Little/ Fairly Likely	3 Some/ Likely	4 A lot/ Very Likely
1. I place a lot of emphasis on teaching self-advocacy to my students with or at risk for EBD.				
2. I feel self-advocacy instruction is important for students with or at risk for EBD.				
3. I feel the level of support I provide to students with behavior challenges would increase if they were to appropriately self-advocate their needs.				
4. I feel other teachers would be more responsive to supporting students with behavior challenges if students self-advocated their needs.				
5. I feel students with or at risk for EBD who possess self-advocacy skills and proactively seek assistance for problem behaviors can positively affect the overall environment of my classroom.				
6. In general, my students (including non-disabled students) self-advocate.				
7. I feel self-advocacy skill training can help students with or at risk for EBD who are transitioning to general education settings from more restrictive settings.				
8. I believe all students with disabilities will benefit from the self-advocacy training.				
9. I am likely to share a self-advocacy training strategy with other educators if it were available.				
10. I am likely to share the self-advocacy				

training strategy with parents if it were available.				
11. I feel this training would be beneficial for all students (not just those with disabilities).				

Appendix H

Social Validity Post-intervention Questionnaire for Teachers

Your student has completed a training on self-advocacy skills. Please fill out the following questionnaire addressing components of the strategy that will be taught.

Date: _____

Teacher: _____

Items	1 None/ Not at all Likely	2 Very Little/ Fairly Likely	3 Some/ Likely	4 A lot/ Very Likely
1. I place a lot of emphasis on teaching self-advocacy to my students with or at risk for EBD.				
2. I feel self-advocacy instruction is important for students with or at risk for EBD.				
3. I feel the level of support I provide to students with behavior challenges would increase if they were to appropriately self-advocate their needs.				
4. I feel other teachers would be more responsive to supporting students with behavior challenges if students self-advocated their needs.				
5. I feel students with or at risk for EBD who possess self-advocacy skills and proactively seek assistance for problem behaviors can positively affect the overall environment of my classroom.				
6. In general, my students (including non-disabled students) self-advocate.				
7. I feel self-advocacy skill training can help students with or at risk for EBD who are transitioning to general education settings from more restrictive settings.				
8. I believe all students with disabilities will benefit from the self-advocacy training.				
9. I am likely to share a self-advocacy training strategy with other educators if it were available.				
10. I am likely to share the self-advocacy				

training strategy with parents if it were available.				
11. I feel this training would be beneficial for all students (not just those with disabilities).				
12. The self-advocacy training and strategy is something that students with or at risk for EBD can do independently.				
13. The self-advocacy training and strategy helped me support the target student in addressing his/her challenging behavior.				
14. The self-advocacy training and strategy was useful in my class.				
15. I can see the self-advocacy training and strategy as being useful in other general education classes.				
16. I saw positive changes to the target student's classroom behavior.				
17. I saw positive learning of the self-advocacy skills from the target student with or at risk for EBD.				
18. The skills learned in the self-advocacy training benefits outweighed the time the target student spent out of the classroom.				

19. What components of the self-advocacy strategy do you feel benefitted your student the most?

20. Do you see a marked change in the behavior(s) of the target student after the intervention? If so, please briefly describe.

21. Were there any missing components or anything that seemed unnecessary? If so, please briefly describe.

22. Is this something you would like to continue? If so, in what way would you go about including this in your classroom?

23. Additional comments:

Appendix I

Social Validity Pre-Intervention Questionnaire for Student Participants

Date: _____

Student: _____

Items	1 Completely Disagree	2 Slightly Disagree	3 Agree	4 Completely Agree
1. I know what self-advocacy is.				
2. I know how to self-advocate.				
3. I feel comfortable telling my teachers about my behavior problems.				
4. I talk to my teachers about my disability and/or behavior problems.				
5. I know why I have problems with my behavior in class.				
6. I know the things I need to do to behave better when I am in class.				

7. What are your behavior challenges in the classroom?

8. What is something that you think would be helpful to improve your behavior while in class?

Appendix J

Social Validity Post-Intervention Questionnaire for Student Participants

Date: _____

Student: _____

Items	1 Completely Disagree	2 Slightly Disagree	3 Agree	4 Completely Agree
1. I know what self-advocacy is.				
2. I know how to self-advocate.				
3. I feel comfortable telling my teachers about my behavior problems.				
4. I talk to my teachers about my disability and/or behavior problems.				
5. I know why I have problems with my behavior in class.				
6. I know the things I need to do to behave better when I am in class.				
7. After the self-advocacy training, I feel this strategy is something that I can do all by myself.				
8. The self-advocacy strategy has helped me share my needs with my teacher(s).				
9. The self-advocacy strategy helped me be more successful in class.				
10. The self-advocacy strategy helped me with my behavior while in school.				
11. The self-advocacy strategy helped me feel more confident about talking to my teachers about my behavior needs.				
12. The self-advocacy strategy helped me feel more comfortable talking about my disability.				
13. I think the self-advocacy strategy will be helpful in all of my classes.				
14. The self-advocacy strategy took the right amount of time to learn.				
15. I can see my peers with behavior problems being able to learn this strategy.				

