An Analysis Of The Effectiveness Of Functional Behavioral Assessment For Students With Emotional Behavioral Disabilities

Megan Kale Brose
University of Northern Iowa

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AN ANALYSIS OF THE EFFECTIVENESS OF FUNCTIONAL BEHAVIORAL ASSESSMENT FOR STUDENTS WITH EMOTIONAL BEHAVIORAL DISABILITIES

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Educational Specialist

Megan Kale Brose
University of Northern Iowa
July 2009
ABSTRACT

Functional behavioral assessment (FBA) is defined as “a set of assessment procedures used to identify variables that promote and maintain challenging behavior and based upon this assessment, interventions are selected that alter one or more of these variables” (Stichter & Conroy, 2005, pp. 19-20). FBA has received a great deal of attention since the passage of the Individuals with Disabilities Education Act (IDEA) 1997 amendments, which require the use of FBA for all special education students upon referral of alternative educational placements due to behavior resulting in disciplinary action. There has also been considerable questioning of and need for research in determining the effectiveness of FBA in the school setting. Previous research has focused primarily on students with cognitive or developmental disabilities in controlled settings not students in normal school settings. This paper proposes a study that examines the effectiveness of the use of a model of FBA in school settings with students with emotional and behavioral disabilities.
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This Study by: Megan Kale Brose

Entitled: An Analysis of the Effectiveness of Functional Behavioral Assessment for Students With Emotional Behavioral Disabilities

has been approved as meeting the thesis requirement for the Degree of Educational Specialist

\[\text{Date} \quad 4/27/09 \quad \text{Dr. Kimberly Knesting, Chair, Thesis Committee}\]

\[\text{Date} \quad 4/27/09 \quad \text{Dr. Susan Etscheidt, Thesis Committee Member}\]

\[\text{Date} \quad 4/27/09 \quad \text{Dr. Frank Kohler, Thesis Committee Member}\]

\[\text{Date} \quad 5/28/09 \quad \text{Dr. Sue A. Joseph, Interim Dean, Graduate College}\]
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Functional behavioral assessment (FBA) is a process of identifying functional relationships between environmental events and the occurrence or nonoccurrence of inappropriate behaviors (Etscheidt, 2001). The identification of this relationship allows for the teaching of an appropriate alternative behavior that serves the same function as the inappropriate behavior for the student. The alternative behavior achieves the same goal as the inappropriate behavior for the student. The behavior change is also facilitated by a change in the environment that will also support the appropriate behavior. The ultimate goal of FBA is to produce a positive and maintaining lifestyle change for the student (Drasgow, Yell, Bradley, & Shriner, 1999). Currently, a majority of the research being published on the use of FBA has focused on students with significant cognitive delays and developmental disabilities who live in residential facilities or who attend non-inclusive educational programs. There is a need to explore the effectiveness of FBA in school settings. The authorization of the Individuals with Disabilities Education Act (IDEA) 1997 has mandated that all students who experience a change in educational placement due to disciplinary action must have a FBA conducted; the research discussed here is timely (Stage et al., 2006). While the use of FBA has been mandated, the legislation does not provide guidelines regarding how to conduct the process, therefore, the assessment of the effectiveness of a specific method of FBA also will be beneficial.
Research Problem and Rationale for Study

The passage of the 1997 Individuals with Disabilities Education Act (IDEA) mandated the use of functional behavioral assessment in school settings. The mandate, however, does not include procedures for conducting a FBA or descriptions of who should be involved in its implementation (Hoff, Ervin, & Friman, 2005). Researchers have primarily investigated the use of FBA with students with severe cognitive or developmental disabilities in highly structured settings, but not as frequently with students in schools with milder disabilities or behavior concerns, such as emotional behavioral disabilities (EBD). Because of the mandated use of FBA for students receiving special education services that require a change in placement, there is a need for more exploration into the FBA process. This paper describes a study that evaluated the effectiveness of a model of FBA (Etscheidt 2001) that is used with students, including those with EBD, in school settings.

Research Questions

Three research questions have been addressed. (1) How well does this model of FBA hypothesize relationships between environmental events and the target behaviors for a student with EBD? (2) How successful are the interventions that are developed using this model for this student? (3) What are the experiences of the teachers who participate in this model of FBA with this student and implement the interventions?

Theoretical Framework

The paucity of research on the use of functional behavioral assessment in school settings and with students with emotional/behavioral disorders is the basis for this
research. However, with the IDEA mandates, the growth and expansion of functional assessment procedures have helped to provide effective interventions for a diverse population of students, including those with mild disabilities. Functional assessment procedures should facilitate the development of behavior intervention plans (BIP). The behavioral intervention plans should address both the modification of antecedents, but especially the teaching of new, alternative skills. Identifying methods for teachers and school personnel to conduct such assessments in an effective manner and the development of behavioral intervention plans is an important objective because it will facilitate understanding and the development of both effective and individualized programs of educational support (Etscheidt, 2001).

Definitions

Functional behavioral assessment is defined as “a set of assessment procedures used to identify variables that promote and maintain challenging behavior and based upon this assessment, interventions are selected that alter one or more of these variables” (Stichter & Conroy, 2005, pp. 19-20). The interventions are developed to support the student’s use of an alternative behavior that serves the same function as the inappropriate behavior and to make environmental changes that also support this behavior. Several methods and procedures have been suggested for conducting FBAs, but a specific method has not been determined to be the most effective. Information used in a FBA is gathered through both indirect and direct assessment techniques. Indirect assessment methods include interviews, behavior rating scales, record reviews, scatterplots, and behavior checklists, with interviews being the most common method of data collection (Floyd,
Phaneuf, & Wilczynski, 2005). Direct assessments methods involve direct observation of the behavior of concern. To avoid confusion with functional behavioral analysis, in this paper, FBA will always refer to functional behavioral assessment.

Functional behavioral analysis is a process of manipulating variables associated with the antecedents and consequences of a behavior to determine if these variables reinforce the inappropriate behavior (Drasgow et al., 1999). Functional behavior analysis is sometimes implemented during the FBA process to test the hypotheses made about a student's behavior, but not to initially determine the function of the behavior. Functional behavioral analysis involves manipulating a student's environment to support the hypothesis of the function of the behavior. Often times the use of functional behavioral analysis is not needed to conduct an effective FBA, in most cases, the FBA provides the information necessary to improve the challenging behavior (Chandler & Dahlquist, 2002). However, functional behavioral analysis can be useful when the function of a behavior cannot be determined through a FBA alone, or when the FBA needs to "firmly establish the function" (Chandler & Dahlquist, 2002, p.79) of the behavior.

Students with emotional/behavioral disorders (EBD) are a complex group of students, making their disabilities difficult to identify and support in school settings. Students identified with EBD generally display "deficits in executive function, hyperactivity, poor social skills, and inattention" (Rock, Fessler, & Church, 1997, p. 1). While social skills deficits are the most commonly cited concern, low self-esteem, poor adult relationships, failure to accept responsibility, an inability to express feelings appropriately, anxiety, and difficulty adjusting to change are also cited frequently as
concerns for students with EBD (Repp & Horner, 1998). For many individuals with EBD, their inappropriate behaviors "occur unpredictably and for reasons that are unclear" (p. 99) making identification of the functions of their behavior using FBA difficult (Repp & Horner, 1998).

Behavior intervention plans (BIP) are developed for a student using the information obtained through the functional behavioral assessment. Van Acker, Boreson, Gable, and Potterton (2005) describe the following components of BIP plans: the identification or encouragement of an alternative behavior, indication of how the information from the FBA helped develop the BIP, positive behavioral supports that will facilitate the success of the intervention plan, plans to evaluate and monitor the intervention's success (Van Acker, et al., 2005). Developing a successful BIP and teaching a student to regularly use the alternative behavior is the final, and most critical, aspect of the FBA process. A student's consistent use of a socially acceptable behavior is the ultimate goal of the process.

Summary

The need for research evaluating the effectiveness of FBA with students with EBD in school settings is continually expanding. Because the majority of research on the use of FBA has been done in non-school settings with students with severe cognitive and developmental disabilities, its effectiveness cannot be generalized to other populations or settings. The purpose of this research paper was to examine a model of functional behavioral assessment and evaluate its effectiveness in a school setting with students with emotional behavioral disabilities.
CHAPTER 2

LITERATURE REVIEW

Functional behavioral assessment (FBA) has received increased attention from legislators and school district personnel since the passage of the Individuals with Disabilities Education Act (IDEA) 1997 amendments (IDEA, 2004). This attention has led to an awareness of the need for more extensive research into the area of school-based FBA practices (Hoff, Ervin, & Friman, 2005). This chapter reviews the research on FBA with a focus on its use in school-based settings, the IDEA amendments related to FBA and current issues regarding school-based implementation of FBA.