16. I think learning these skills will help me after I graduate.				
--	--	--	--	--

17. How have your behaviors changed since beginning the self-advocacy strategy in class?

18. What did you like the most about the self-advocacy strategy?

19. What part did you like the least about the self-advocacy strategy?

20. Can you think of ways that we can make the self-advocacy strategy better?

Appendix K

FBA Materials

Materials have been removed due to copyrights.

Loman, S. & Borgmeier, C. (n.d.) *Practical Functional Behavioral Assessment Training
Manual for School-Based Personnel*, Portland, OR.

Appendix L

Lessons for the Self-advocacy Training-Adapted

adapted from *Requesting Classroom Accommodations: Self-advocacy and Conflict*

Resolution Training for College Students with Disabilities (Palmer & Roessler, 2000)

Lesson 1	Introduction and Disclosure
Lesson 2	Solution
Lesson 3	Resources
Lesson 4	Agreement
Lesson 5	Summary
Lesson 6	Closure

Lesson 1: Introduction and Disclosure

Skill Description

In this lesson, you will learn how to do two things that will help you be successful in _____'s classroom. First, you will learn how to introduce yourself. Next, you will learn how to disclose your disability.

The introduction is a friendly greeting that tells the teacher who you are and opens the conversation.

It is helpful if you approach the conversation in a relaxed manner.

Establish eye contact and extend your hand for a handshake if it seems appropriate.

Smile and maintain a relaxed posture.

Goal of the Skill

The goal of the instruction is to:

- 1. establish a friendly basis for interaction; and*
- 2. let the teacher know who you are and your relationship to him/her.*

Skill Examples

First make a greeting statement such as "Good morning" or "Hello"

Then state your name and tell the person you will be in his/her class.

For example, you might say something like:

"I'm _____, and I'm in your Math 1 class in 3rd period."

Or

"I'm _____, and I am in your English 9 class during 2nd block."

Modeling

Let me give you an example of an effective introduction.

Instructor models an introduction for the student.

Notice the manner and tone of my voice as well as the specific statements that I made.

I included three things in my introduction:

- 1. Greeted the teacher*
- 2. Gave him/her my name*
- 3. Told him/her the class I was in*

Also, I presented myself positively by speaking directly and maintaining good posture and eye contact.

Practice/Role-play

Now, let's practice making introductions

you can try different opening statements so you can become comfortable with them rather than relying on just one.

Student practices with the instructor until they become proficient with the introduction. Discuss the role-play activities before closing.

Disclosure

Now we will talk about the second part of our lesson today, disclosure. Disclosure is a brief explanation of your disability in specific terms.

The key to successfully communicating your need for support is to focus on why you are doing a behavior and what your teacher can do to help you overcome the behavior.

Just saying you have problems with people who make you mad will not help your teacher know how to help you.

Goal of the Skill

The goal for the disclosure is to:

1. *identify your disability, and*
2. *explain your disability in functional terms.*

Skill Examples

First, make a general statement about your behavioral challenges:

"I have a behavioral challenges."

or

"I have an anxiety disorder."

Then explain how it affects you.

"Because of this, I sometimes need to take time to calm down away from others who are bothering me."

or

"I may need to stand at the back of the line so that people do not make me feel uncomfortable."

This explains your needs without focusing on your disability itself.

Modeling

Now let me show you how an introduction and disclosure sound together.

Instructor models an introduction and disclosure for the students.

Instructor models an introduction and disclosure for the student.

Notice how I used the introduction skills and then presented a disability and a way to support me in this example.

I did not focus on the disability.

First I stated the disability, then moved on to the specific ways that I can be supported when my behaviors become challenging.

Because I was prepared and knew what I wanted to say, I did not hesitate or appear apologetic.

Practice/Role-play

Let's practice making a disclosure of your disability.

Be sure to use terms that will help your teacher know how to support you.

Each student practices making a disclosure with the instructor. If more practice is needed, allow another turn.

Try to make your opening disclosure statement sound like you are introducing your disorder and then quickly move on to the point you want to make about how you can be supported.

Student practices with the instructor until they are able to make comfortable and effective disclosure statements. Discuss role-play activities before closing.

Summary

You have learned the first two steps in the advocacy process, introducing yourself to your teacher, discussing your behavioral needs, and disclosing your disability.

You can:

- 1. Successfully greet your teacher*
- 2. Introduce yourself*
- 3. Refer to the reason for your discussion*
- 4. Identify your disability*
- 5. Tell your teacher how to support you*

Lesson 2: Solution

Skill Description

The solution statement includes an explanation of something that has helped you calm down or refocus when your behavior is becoming difficult to manage. You will share what helps you with your teacher and suggest a way that he/she can help you when you need help calming down or refocusing in class. We will call this an accommodation.

The first statement gives a reason for requesting the accommodation.

It is important to request the accommodation in a statement, not in a question.

Providing solution rather than asking your teacher to come up with possibilities is a key to successful advocacy.

Goal of the Skill

The goal of the solution is to:

1. *cite an accommodation you have identified as effective,*
2. *state the benefit to you, and*
3. *make a request, in statement form, to use the accommodation in class.*

Skill Examples

First, give an example of an accommodation.

“I have used a calm down exercise, like breathing 10 deep breathes in a quiet location when I was at day treatment.”

“I have learned that I need to write in my journal to calm down.”

or

“In the past a staff member would provide me with a 5-minute break in the hall to refocus.”

Follow this with an explanation of the benefit to you in class.

“This helps me calm down and focus on completing my work.”

“This helps me realize I am making the problem bigger than it really is.”

“I am able to remember how to seek the teacher’s attention appropriately.”

Complete the request by stating that you think the accommodation would be of help in this class.

“I think allowing me to take a 5-minute break would be helpful in your class as well.”

“I would like to be able to write in my journal when I feel anxious in your class.”

“It would be helpful to have reminders when I am not completing my work.”

Modeling

Let me give you an example of how the solution follows naturally after the introduction and disclosure.

Instructor models an introduction, disclosure and solution for the student.

Notice that I mentioned an effective accommodation, gave an example of why it was helpful, and then suggested it as a solution.

I was also able to direct the conversation in a positive manner.

Practice/Role-play

Now let's practice making a solution statement with a request to use an accommodation.

Be sure to avoid asking for the accommodation at this point. Suggest the accommodation as a solution for this class. Do not put your request in a question.

Student practices making a solution statement with the instructor. If more practice is needed, allow another turn. Discuss the role-play segment.

Summary

You now know how to:

- 1. state the accommodation(s) you have successfully used in similar situations,*
- 2. state the benefit(s) from using the accommodation(s), and*
- 3. make a request in statement form to use the accommodation(s) in this class.*

You have also reviewed the skills for introduction and disclosure.

Lesson 3: Resources

Skill Description

At this point you will want to mention the resources available to assist you and the teacher in arranging accommodations.

If you can provide information about the solution, this will go a long way in helping the teacher understand that the accommodation will not present a hardship for him/her.

You should provide an explanation of what persons, offices, or agencies can help you use the accommodations and what your role will be in getting the accommodations in place.

Goal of the Skill

The goal of explaining the resources is to:

- 1. describe the resource(s) available to implement the accommodation, and*
- 2. state what your role will be.*

Skill Examples

First, state who (or what) will be able to assist in providing an accommodation.

“My EC teacher and I have a plan in place for when I become anxious.”

“I have a journal that I can bring with me when I need to write down my thoughts.”

Then, state your responsibility for implementing the accommodation.

“I will ask my EC teacher to share our plan with you.”

“I will keep my journal in my desk and only use it when we have agreed it is okay for me to use it.”

Modeling

Now let’s take a look at how resources can be presented in an advocacy request.

<p>Instructor models an introduction, disclosure, solution and resources for the student.</p>
--

Note that I provided information about the resource in addition to identifying it by name. I described the resource and then stated what action I would take to implement the accommodation.

Practice/Role-play

Now we will practice providing information about resources available to help you use an accommodation.

Remember to start with the introduction, make a disclosure statement, and suggest an accommodation that you think will help in the class, along with a statement about using the accommodation in class.

Then, present information about the resources available to help with the accommodation and explain what you will do to get the accommodation in place

Student practices giving resource information and stating his/her role in implementation. If more practice is needed, allow another turn.

Student practices with the instructor until they are able to effectively present information about the resource and fully explain their role in the implementation of the accommodation. Discuss the role-play activities before summarizing.