Functional Behavioral Assessment

Functional behavioral assessment is defined as “a set of assessment procedures used to identify variables that promote and maintain challenging behavior and based upon this assessment, interventions are selected that alter one or more of these variables” (Stichter & Conroy, 2005, pp. 19-20). FBA assumes that every student has a unique history that plays a role in the development of maintaining factors for inappropriate behavior and that a behavior is learned and continues to occur because it achieves a desired outcome for an individual (Chandler & Dahlquist, 2002). It incorporates a variety of strategies to identify the maintaining variables of a behavior (Horner, as cited in Murdock, O’Neill, & Cunningham, 2005). FBA involves several steps to determine the inappropriate behavior, what is maintaining this behavior, and what can be done to eliminate or replace the behavior. FBA allows for the identification of the function of a
given behavior as well as those situations that precede the behavior (Dunlap, Newton, Fox, Benito, & Vaughn, 2001).

A FBA involves several assumptions. First, inappropriate behavior occurs in a complex social context and interventions may need to address these systems as well as the student. Second, inappropriate behavior is effective and functional and reaches the same goal for the student as an alternative behavior (Chandler & Dahlquist, 2002). Likewise, it usually leads to a predictable reinforcement (Drasgow et al., 1999). Fourth, careful consideration should be given to the influence a behavior has on a student and others around him or her, regardless of how severe or mild the behavior may be (Chandler & Dahlquist, 2002).

The goal of the intervention developed through FBA is not only to reduce an inappropriate behavior, but also to teach the student a new socially acceptable alternative behavior that is supported by the environment. Using punishment-based interventions to reduce inappropriate behavior is not suggested because it is generally a short term fix for the problem and it only teaches the student what they should not do, not a positive alternative behavior (Chandler & Dahlquist, 2002). The ultimate goal of FBA is to produce a positive and maintaining lifestyle change for the individual (Drasgow et al., 1999).

**Purposes/Functions of Behavior**

FBA assumes that students display inappropriate behaviors because they serve a purpose or function for them. Chandler and Dahlquist (2002) provide broad examples of the function of student behavior, specifically that behaviors have a positive reinforcement
function, negative reinforcement function, or a sensory regulation and sensory stimulation function. When the function of a student’s behavior is positive reinforcement, the individual is obtaining something positive by exhibiting the challenging behavior. This could be attention, control, or material items. The negative reinforcement function does not mean a student wants to be punished for the behavior, rather when the student displays an inappropriate behavior; he or she is attempting to avoid or escape something negative in the environment. This may include avoiding a specific task, activity, place, person(s), material items, or even participation in a class (Chandler & Dahlquist, 2002).

Chandler and Dahlquist’s (2002) third function is sensory regulation and sensory stimulation. While the positive and negative reinforcement functions are maintained through social outcomes, the sensory functions are maintained by biological and neurological outcomes. Sensory regulation can occur in any of the sensory systems (i.e. tactile, auditory, visual, etc.). Students who have a sensory regulation function want to maintain an optimal level of stimulation (sensory regulation theory), therefore, when their level of stimulation becomes too low, the individual will engage in behavior that will increase it or if their level of stimulation is too high, they will engage in behavior to decrease it. This differs from the sensory stimulation function, which suggests that student’s exhibit challenging behavior because it is generating sensory or perceptual stimulation that is reinforcing on its own, the behavior itself is what is producing the outcome the student desires (Chandler & Dahlquist, 2002).
Cipani (2002) provides more specific examples of the function of a student’s behavior. Cipani proposes that there are seven possible purposes of behavior: “teacher attention, peer attention, tangible reinforcers, sensory reinforcers, escape/avoidance of instruction-task duration, escape/avoidance of instruction-task difficulty, and escape of unpleasant social situations” (p. 235).

Inappropriate and target behaviors. When conducting a FBA, the goal is to replace an inappropriate behavior with an appropriate behavior that serves the same function for the student. The replacement behavior allows the student to achieve the same goal they were attaining by using the inappropriate behavior. Inappropriate behavior is, “any behavior that interferes with the physical, emotional, social, or academic well-being of the target student or any other person [affected by his or her behavior]” (Kaplan, 2000, p. 4). The ten most common inappropriate behaviors displayed by students referred for FBA include (1) not working on task without supervision, (2) engaging in inappropriate physical activity, (3) not following directions expected of all students, (4) being disruptive when seeking attention, (5) engaging in tantrum behavior when requests are not met, (6) making demands of and threatening others, (7) destroying property, (8) exhibiting aggression when provoked, (9) being verbally aggressive without provocation, and (10) being physically aggressive without provocation (Kaplan, 2000). The functions of these behaviors may include many things, most commonly a gain or escape function. The student is displaying the problem behavior with the intention of getting something out of it (gain) or getting away from doing something (escape) (Kaplan, 2000).
A target behavior is a replacement behavior that serves the same function as the inappropriate behavior for a student and it is the behavior a student is expected to use after successful implementation of an intervention (Kaplan, 2000). Target behaviors are incompatible with inappropriate behaviors. For example, “exhibits aggression when provoked” would have a target behavior of “engages in assertive behavior when provoked” (Kaplan, 2000, p. 5). Target behaviors should be generalizable across situations and people and support maintenance or the continuation of the alternative behavior across time (Chandler & Dahlquist, 2002).

Common misconceptions regarding the causes of the target behaviors may influence the effectiveness of an intervention. Five misconceptions of causes are (1) the bad child, (2) the disability, (3) the bad family, (4) the bad home, and (5) previous trauma or traumatic experience (Chandler & Dahlquist, 2002). The use of FBA may help alleviate these misconceptions. For example, FBA does not stem from the belief that this child is inherently bad and nothing can change that. The information gathered through a FBA may illustrate that a behavior is challenging but that altering variables in a student’s environment and teaching new behaviors may help a student behave in a socially acceptable way (Chandler & Dahlquist, 2002). In a response to the other common misconceptions, Chandler and Dahlquist suggest that those conducting FBAs assume that a disability is not what causes an inappropriate behavior because both students with and without disabilities display inappropriate behaviors. In relation to the bad parenting, bad family or bad home, it is necessary to take into account that students may learn their behaviors from their families. While students may learn the behavior at
home, it is not necessarily being reinforced in the home. Because the FBA is being conducted in school, you should recognize that the behavior displayed is providing the student with some desired result in school although it could have started in the home. Finally, while it is equally important to recognize and accommodate for previous trauma, a student’s specific behavior is serving a purpose in the current setting, not the previous setting or traumatic situation that occurred (Chandler & Dahlquist, 2002).

Steps in FBA

The Center for Effective Collaboration and Practice (1997) describes a seven step process for conducting a FBA (as cited in Jolivette, Barton-Arwood, & Scott, 2000). The first step is to describe the behavior, making sure to define it in terms of the conditions in which it is likely to occur, not the environment. For example, saying, “the student is out of her seat during writing time” rather than just saying “the student does not stay in her seat.” The second step is refinement of the definition of the inappropriate behavior. The new definition should be measurable and observable, as well as facilitate a common understanding of the problem. The best way to achieve this is to question who, what, when, where, and why about the inappropriate behavior. Step three is data collection. It is imperative to use multiple sources for data collection because it increases the reliability and validity of the data. There are several methods of data collection available. These can include indirect methods such as interviews, record reviews, rating scales, and checklists or direct observation of the behavior of concern. A more detailed discussion of data collection methods is provided later in this chapter. Following data collection, data analysis begins. This step requires those completing the assessment to organize and
analyze the data and identify behavior patterns, facilitating recognition of the antecedents and consequences that predict and maintain an inappropriate behavior. The information gained through this step allows for hypothesis generation in step five. A hypothesis should be a succinct summary of the data and suggest an explanation for the function of the inappropriate behavior. The sixth step is developing and implementing a behavior intervention plan (BIP) that is linked to the function of the behavior. The BIP is a system or strategy used to develop interventions that decrease inappropriate behaviors, and increase positive replacement behaviors. The final step is to evaluate and modify the intervention plan as necessary (The Center for Effective Collaboration and Practice as cited in Jolivette et al., 2000). Using this method of FBA to design interventions may lead to several benefits for a student, specifically an emphasis on skill building and not on punitive strategies and that these new skills may provide long lasting changes in behavior (Stahr, Cushing, Lane, & Fox, 2006).

**Methods for Gathering Information**

Many researchers have investigated methods of conducting FBAs (Barton-Arwood, Wehby, Gunter, & Lane, 2003; Floyd, Phaneuf, & Wilczynski, 2005; Fox, Gunter, Davis, & Brall, 2000). There is considerable debate about the data collection methods that are most effective for obtaining information necessary to identify the function of a behavior and develop an appropriate intervention (Stage, et al., 2006). Available methods of data collection are indirect methods, direct observations, and functional analysis.
Indirect Methods of Data Collection

Indirect methods of data collection are the most common method currently in use. Van Acker et al. (2005) reported the use of indirect data collection 90% of the time in their review of FBA studies that were generally completed in highly structured, non-school settings. Indirect methods are “characterized by being removed in time and place from the phenomena they measure” (Floyd et al., 2005, p. 58). Examples of those methods are interviews, rating scales, record reviews, and checklists. In survey conducted by Desrochers, Hile, and Williams-Moseley (1997), it was reported that 95% of the respondents used interviews as their most frequently utilized indirect methods of data collection. The goal of an interview is to understand the inappropriate behavior along with the environmental conditions or events that are associated with it (Drasgow et al., 1999). The purpose of an interview is to review a large number of potential variables supporting an inappropriate behavior and to narrow them down to those that appear to be of the most influential to the student (O’Neill, Horner, Albin, Storey, & Sprague, 1990). It is important to use multiple sources of information for interviews because each offers a unique perspective and information about the inappropriate behavior. Interviews should be conducted with the student, teacher(s), family, and others who spend a significant amount of time with the student. Following the interview, the collected information should provide a “physical description of the problem behavior, the circumstances that predict the occurrence and nonoccurrence of the problem behavior, and the reaction that the problem behavior evokes in others” (Drasgow et al., 1999, p. 4). Interviewing is an effective way to get important information about inappropriate behaviors, but its validity
depends on the accuracy of the information an informant provides (Yarbrough & Carr, 2000). The interview format has shown the “strongest convergent agreement between teachers and students” suggesting that information from teachers and students may be more valid than information obtained from parents or other sources (Stage et al., 2006, p. 453).

There are several standardized indirect data collection scales available for use during a FBA assessment. One example is the Motivation Assessment Scale (MAS), developed by V. Mark Durand, Ph.D. and Daniel B. Crimmins, Ph.D., which is a 16-item scale used primarily with students with developmental disabilities or cognitive impairments. This instrument is completed by parents and school or residential facility staff, and it identifies the function of a target behavior as either negative reinforcement, positive reinforcement, or self stimulation (Desrochers, Hile, & Williams-Moseley, 1997). Another frequently used instrument, developed by Lewis, Scott and Sugai, is the Problem Behavior Questionnaire (PBQ), a 15-item scale that indicates if maintenance of a behavior is due to peer attention, teacher attention, escape from peer attention, or escape from teacher attention (Stage et al., 2006).

Stage, Cheney, Walker and LaRocque developed the Teacher Functional Behavioral Checklist (TFBAC) which asks teachers to describe routines, setting events, and reinforcers for the student (Stage et al., 2006). It has good test-retest reliability and good reliability over time in the prediction of inappropriate behavior (Stage et al., 2006). Scales are also available for student completion, such as the Children’s Intervention Rating Profile (CIRP), developed by Witt and Elliott, is a 7-item rating scale that assesses
the student’s perception of the fairness, effectiveness, and negative outcomes associated with participation in a specific intervention (Stahr et al., 2006). This scale has internal consistency validity in a range from .75 to .89 (Stahr et al., 2006).

Some benefits of indirect methods of data collection are that they are less time-consuming to use and less expertise is necessary to use them as compared to direct observation methods or functional analysis. Because of this, teachers and behavior specialists alike can administer them. Indirect methods of assessment are the only methods that can be used with behaviors that occur infrequently (Floyd et al., 2005). Indirect methods may also “yield unique and relevant information that aids in the identification of functional relations” (Floyd et al., 2005, p. 69). However, indirect methods are not without their shortcomings. Stage et al. (2006) reported that “legally challenged FBA cases relied heavily on indirect assessments, suggesting that these methods are questionable” (p. 452). Indirect methods may be erroneous because the reports are derived from personal judgments of the person gathering the information and are not a direct measurement of a student’s behavior. Also, there are no methods or guidelines to determine the quality of indirect assessment data (Floyd et al., 2005).

**Direct Data Collection**

Direct assessment methods also are commonly utilized in FBA’s, generally in the form of direct observations of student behaviors. Direct assessments refer “to methods of observing and recording ongoing behavior to identify the variables correlated with the occurrence of the target behavior” (Desrochers et al., 1997, p. 2). There are three major purposes of observation: (1) describing classroom events that lead to inappropriate
behaviors, (2) developing and evaluating the accuracy of hypotheses regarding antecedents/consequences of behavior, and (3) evaluating the intervention that was developed from the FBA (Fox et al., 2000).

With direct data collection techniques, the person conducting the FBA collects data regarding the antecedents and consequences of the inappropriate behavior through observations of the behavior. Antecedents are the events that occur before the inappropriate behavior is exhibited and consequences are the events that follow the inappropriate behavior. However, these are not the only two events that can be observed through direct data collection. Setting events, which are situational or contextual factors that have an influence on how an individual responds to antecedents and consequences of behavior may also be observed (Chandler & Dahlquist, 2002). Setting events do not cause inappropriate behavior, but when they are combined with antecedents, setting events are associated with inappropriate behaviors becoming more disruptive. Setting events can facilitate data collection and intervention development when changes to the antecedents and consequences of a behavior are ineffective at reducing challenging behaviors (Chandler & Dahlquist, 2002). Setting events are helpful because if an individual is not responding to an intervention as expected, an awareness of other situational factors may explain the lack of response (Chandler & Dahlquist, 2002).

One procedure used to record information from observations is Antecedent-Behavior-Consequence (ABC) analysis. Observations occur in the student's natural environment (classroom, lunchroom, etc.) and descriptions of behavior are recorded, including the antecedent (what preceded the behavior) and the consequence (what
followed the behavior). Another procedure is using a scatter-plot analysis, in which a large block of time is divided into smaller intervals, the occurrences of behavior are charted, and a pattern of behavior is determined (Desrochers et al., 1997). While this ABC analysis method is supported by the fact that it is able to produce relevant and accurate information, it is criticized for being time and labor intensive (Desrochers et al., 1997; Yarbrough & Carr, 2000).

Functional Behavioral Analysis in Data Analysis

Functional behavioral analysis is a method of data analysis used with FBA and it is often confused with FBA. This method of data analysis manipulates the antecedents and consequences of a behavior to test the hypotheses determined through the FBA process (Drasgow et al., 1999). This method is often preferred because it is the only method that “demonstrates control of the problem behavior” (Desrochers et al., 1997, p. 2). The use of functional behavioral analysis is often not necessary to determine the function of a behavior because a good functional assessment should give the assessor the information needed to improve challenging behavior (Chandler & Dahlquist, 2002). However, functional behavioral analysis may be useful when the function of a behavior cannot be determined through observations, when there is uncertainty regarding the true function of behavior, or if the person conducting the FBA needs to “firmly establish the function” (Chandler & Dahlquist, 2002, p.79). Functional behavioral analysis is the most exact and meticulous method for evaluating the association between the environment and behavior (Drasgow et al., 1999). Functional behavioral analysis also has a short duration, which has also been considered to be one of its shortcomings. Some view its timeliness
as "misleading" (p. 131) because of the belief that 10-15 minutes is not enough time to determine the function of a behavior (Yarbrough & Carr, 2000).

Functional behavioral analysis has other limitations, including its assumption that direct manipulation of controlling variable(s) is possible, when it may not be (Desrochers et al., 1997). Often students are in a setting where the controlling variable(s) cannot be changed or would be difficult to change. For instance, if the controlling variable is a student's teacher or the way the classroom is arranged. Variables like the classroom teacher or the seating in the classroom, would be difficult to change without moving the child to another setting, which may remove the student from the situation rather than solve the problem. Perhaps, the biggest shortcoming of functional behavioral analysis is that "simply applying the test condition may inadvertently introduce a new controlling variable," which could "exacerbate" the student's behavior (Desrochers et al., 1997, p. 2). This suggests that by manipulating a variable, such as where the student is sitting, you may introduce a new variable that controls the behavior or one that makes the behavior more problematic, for instance, another student, the window near her desk, etc.

**Current Concerns Regarding FBA**

There are several concerns regarding the implementation of FBA in school settings. The most prevalent is the lack of research of the use of FBA in schools and therefore, the unknown reliability and validity of its use (Hoff, Ervin, & Friman, 2005). Other concerns include the fundamental implementation within schools, determining who is qualified to implement FBA, and the significant lack of research regarding the use of FBA with students with emotional behavioral disabilities (EBD) and the context to which
it is occurring. In a review of research, Hoff, Ervin and Friman (2005) found that only 18% of FBAs conducted in a school setting were done for students displaying disruptive behaviors.