Summary

In this lesson you have learned to:

- 1. State what resources are available to help with accommodations, and*
- 2. Tell what you will do to use the accommodation.*

In addition, you have review skills for the introduction, disclosure, and solution.

Lesson 4: Agreement

Introduction

Agreement is the step in which you ask the teacher if the accommodations and arrangements would be acceptable to use in class.

By this point you have provided enough information about your behavioral challenges, the accommodation needs that you have, the accommodations you believe will be helpful to you, and the resources and what you will do using the accommodations in his/her class.

Now you are ready to ask for confirmation of what you feel will allow you to do well in class.

Goal of the Skill

The goal of the agreement is to:

- 1. ask for agreement from the teacher, and*
- 2. confirm the agreement with an affirming statement.*

Skill Examples

First, you would ask if the accommodation plan sounds agreeable. You might ask a question like:

“Does this sound okay to you?”

“Will this plan work for your class?”

Then, you would respond to the teachers agreement with a positive statement such as:

“Great.”

“Okay.”

Modeling

I'll give you an example of how to ask for agreement as part of the self-advocacy process.

Instructor models an introduction, disclosure, solution, resources and agreement.

Notice that I used a postive tone of voice in asking for and confirming an agreement.

By using a positive tone, I set the stage for a positive answer from the teacher.

This confident attitude is helpful in an advocacy setting as it helps keep the focus on the solution, not the problem.

Practice/Role-play

Now, let's practice asking for agreement for your accommodations plan and then affirming the agreement.

Try to ask your question in a positive tone.

Remember to practice through the introduction, disclosure, solution, and resources.

Then, confirm the agreement with an affirming statement.

Student practices with the instructor until they are able to effectively ask for agreement and confirm with a positive remark. Discuss the role-play activities before summarizing.

Summary

Agreement is the fifth skill you have learned in successfully advocating for use of accommodations in the classroom.

Specifically, this skill involves:

- 1. asking for confirmation or agreement to use the accommodation, and*
- 2. making an affirming acknowledging statement.*

We have also reviewed the skills for introduction, disclosure, solution, and resources.

Lesson 5: Summary

Skill Description

The summary statement restates what has been agreed upon and who will be responsible for the plan.

It is important to clarify what accommodation(s) will be used and who will be responsible for each part of the plan.

This summary allows for any misunderstandings to be clarified and both people to be aware of their responsibility.

Goal of the Skill

The goal of the summary is to:

- 1. restate the accommodation(s) to be used in the class,*
- 2. state what you will do to implement the accommodation(s), and*
- 3. state what the teacher's involvement or responsibility will be.*

Skill Examples

Begin by restating the solution.

"Good. I'll plan to take ten deep breaths when I feel like I am overwhelmed."

"Great. I will write my thoughts in my journal if I become anxious."

Follow by stating what you will do to arrange for using the accommodation.

"I will keep a journal in my desk for when I need to write down my thoughts."

"I will put a cue card on my desk that my EC teacher will give me to bring to class to show you I am taking a 5 minutes break in the hall."

Then, state what action the teacher needs to take. For example:

"You can help me by giving me a thumbs up to let me know I am allowed to go into the hallway."

"You can help me by reminding me to do my deep breathing if you notice I am getting overwhelmed."

If the teacher does not need to do anything more, you could say:

"I guess that will take care of everything."

"I will let you know if there are any problems but I guess that's all for now."

Modeling

I'll demonstrate a summary statement for you.

Instructor models an introduction, disclosure, solution, resources, agreement and summary for students.

Notice that I included all parts of the solution and mentioned each person's responsibility.

I summarized the accommodations I would use in the class and mentioned my responsibility as well as that of the resource and the teacher.

Practice/Role-play

Now we will practice making a summary statement with an identification of each person's responsibility.

Start with an introduction, make your disclosure statement, suggest an accommodation with a stated request to use it in class.

Then explain the resources available to help, ask if the plan will work, and summarize the arrangement and the individual responsibilities.

Student practices with the instructor until they are able to make an accommodation request, complete with summary statements. Discuss role-play activities before moving to the summary.

Summary

You have learned the essential components in the self-advocacy process.

You have successfully learned to:

1. *restate the accommodation(s),*
2. *state what your role will be in using them in class, and*
3. *state what, if any, action will be required of your teacher.*

You have also learned the skills for introduction, disclosure, solution, resource, and agreement.

Lesson 6: Closure

Skill Description

The closure is a generally positive statement indicating a close to the conversation that contains an expression of appreciation.

The closure should be made in a comfortable, unhurried manner.

It is important to continue the feeling of confidence, avoiding any sense of hurry or apology.