Research Limitations

FBA is being used more frequently in school settings; however, there is little evidence of the effectiveness of using FBA in a school setting (Hoff, Ervin, & Friman, 2005). Gable (1999) suggests that much of the knowledge steering the use of FBA in schools is based on research completed in clinical settings with students with significant developmental disabilities. In these studies the FBA was completed by behavior specialists, not classroom teachers or other school personnel. There are few empirical studies on the effectiveness of FBAs conducted by school personnel with no specific training in behavior assessment or analysis (Hoff et al., 2005). The need for evaluating the validity and utility of FBA implemented by school personnel with various student populations in school settings has been discussed especially in regards to students with emotional/behavioral disorders (EBD; Scott, Liaupsin, Nelson, & McIntyre, 2005). Scott, et al., (2005) argue that the limited research on the use of FBA with students with mild disabilities, such as EBD, is enough to question the implementation of FBA and call for a simpler approach for use in schools. The use of FBA in school settings needs to be examined more closely.

Implementation of FBA in Schools

Scott and colleagues (2005) argue that there are three flaws of the current use of FBA in schools, which they determined through a "descriptive analysis of the perceptions
and practices of 13 school-based FBA teams” (p.57). First, the process of FBA in schools is reactionary and results in the loss of opportunities to develop and implement interventions to prevent minor problems from developing into more serious issues. Second, the complexity of FBA procedures requires that only those professionals specifically trained in behavioral assessment should implement it. This concern questions the abilities and skills of the people the student is most frequently in contact with, parents and classroom teachers to conduct an FBA. Finally, the meticulous procedures of FBA implementation may not be feasible for school settings as they are in more controlled clinical or residential settings, specifically the use of functional behavioral analysis and the time constraints and work load that FBA places on those who are completing the assessment.

Hoff et al. (2005) suggest that the use of FBA in schools is flawed because schools are mandated to implement the procedure without sufficient guidance from research and with a lack of effective methods for dealing with implementation. There is a lack of “uniformity regarding the roles and responsibilities of school personnel” in relation to the implementation of FBA procedures (Conroy, Clark, Fox, & Gable, 2000, p. 1). Others agree that thus far there is no consensus on what school personnel need to know in order to conduct a sound FBA (Quinn, Gable, Fox, Reithesford Jr., Van Acker, & Conroy, 2001). These scholars suggest research regarding the effectiveness of FBA is limited and the procedural guidelines for implementing FBA in schools are inadequate. Also, the fact that FBA is mandated by IDEA, which neglected to include any specific
information regarding implementation of the FBA process, leads to questions regarding how effectively schools are currently following or are able to follow the law.

Not all research on the implementation of FBA in schools has been critical. Several studies have determined that FBA can be successfully implemented in schools regardless of the lack of federally mandated methods to do so. Theoretical and empirical support is emerging to validate FBA use in the school context and with students who display disruptive behaviors in general education classrooms (Hoff et al., 2005). Ervin et al. (as cited in Hoff et al., 2005) found that in 98.7% of school-based studies where FBA was implemented to develop interventions, the interventions produced a positive behavior change. The review of results of 14 studies conducted in various school settings (special schools, self-contained special education classrooms, and general education classrooms) regarding the utility of FBA found that despite the lack of studies on this topic, evidence that FBA can identify functions and develop interventions across settings and with various students is emerging (Reid & Nelson, 2002). Stahr et al., (2006) also support the future of FBA by reporting that students with a variety of disabilities have shown success after implementation of the FBA process. However, who is able to implement the procedure and the efficiency of the training in this process are still common questions.

Who should implement FBA. One of the most prominent issues in school implementation of FBA is in relation to who is able to implement the FBA procedures. Multiple studies have noted the lack of training of teachers and other school staff in conducting FBA's including a study by Van Acker et al., (2005) that reported that school psychologists, special education professionals, and program support personnel were most
likely to be trained in conducting FBA's. Regular education teachers were not a member of this cohort of trainees. In fact, “a majority of school districts’ personnel lack the specific competencies and expertise to implement FBA” (Hendrickson, Gable, Conroy, Fox, & Smith, 1999, p. 3). Yell and Katsiyannis (2000) suggest that “public policy has exceeded the existing FBA knowledge base” (p. 3) and that while school-based teams have been required to conduct FBA’s they generally have insufficient knowledge to do so. Most schools are not ready to implement FBA procedures because of the scarcity of staff trained in FBA (Van Acker et al., 2005). Not only is their knowledge of FBA limited, but IDEA does not describe how to implement FBA in a school setting. Also, the limited empirical research conducted on the efficacy of school based FBA implementation by school personnel has left schools to rely on researchers or trained experts to conduct the FBA (Hoff et al., 2005).

The level of knowledge needed to produce an effective FBA constitutes a significant amount of coursework (Scott & Nelson, 1999). School personnel should receive rigorous training in data collection methods and procedures, as well as in the interpretation of the data and in developing and implementing proper interventions (Quinn, 2000). School personnel also require more training on how to produce a FBA that is “legally defensible and technically adequate” (Van Acker et al., 2005, p. 54). Conroy, Clark, Fox, and Gable (2000) contend that, “most educators have limited training and lack the knowledge and skills needed to conduct an FBA in an appropriate, systematic manner” (p. 1). Staff should be taught using systematic methods of
instruction and supplement this instruction with the use of practical experiences, support, guidance, and feedback because a training session is not enough (Van Acker et al., 2005).

Teaching preservice teacher’s methods and techniques for conducting FBA’s seems an effective method for increasing competence and comfort in the process. Most preservice FBA training is completed in existing courses in classroom or behavior management, not specific courses on FBA (Conroy et al., 2000). Within these classroom and behavior management courses, time is always a constraint; therefore, students only receive an overview of FBA implementation, not nearly enough knowledge to facilitate competence. If competence of the procedure is to be obtained, teacher education programs should include a specific course on FBA with coursework and an applied practicum experience (Conroy et al., 2000). Teacher education programs need to clearly express the importance of the use of FBA and present it as a positive and proactive method of behavioral interventions and modifications (Stichter, Shellady, Sealander, & Eigenberger, 2000). Quinn (2000) suggests that for FBAs to be useful and conducted properly, school personnel should be convinced of the practicality of FBA, given extensive training, and understands the practical applications. If teachers lack the specific knowledge and skills needed to complete a FBA and develop an intervention, “their efforts may be futile” as the selected intervention may be ineffective and further assessment becomes necessary (Conroy et al., 2000, p. 2).

Limited knowledge and resources have led to the belief that school systems may need a full-time behavioral specialist on staff to conduct FBA’s (Quinn, 2000). The demands of school staff are ever increasing, leaving limited time to conduct FBA’s and
other assessments. Several school districts have started to use check mark systems where teachers simply mark a box labeling the behavior and one of several potential functions without doing a thorough assessment (Yell & Katsiyannis, 2000). This checklist system of identifying functions and planning interventions suggests that FBA is seen "as a legal mandate, rather than an instructional process to ameliorate problem behavior" (Hendrickson et al., 1999, p. 2).

Despite the above discussed concerns, research does support the implementation of FBA by school personnel. Though some researchers claim that intensive expertise is needed to conduct FBA's, others believe a practical knowledge base and skills obtained through in-service trainings are enough to allow for acceptable implementation (Carr & Wilder, 1997). Chandler, Dahlquist, Repp and Feltz (1999) found that after providing school personnel in preschool classrooms 16 hours of FBA training, the educators were able to implement FBA effectively. These results were supported by the success of student outcomes following FBA procedures, which is that the inventions implemented were successful in decreasing inappropriate behaviors.

Although research is promising and becoming more prevalent, many teachers still believe that they cannot implement FBA's. It is important to encourage teacher participation because, "the cost in time and resources are too high for schools to simply move through the process without concern for achieving positive student outcomes" (Van Acker et al., 2005, p. 54). Essentially the people conducting FBAs need to encourage and support teachers in their efforts to learn and subsequently administer FBA's correctly and effectively. The amount of time that an average FBA takes ranges from a week to a
month, so if a teacher is investing that much time on helping a student to improve inappropriate behaviors, it is essential that they really know what they are doing, as to not waste any valuable time (Hoff, Ervin, & Friman, 2005).

**Etscheidt’s Model of Functional Behavioral Assessment**

Etscheidt (2001) defines functional assessment as “identifying functional relationships between environmental events and the occurrence and nonoccurrence of a target behavior” (p. 1). Etscheidt’s model seeks to facilitate more directly linking the results of functional behavioral assessment to the development of a behavior intervention plan. The focus of this model is on functional assessment, not on functional analysis, and progress monitoring is used to verify the effectiveness of the intervention. This model also emphasizes student participation in information gathering, intervention, and evaluation. This specific model was designed to be useful to all students, those in general and special education alike, who display inappropriate behaviors.

The first step is to have the teacher define the inappropriate behavior and then perform a scatter plot analysis over a five day period in order to determine the frequency of the inappropriate behavior (Etscheidt, 2001). Conducting a functional assessment of the inappropriate behavior is the next step; this is done by using the commonly used methods of interviewing and conducting direct observations. Unlike many other models, which assume that the behavioral specialist would conduct these interviews and observations, with this model, the teacher is responsible for interviewing parents and others who are familiar with the student and their behavior, as well as completing the interview for themselves (Quinn, 2000). The method of interview is very specific for this
model. The interviewee is first asked to describe the inappropriate behavior and indicate why it is so problematic. Next they are asked to identify the antecedents of the behavior in regards to four domains. This is where this model differs significantly from other models of FBA. The four domains discussed are (1) physical (i.e. time of day, location, description of room), (2) instructional (i.e. instructional content, method of presentation, response format, student preference), (3) social (i.e. peers, adult-student interaction), and (4) non-school/ecological (i.e. medication, nutrition, family). The information obtained about each of these domains is intended to determine a better link between inappropriate behavior and the behavioral intervention that is developed. The more specific information we know about a behavior, the better able we are to assist the student in developing a new socially acceptable alternative (Etscheidt, 2001).

The next step in this model is to identify the consequences of the student’s behavior, or what the behavior is obtaining for the student i.e. escape/avoidance, tangible materials (Etscheidt, 2001). Finally, the respondent to the interview identifies an acceptable alternative behavior. After the interviews are completed the teacher conducts three one hour observations during the activities associated with the highest frequency of inappropriate behavior. The purpose of these observations is to provide a frequency count of the behavior, identify the antecedents and consequences, and to validate the information gathered from the interviews. After conducting the observations and analyzing the data, the teacher is ready to develop a hypothesis about the functional relationship between the antecedent and consequent events and the inappropriate behavior (Etscheidt, 2001).
While many methods would use functional analysis to test the hypothesis, this model indirectly tests the hypothesis by evaluating the effectiveness of the subsequent intervention. Etscheidt (2001) offers several reasons for this including, (1) functional analysis is criticized as being too complex and time consuming, (2) constructing the analogue conditions that may occur the inappropriate behavior could cause ethical concerns, (3) it may be problematic for students with mild disabilities because these students often have several functions associated with their behaviors, and (4) validity concerns may exist because this specific method has yet to be used in the school setting.

Based on assessment data, a behavior intervention plan is developed. The development of the behavioral intervention is a two pronged approach that includes modifying the antecedent events in order to prevent the inappropriate behavior from occurring and then teaching the student an alternative replacement behavior that achieves the same function as the inappropriate behavior. Finally, the behavioral intervention can then be evaluated (Etscheidt, 2001). The process of evaluation consists of three parts. The first component is conducting a direct observation of both the inappropriate behavior and the replacement behavior and collecting frequency data. The second component involves conducting ongoing interviews with those people who are involved with the student and observe behaviors. The final component is conducting student interviews throughout the intervention process (Etscheidt, 2001).

This model was developed due to the lack of functional behavioral assessment procedures that are adequately described in the literature (Etscheidt, 2001). Further, schools and teachers are often reluctant or because they do not know exactly how to
conduct FBA’s. Additionally, with the mandates of IDEA 1997, the use of FBA is becoming much more common, so a standardized procedure would not only be helpful, but ultimately necessary.

**Emotional Behavioral Disabilities (EBD)**

A plethora of research on FBA as it relates to students with significant developmental and cognitive disabilities exists; however, the same cannot be said for students with emotional behavioral disabilities (EBD). The majority of information about the usefulness of FBA comes from the research conducted with students with developmental disabilities who generally display self-injurious or destructive behaviors (Lane, Gresham, & O’Shaughnessy, 2002). The most significant limitation of current research with students with EBD is that the current methods find it difficult to determine the supporting factors of the low-frequency, high intensity, behaviors characteristic of this population of students because there are often multiple functions for their behaviors (Stichter & Conroy, 2005). Stichter and Conroy propose three specific reasons for the lack of empirically validated use of FBA for students with EBD. These include the absence of a standard procedure of FBA to use, that the reactive policies of schools generally do not call for implementation of FBA until there is a change in placement, and the lack of adequate knowledge for teachers on using FBA.

**Students with EBD**

Students with EBD represent a group of students who are “especially appropriate for assessment-based interventions” like FBA (Repp & Horner, 1998, p.199). Approximately 375,000 students are identified with emotional behavioral disabilities
every year, accounting for 9% of students in special education (Repp & Horner, 1998).

Students with EBD are a complex group of students which not only make them difficult to identify, but also makes them the last group of students with disabilities to be identified in the public school context. They are under-identified and under-served within special education programs (Nelson, 2000). This under-identification could be because the number of teachers who have specific training in teaching students with EBD's is at the lowest number in recent history. There is a lack of qualified special education teachers working with students with EBD and these students are the last group to be included within the general education setting (Nelson, 2000). One of the biggest challenges reported by teachers who work with students with EBD is managing significant inappropriate behavior (Repp & Horner, 1998). Lane et al. (2002) suggest that teachers are often hesitant to use screening tools or advocate for placement of students they suspect of having emotional or behavioral difficulties because they will have to provide services with already limited funds, knowledge, and resources.

Students identified with EBD have a tendency to display “deficits in executive function, hyperactivity, poor social skills, and inattention” (Rock, et al., 1997, p. 1). The most frequently cited problem is the social deficits, however, other problems include low self-esteem, poor adult relationships, failure to accept responsibility, inability to express feelings appropriately, anxiety, and a difficulty in adjusting to change (Repp & Horner, 1998). These students are also associated with high dropout rates, elevated arrest rates, low employment rates, and often an inability to live independently (Nelson, 2000). In comparison to other students with disabilities, students with serious emotional
disturbance have a 50% dropout rate, in contrast to 32.5% for other students (Repp & Horner, 1998). They report that of those students who do complete school, only 44% are employed after two years, in comparison to 61% of students without disabilities. The arrest rates for students with emotional disturbance is two times greater than that of the general population, with 4% living in correctional facilities, compared to only .3% of people from the general population (Repp & Horner, 1998).

As with all students, there are factors outside of the classroom that may affect behaviors (Stichter & Conroy, 2005). The most prevalent risk factor for students classified with EBD is poverty, but other external factors have a significant effect on development as well, including, family stress, maternal health, inadequate parenting, school climate, and teacher and child interactions (Conroy & Davis, 2000). Repp and Horner (1998) caution those using FBA to recognize that these students often exhibit inappropriate behaviors inconsistently, that is that students may respond appropriately to an antecedent in one instance, but inappropriately at a later time. They suggest being aware of the risk factors, including the fact that a situation from home, the students level of fatigue, or the effects of medication play an important role in how the student may respond to particular antecedents or consequences. One specific factor is academic difficulties, including specific learning disabilities, which affect nearly 81% of students classified as EBD (Repp & Horner, 1998). The aversive behaviors displayed by these students are more closely attended to than the risk factors; the lack of proactive procedures used with these children is astounding.
Several screening tools are available to evaluate children whose life circumstances place them at a higher risk for being classified with EBD, however teachers are not using them frequently enough. Some of these tools include the Social Skills Rating System, the Walker-McConnell Scale of Social Competence and School Adjustment, the Child Behavior Checklist, and the Behavioral Assessment System for Children, all of which allow for a more accurate description of the academic, social, and behavioral profiles of students (Lane et al., 2002). Partially due to the lack of adequate proactive evaluations of student behavior, more than half of students classified with EBD are not identified and do not receive services until they are 12 years old (Conroy & Davis, 2000). Even more telling is that 10-15% of preschool aged children demonstrate behavioral difficulties that could be handled proactively instead of waiting for the problem to become more well-established and more destructive (Conroy & Davis, 2000).

Because practitioners have failed to provide adequate early intervention programs and strategies, they have been forced to compensate for their poor planning by implementing interventions with these students that are highly punitive, instead of being able to use the more effective early intervention strategies or functional behavioral assessment to determine more appropriate interventions (Nelson, 2000). Instead of developing positive behavioral supports for these children, they are all too often the first group to get suspended or expelled for their behaviors. While this temporarily relieves the situation, these students are out of the environment that can be most helpful to them, the classroom. Likewise, when these students are continually removed from the classroom they are not receiving any academic instruction and will undoubtedly fall
behind, causing frustration that leads to further behavioral difficulties (Nelson, 2000). While removing these students from the classroom may seem to be the easiest and most feasible option at the time, it can lead to negative long term outcomes.