Just as an introduction, it is helpful if you approach the conversation in a relaxed manner without verbal nervousness such as “Uh,” or “Uhm.”

It is important to maintain eye contact and extend your hand for a handshake if it seems appropriate.

And smile!

Goal of the Skill

The goal of the closure is to:

- 1. make a positive statement about the class or the accommodation plan, and*
- 2. express your appreciation for the teacher’s time, attention, and assistance.*

Skill Examples

First make a general statement such as:

“I’m looking forward to your class.”

“I’m pleased we are able to get these arrangements made.”

Then express your appreciation by saying:

“Thanks for your help.”

“I appreciate your help.”

or some other similar acknowledgement.

Modeling

Let me demonstrate how the closure works into the accommodation request process.

Instructor models an introduction, disclosure, solution, resources, agreement, summary and closure.

Notice that I included a positive statement and an expression of appreciation in my closure.

I also used good non-verbal communication by speaking directly, using good posture, and maintaining eye contact.

Practice/Role-play

Now, let's practice the closure of the conversation.

Try using different closing remarks so you can become comfortable with more than one.

Start at the introduction and go through the entire accommodation request process, ending the conversation with a positive reference to the class and an expression of appreciation.

Student practices with the instructor until they become proficient with the accommodation process including the closure. Allow additional practice if the students are having difficulty with any areas. Discuss role-play activities before summarizing.

Summary

This last lesson has provided you with two important skills needed to conclude an advocacy discussion, how to:

- 1. make a positive statement which suggests closure, and*
- 2. express your appreciation.*

We have also reviewed the skills for introduction, disclosure, solution, resource, agreement, and summary statement.

Appendix M

Self-advocacy Cue Cards

Introduction (#1)

Example:

Hi, _____ (teacher's name), I'm _____ in your _____ (class).

I wanted to talk to you about how _____ might affect me in class. A challenge I may have is _____.

Accommodations (#2)

I have learned to _____, which helps me _____.

I think allowing me to _____ will help me be successful in your class.

Resources (#3)

Share the plan for using resources:

When I feel/need _____, I will _____.

It will help if you _____.

Agreement (#4)

Choose a statement that sounds good to you:

- ☐ Does this sound okay to you?
- ☐ How does this work for you?
- ☐ Will this plan work for your class?

Then say: "Great!" or "okay"

Summary (#5)

Restate the plan:

In order be successful when I _____

I will _____.

You (the teacher) will _____.

Closing (#6)

Positive statement:

Express appreciation:

Say "Thank you for your help! See you in class."

Appendix N

FBA and FBI Development Procedural Reliability Checklist

Date: _____ **Student:** _____

Steps	Completed?
1. Conducted interview with student adhering to each component in the FBA form.	Y N
2. Conducted interview with parent (if possible) adhering to each component in the FBA form.	Y N n/a
3. Conducted interview with student's general education teacher from identified target class adhering to each component in the FBA form.	Y N
4. Conducted interview with any other individual who may have input on student behavioral performance across the school context, particularly in the general education classroom, adhering to each component in the FBA form.	Y N n/a
5. Identify observable target behavior.	Y N
6. Identify where and when specific behavior occurs.	Y N
7. Determine the possible function of the behavior (why the behavior occurs).	Y N
8. Develop a hypothesis statement using a competing pathways summary.	Y N
9. Observe behavior and collect data using FBA forms in the target setting to verify function of behavior and competing pathways summary.	Y N
10. If function and competing pathways summary is not verified, complete a new hypothesis statement using competing pathways summary.	Y N n/a
11. If step 10 is completed, observe behavior and collect data using FBA forms in the target setting to verify function of behavior and competing pathways summary.	Y N n/a
12. Develop an FBI to be embedded in the self-advocacy strategy, in collaboration with student, using an alternate or replacement behavior.	Y N
13. Share FBA results with all pertinent individuals (teacher, student, administrator) in debriefing meetings.	Y N
Steps Correct	
Percent Correct	

Appendix O

Self-Advocacy Training Implementation Procedural Reliability Checklist

Date: _____ Student: _____

Lesson Number: _____ Focus Skill: _____

Steps	Completed?
1. Provide a skill explanation to the student.	Y N
2. Identify the goal of the lesson to the student.	Y N
3. Provide explicit examples to the student.	Y N
4. Model the skill to the student.	Y N
5. Provide opportunities for the student to practice with the instructor.	Y N
6. Role-play with the student.	Y N
7. Provide performance feedback to the student.	Y N
8. Allow opportunity for questions or further practice.	Y N
9. Provide a summary of the lesson and skill for the student.	Y N
Number Correct	
Percentage Correct	