**Teachers and Interventions for EBD**

Many students with EBD are not included in the general education classroom, but are in a self-contained classroom. The curriculum in these segregated classrooms has been described as the "curriculum of noninstruction" (Lane et al., 2002, p. 510). These classrooms offer little of the general education curriculum, such as, math, reading, social studies, and science, and there may be little instruction if at all. Jolivette, Lassman, and Wehby (1998) suggest teachers of students with EBD often have difficulties identifying the best way to meet their students unique needs behaviorally and academically, as students with EBD also tend to exhibit "poor or slow academic progress" (p. 1). Teachers interact less frequently with these problem students and focus less on the academic issues and more on the behavioral concerns (Chandler & Dahlquist, 2002). Most general education teachers are not prepared to address the unique academic and behavioral needs of students with EBD; likewise, special education teachers generally do not have enough training in collaboration or consultation to be able to assist the general educators (Hendrickson, Gable, Conroy, Fox, & Smith, 1999).

This lack of collaboration is not solely the fault of the special education teachers. Lane et al. (2002) state that most preservice training for teachers working in EBD classrooms puts an emphasis on classroom behavior and conflict management, and social skills training, but not on teaching academic skills. Because of this, even if students do
make progress in relation to their behavior, returning to a general education placement is unlikely to last because they have not been exposed to the amount of academic curriculum that other students have (Lane et al., 2002). A six-step process has been recommended that incorporates functional assessment with developing academic interventions specifically for students with EBD. This six-step process includes (a) gathering evidence of any academic problems or deficiencies, (b) gather evidence of medical or sensory issues, (c) pinpointing the specific skill deficit, (d) formulating hypotheses and develop interventions that address the academic problem are appropriate for classroom use, (e) assess the effectiveness of the interventions in analogue settings, and (f) select, implement and evaluate the effectiveness of the intervention (Hendrickson, Gable, Novak, & Peck, 1996).

Positive intervention. Since the implementation of the 1997 IDEA amendments, the use of FBA and positive behavioral supports with students who display inappropriate behaviors, including those with EBD, have increased. Nelson (2000) suggests several ways teachers can work with these students and their behaviors in a positive way, instead of always removing them from the classroom. He suggests demonstrating proper social skills in instruction, practicing contingent reinforcement of desired behavior, and using systematic behavior modification, through the use of a token economy or something similar. Nelson also suggests other methods that are not widely used with this population, including social skills training, behaviorally-based interventions (developed through FBA), and academic or curriculum restructuring. Despite their difficulties in the
classroom, students come to school to learn, they belong in the classroom and deserve the same instruction as students in general education programs (Nelson, 2000).

In their review of studies using FBA with students with EBD, Kern, Hilt, and Gresham (2004) found that between 1991 and 2002 only 20 studies were published on this topic. They also reported that 10 of these were published between 1999 and 2002, in response to IDEA 1997. These studies included 43 participants ranging from 4 to 14 years of age, who were classified in various areas including, at risk, attention deficit disorder, attention deficit hyperactivity disorder, behavioral disorder, bipolar disorder, emotional behavioral disorder, oppositional defiant disorder, schizophrenia, severe emotional disturbance, and mood disorder (Kern et al., 2004). This research helps those conducting FBAs to become aware of the type of research that has been conducted and with what specific disabilities, which may be helpful when looking for successful interventions for their own students. While this may seem like a limited amount of information when compared to the number of studies involving students with developmental disabilities, the research efforts represent a step in a positive direction towards learning more about students with EBD and how the use of FBA allowed for the development of successful interventions.

Conclusion

While educators and specialists are ethically mandated to follow federal regulations, such as the IDEA amendments, they are also ethically mandated to continue to follow "best practices" in implementing FBA's in the school context. With the continued research and extensive implementation of FBA, legislators will have to
recognize the limitations preventing the effective implementation of this procedure in schools. Eventually, those involved with education can hope for IDEA, or a new plan similar to IDEA, to describe in more details the expectations and means of implementing FBA. This research aimed to answer three questions, (1) How well does this model of FBA hypothesize relationships between environmental events and the target behaviors for a student with EBD? (2) How successful are the interventions that are developed using this model for this student? (3) What are the experiences of the teachers who participate in this model of FBA with this student and implement the interventions?
CHAPTER 3

METHODS

Purpose of the Study

The purpose of this study was to examine the effectiveness of a model of FBA that facilitates more directly linking the results of functional behavior assessment to the development of a behavior intervention plan for students with emotional/behavioral disabilities (EBD). The model focuses on gathering information from interviews and observations about four domains – instructional, social, physical, and non-school – that will assist school staff in developing behavioral interventions that more effectively address a target behavior. Ongoing progress monitoring of intervention effectiveness was used to verify the hypothesized relationships between environmental events from the four domains and the target behavior and evaluate intervention success. The specific research questions that were addressed are: (1) How well does this model of FBA hypothesize relationships between environmental events and the target behaviors for a student with EBD? (2) How successful are the interventions that are developed using this model for this student? (3) What are the experiences of the teachers who participate in this model of FBA with this student and implement the interventions?

Subject Recruitment

The individual who participated in the study was referred by a regular education classroom teacher to the school counselor for additional academic and/or behavioral support. The school counselor contacted the researcher, a school psychology graduate student, to determine through observation and behavioral checklists if the student was
demonstrating a serious, recurring problem and thus, would be a viable candidate for the study. This student was found to be a good candidate for the study because of increasing incidences of aggressive and disruptive behaviors in the classroom. He had also been referred to the school’s Teacher Assistance Team to develop a plan for more classroom support to decrease these behaviors. The counselor contacted the parent to inform them about the possibility of their child participating in the research and asked for permission to have the researcher contact them. Once verbal permission was given, the counselor gave the parent’s contact information to the researcher. The researcher proceeded to send information about the study to the parents, as well as an informed consent form. In this letter it was stated that if they chose not to have their child participate in the study, that they would still receive services from the school to help with the areas of concern. After the parents agreed to participate, the researcher gathered teacher consent, parent consent, parent permission, and student assent to participate. Participants then received a copy of the form that they signed, which explained the nature of the study, that participation was voluntary, and that confidentiality would be assured. After teacher consent, parent consent, parent permission, and student assent was obtained, the researcher began the functional behavioral assessment process using Etscheidt’s Model of Functional Behavioral Assessment.

Subject

Martin was a 6-year-old African American boy served in a general education Kindergarten classroom with minimal pullout for extra math and reading assistance. He was identified as an entitled individual; however, he was taking part in a Problem Solving
intervention process for other academic and behavioral needs. He was referred to the study because he displayed problem behaviors in the classroom. Martin was verbally and physically aggressive towards his peers. He also displayed sexually explicit behaviors such as inappropriate touching of his peers and using sexual references in his conversations. Martin also displayed off-task behaviors, such as talking, getting out of his seat, and fidgeting during carpet time. In addition to these behaviors, Martin frequently threw temper-tantrums in the classroom that lasted up to 20 minutes and disrupted not only his own classroom, but the neighboring classrooms as well. In addition to the program introduced in this study, Martin was receiving outside counseling on a weekly basis.

Setting

The study was conducted in a general education Kindergarten classroom in an urban Midwest elementary school. Martin’s classroom had about 20 students, with students frequently moving in and out of the school. The school had a positive behavior support program in place, along with the Character Counts program. Martin was also observed during specials classes, such as P.E., music, and art classes, as well as during informational and spirit assemblies and recesses.

Design/Procedure

Etscheidt (2001) defines functional assessment as “identifying functional relationships between environmental events and the occurrence and nonoccurrence of a target behavior” (p. 1). Etscheidt’s model facilitates more directly linking the results of functional behavioral assessment to the development of a behavior intervention plan.
The focus of this model is on functional assessment, not on functional analysis, and progress monitoring is used to verify the effectiveness of the intervention. This model also emphasizes student participation in information gathering, intervention, and evaluation. This specific model was designed to be useful to all students, those in general and special education alike, who display inappropriate behaviors.

The first step was to have the teacher define the inappropriate behavior and then perform a scatter plot analysis over a five day period in order to determine the frequency of the inappropriate behavior (Etscheidt, 2001). Conducting a functional assessment of the inappropriate behavior was the next step; this was done by using the commonly used methods of interviewing and conducting direct observations. The method of interview was very specific for this model. The interviewee was first asked to describe the inappropriate behavior and indicate why it was so problematic. Next they were asked to identify the antecedents of the behavior in regards to four domains. This is where this model differs significantly from other models of FBA. The four domains discussed were (1) physical (i.e. time of day, location, description of room), (2) instructional (i.e. instructional content, method of presentation, response format, student preference), (3) social (i.e. peers, adult-student interaction), and (4) non-school/ecological (i.e. medication, nutrition, family). The information obtained about each of these domains was used to determine a better link between inappropriate behavior and the behavioral intervention that was developed. The interview process followed a similar structure for all participants. The student and teacher interviews were conducted at the school during non-instructional times. The student interview lasted approximately 20 minutes and the
teacher interview lasted about 45 minutes. Both of these interviews were audiotaped. The parent interview was not able to be conducted in person and was replaced with a phone interview that lasted about 30 minutes and was not audiotaped. These interviews followed the format in Appendix B.

The next step in this model was to identify the consequences of the student's behavior, or what the behavior was obtaining for the student i.e. escape/avoidance, tangible materials (Etscheidt, 2001). Finally, the respondent to the interview identified an acceptable alternative behavior. After the interviews were completed the researcher conducted three one hour observations during the activities associated with the highest frequency of inappropriate behavior. The purpose of these observations was to provide a frequency count of the behavior, identify the antecedents and consequences, and to validate the information gathered from the interviews. After conducting the observations and analyzing the data, the team was ready to develop a hypothesis about the functional relationship between the antecedent and consequent events and the inappropriate behavior (Etscheidt, 2001).

While many methods would use functional analysis to test the hypothesis, this model indirectly tested the hypothesis by evaluating the effectiveness of the subsequent intervention. Etscheidt (2001) offers several reasons for this including, (1) functional analysis is criticized as being too complex and time consuming, (2) constructing the analogue conditions that may occurrence the inappropriate behavior could cause ethical concerns, (3) it may be problematic for students with mild disabilities because these
students often have several functions associated with their behaviors, and (4) validity concerns may exist because this specific method has yet to be used in the school setting.

Based on assessment data, a behavior intervention plan was developed. The development of the behavioral intervention was a two pronged approach that included modifying the antecedent events in order to prevent the inappropriate behavior from occurring and then teaching the student an alternative replacement behavior that achieved the same function as the inappropriate behavior. Finally, the behavioral intervention was evaluated (Etscheidt, 2001). The process of evaluation consisted of two parts. The first component was conducting a direct observation of both the inappropriate behavior and the replacement behavior and collecting frequency data. The second component involved conducting ongoing interviews with those people who were involved with the student and observe behaviors.

Once the researcher collected data from records, observations, and interviews, a meeting was scheduled with the teacher and parent to develop a behavior intervention plan (BIP). This plan followed the format in Appendix D, and specified classroom interventions. Because the parent could not attend meetings, the researcher and teacher met to design the BIP, a plan was also developed for gathering progress monitoring data on the effectiveness of the intervention. After the intervention was implemented, the researcher and teacher monitored the data on a daily basis. Data collection and monitoring continued, with the intervention continuing as planned because of success, until the end of the school year. Data for this study came from three different sources including students, the student’s mother and the classroom teacher.
Student Data

Data from the student was collected through an individual interview, review of school records, and classroom observations. The student interview was approximately 15-20 minutes in length and took place during a rest time in the classroom. The student was assigned a pseudonym at the start of the study and all contacts, including interviews, were private. The interview was conducted in a private room and was audiotaped. The researcher did not interact with the student during any classroom observations.

Parent Data

Data from the student’s mother was collected through an individual interview. The parent interview was a phone interview, because the parent’s schedule did not allow her to come to school during normal school hours. The phone interview was approximately 30-45 minutes in length and was not audiotaped. The student’s mother was also assigned a pseudonym at the start of the study and all contacts for interviews and participation in meetings was private.

Teacher Data

Data from the teacher was collected through an individual interview and through the teacher’s participation in meetings to plan interventions for the student. Interviews were approximately 30-45 minutes in length and meetings were approximately 30 minutes in length. The teacher was assigned a pseudonym at the start of the study and all contacts for interviews and participation in meetings was private. The interview and meetings were conducted before or after school in the teacher’s classroom and were audiotaped.
Data Analysis Procedure

The data was analyzed in regards to effectiveness of the intervention developed by the team and through ongoing progress monitoring during implementation. Baseline data was obtained as outlined in the previous sections. From this data a goal was set for student behavior, to decrease an inappropriate behavior. This information was graphed and continuous progress monitoring to measure the levels of student behavior was added. This ongoing progress monitoring not only allowed for the researcher and other participants to evaluate the effectiveness of the intervention itself, but it also facilitated knowledge of the effectiveness of the FBA model in general. It also allowed the researcher to determine if the intervention was allowing the student to make progress.

Also included in the data analysis procedures was information from semi-structured interviews completed by the researcher regarding the opinions of the ease and effectiveness of the intervention and process, of the teachers and parents.
CHAPTER 4

RESULTS

Data Analysis

The purpose of this study was to examine the effectiveness of a model of FBA that facilitated a more direct link of the results of a functional behavior assessment to the development of a behavior intervention plan for a student with emotional/behavioral concerns/disabilities (EBD). The model focused on gathering information from interviews and observations about four domains – instructional, social, physical, and non-school – that assisted school staff in the development of behavioral interventions that more effectively addressed a target behavior. Ongoing progress monitoring of intervention effectiveness was used to verify the hypothesized relationships between environmental events from the four domains and the target behavior and evaluate intervention success. The specific research questions that were addressed were: (1) How well did Etscheidt’s model of FBA hypothesize relationships between environmental events and the target behaviors for a student with EBD? (2) How successful were the interventions that were developed using this model for this student? (3) What were the experiences of the teachers who participated in this model of FBA with this student and implement the interventions?

How Well Did the FBA Hypothesize the Relationship Between Behavior and Environment?

This structured FBA process provided a great deal of information from which to determine the relationship between Martin’s behavior and his environment. The detailed question suggestions on the interview form addressed the instructional, social, physical,
and non-school domains and provided a vast amount of information. The researcher interviewed Martin’s classroom teacher and the pull-out intervention teacher that implemented his intervention. From this interview, Martin’s teachers and the researcher determined that there were two inappropriate behaviors that needed to be addressed, physical aggression and tantrumming. Physical aggression was defined as hitting, kicking, pushing, and any sexual behaviors, described as inappropriate touching of self and others and use of sexually explicit language. Tantrumming was defined as any incidence of more than 1 minute of crying. The teachers and the researcher also determined that while the behavior was occurring in various settings throughout the day, the behaviors occurred most frequently during unstructured times, such as recess, centers, and lunch.

**Instructional domain.** Martin’s teacher shared that at the time of the interview, Martin was one of the lower performing students academically in the classroom in both math and reading. She also shared that he had difficulties following directions, especially multi-step directions. Martin’s academic strengths were that he was able to follow along with instruction and stay on task in the small group reading setting. His teacher said Martin pointed to words and participated in the group regularly.

According to the classroom teacher, Martin did better in small groups compared to large groups in math and reading. His teacher noted that his behavior was worse during large group instruction, specifically during math. Instructionally, Martin was expected to do the same things as the rest of the class and during this time, behaviorally he was to be sitting quietly, with his legs crossed and his hands in his lap. Martin had
great difficulty sitting still on the carpet during this large group instruction in math and frequently disrupted his peers and his teacher as well.

Based on researcher observations and teacher data, Martin did not work well independently. He was very concerned with what other people were doing and not with what he was supposed to be doing. Martin also did not work well with his peers, unless a teacher was present. Martin had a difficult time sharing materials and taking turns, unless he was prompted to do so, in which case, a temper tantrum may begin.

Martin said that none of his school work was easy for him, and that the hardest part of school was when he had to cut out pictures with scissors. He shared that he could get assistance from his teachers if he needed it, but that it did not help him. He also said that it helped him when he got help from a classmate, but he could not explain why. Martin shared that his favorite part of school was the ramp center, where students build a ramp and see how long they can keep marbles going on it, because he “liked it” and his least favorite part of school was coloring because he “didn’t want to do it.”

Martin’s mother shared that he had told her that he did not like school. She thought it was because he got a lot more help and “hand-holding” in Pre-Kindergarten. She also shared that he did not have many friends at school, which she believed made it hard for him to want to go. Martin’s mother said she thought he knew what was expected of him at school, but that he did not take it seriously. She said she tried to work with him at home as frequently as possible and that all she wanted was for him to learn what he was supposed to learn and continue on to first grade.
Social domain. In the classroom, Martin sat at a table with three other students. However, his teacher said she had made a “moat” around him, because he did not keep his hands to himself when there were peers right next to him. From observations, the researcher found that Martin sat at one end of the table, while the rest of the peers sat at the far opposite end, out of arm’s reach for Martin. Throughout the course of the study, the seating situation changed. Martin was moved into a desk by himself that faced the wall, which helped to minimize distractions for him. Martin’s teacher said that he told her that he preferred this seating arrangement to the group seating. Martin’s teacher suggested that when Martin was within touching distance of his peers, the inappropriate behaviors were more likely to occur.

Martin often became physically aggressive when a peer had something that he perceived was his. The example his teacher gave was that a peer would have a crayon and Martin believed it was his; he would yell at them and hit them until he got it back. His teacher did note that other students antagonized him to get him “riled up,” but that Martin did not display an awareness of proper peer behaviors. For example, Martin became attached to two girls that were in his preschool class, he followed them around and would not leave them alone. As a response, the girls ignored him and complained to the teacher, which appeared to anger him because he was often reprimanded for his behaviors. Another example that his teacher shared was that he actually did make a friend, but one time Martin stuck his hands down his pants, and then shoved his hands in the peer’s face. From that point on, the peer was no longer interested in spending time with Martin. In general, peers were always involved when Martin displayed his
inappropriate behaviors; most times they were the recipients of his physical aggression. Based on the researcher’s observations, Martin did not appear to be aware that his behaviors were bothersome to the other kids and he did not seem to know an appropriate way to act.

As far as the tantrumming situations, Martin’s teacher reported that these usually occurred when he was asked to do something he did not want to do and they could not be predicted. They also occurred when a peer had something he wanted and he was not able to get it from them. Martin was not able to verbalize any descriptions of what made him get upset and cry.

Martin said that other students in the class get in trouble when he gets in trouble because they hit him. When the researcher asked him who else got in trouble, he could not tell her and he could not show her where they sat either. However, Martin was able to share with the researcher the student that he thought was his “behavior bug.” This student happened to be a female student who he had had several problems with throughout the school year. He said that she was his behavior bug, “because her said I can’t sit by her.” Martin shared that no other kids bugged him in class, despite the aggressive behaviors he exhibited towards them.

Martin’s mother shared that she thought that he got along with other kids just fine; she said that he was good with the family and that he “plays how they play.” As far as adults, while Martin was disrespectful and did not listen to adults at school, at home, Martin’s mother described his behavior towards adults as good, because he did not have a choice to not be respectful to them.
Martin's teacher reported that he did not have friends in the classroom because he was too clingy with them, was physically aggressive and just generally bothered and annoyed them with his behavior. Martin also reported that he did not have any friends in his classroom. When the researcher asked Martin if he had friends in other classes, he also said no. This varied greatly from what Martin's mother reported. She shared that Martin came home everyday saying he had a great day and played with his friends, even giving her specific names of classmates he liked to play with. She did note that he did not really have friends outside of school, just his family. Martin was not able to share with the researcher who in the class he did not like. He said he did not like everybody, but could not show the researcher where in the class or give her the name of these students. Also, the behaviors were more likely to occur during unstructured social situations, like recess, centers, and lunch.

*Non-school domain.* Martin's teacher described her experiences with Martin's mother as generally positive. She shared that Martin's mother wanted an update on his behavior every day. When the teacher explained that it would be too difficult to do this, it was agreed that she would give her weekly updates, and let her know about the most severe behaviors daily if necessary. Martin's teacher shared that Martin was very attached to his mother and his grandmother, whom he spent a lot of time with. Martin's teacher noticed also, that while he was very attached, his mother tended to be sort of "hands off." The example his teacher gave was that while most parents take their children's behavior very personally, it did not seem to have that affect on her; she was not concerned about what she was doing as a parent to influence his behaviors. One
thought his teacher shared was that because his mother is not his biological mother (she is actually his aunt), that she feels less responsibility.

Martin’s teacher was not aware of anything specific or possibly problem causing that was happening in the home, but she did report that Martin talked about his older cousins a lot and said he spends a lot of time with them. She suspects that the behaviors he is displaying are things he is observing from his cousins, especially the inappropriate language. She was not aware of any significant life changes or medical concerns, Martin’s mother confirmed this information in her interview. Martin’s mother shared that Martin has a large extended family, with lots of cousins to spend time with, but that he lived with just her. However, Martin’s cousin was living with them for the summer and his mother shared that Martin was upset when she moved out and says that he misses her a lot.

Martin was interviewed about his home life as well. He said that when he was at home he got in trouble for “messing up” his room and that when he did that, he had to go to bed. He also said that he did get into trouble for hitting at home and as a response to “what happens when you get in trouble for hitting?” he said “I get in trouble.” He had a hard time answering several of the questions on the student interview form. He did not seem to understand what was being asked of him and often just said “I don’t know” as a response. His mother shared that he did not display any of the behaviors at home that they see at school. She said he argues sometimes with his cousins and will cry if he doesn’t get his way, but nothing out of the ordinary for a Kindergarten aged student. She also said that there had not been any changes in his behaviors at home recently and could
not say when the last time she noticed something different with his behavior than what she normally observed.

Martín's mother described his daily routines. She said that he was very independent at getting himself ready in the morning, washing his face and brushing his teeth. She said they check his backpack every morning to make sure he has everything he needs and to remove the toys he tried to sneak to school, too! After school, he goes to a daycare program. She said when they get home they go through his backpack again so he can share what he did that day and get any notes from the teacher. She allows him to play until dinner time, then he eats and takes a bath. Martín's mother shared that he is in bed by nine, but that it is often difficult for him to fall asleep and stay asleep.

Classroom Observations

Data obtained from the classroom observations supported the interview information. Three, one hour, classroom observations were conducted by the researcher. During these observations, several incidences of the target behaviors were observed. The target behaviors were physical aggression and tantrumming. The behaviors ranged in severity throughout the observations, but the antecedent a majority of the time was lack of peer/adult attention throughout the domains. However, for the physical domain, it seemed as though the only antecedent to his behaviors were peers being in close proximity to him and his goal was to get attention, he did not appear uncomfortable to have them near him. In fact, there were a couple of occasions where a peer touched him, which elicited no response at all from Martín. Also, as far as the tantrumming, the antecedent in most cases was a reprimand from the teacher or an instance where he did
not get what he wanted. For example, when he raised his hand to answer a question and another student was called on, he cried and rolled around on the floor for two minutes yelling that he “was gonna say that.”

During the final observation, the classroom teacher brought up new concerns. Students had reported that Martin was touching them in inappropriate places. This was a concern in preschool as well and he had been working on some social stories related to “good touching and bad touching.” Following this report, his mother was notified and she scheduled him for outside counseling to address the issue. The consequences for his behaviors varied. If the teacher observed the aggression, she reprimanded him or sent him to time-out, but several instances of his behaviors resulted in no adult consequence for his behavior. In every instance, he was able to attain some form of peer attention, either positive with them responding to him and giving him what he wanted, or negative, in that they acknowledged his behavior and then ignored him. When he was tantrumming the teacher and the rest of the class ignored him every time. The teacher said that they were used to it and that they did not let it interfere with what they were doing. Once Martin realized he did not get the direct attention that he wanted, he immediately stopped the behavior and rejoined the class.

Based on the observations, it appeared that the behavior of physical aggression resulted from a lack of peer or adult attention and the consequence for this behavior was attention, although negative, he was getting attention. Regarding tantrumming, this resulted from either a reprimand or because Martin did not get what he wanted. The
consequence for this behavior was the class and teacher ignoring him, which resulted in him eventually returning to the activity.

Based on the information from the interviews and observations, it was determined that the function of Martin’s physically aggressive behaviors was peer attention. Martin did not appear to know the appropriate way to get attention and the physical aggression was getting him at least some form of peer/adult response, which was reinforcing the behavior. As far as the tantrumming, although his behavior was not being reinforced, he did not appear to have the coping skills to deal with disappointment, which resulted in the excessive crying. Also, while Martin was observed to display behaviors during all times of the day, they were more frequent during unstructured activities, such as recess or centers. Based on this information, a behavior intervention plan was developed that aimed to address the deficits in appropriately gaining attention and in his coping skills, while at the same time, rewarding him for the positive behaviors he displayed.

Behavior intervention plan. This plan sought to address both areas of concern for Martin, both his inability to gain peer attention in an appropriate way, and his lack of coping skills. The program that was used was *I Can Problem Solve: An Interpersonal Cognitive Problem-Solving Program* by Myrna B. Shure (2001), to teach Martin social skills and appropriate ways to gain attention. There are currently three volumes to this program. The program used with Martin was the program targeted towards Kindergarten and Primary grades. It provides children opportunities to learn to evaluate and react to problems in positive ways (Shure & Spivack, 1982). Students learn various problem solving vocabulary words, methods to identify feelings of their own and others, how to be
considerate of others beliefs and views, and also develop an awareness for the timing and sequence of events (Shure, 1993). Research using this program has found that students who receive this curriculum are able to obtain what they want in a positive way and also have a positive reaction to disappointments when they are not able to get their way (Shure, 1993). Recent longitudinal studies with schools that implemented this problem solving curriculum found that it can decrease problem behaviors and up to 5 years later, found that many of the occurrences of the behaviors had been eliminated all together (Shure, 1993). Teachers are encouraged to begin teaching lessons at the beginning of the program and continue through the program in order, so all students have the same opportunities for success.

This program was implemented for 15-20 minutes daily by the Push-In Specialist, with whom Martin had a good working relationship. In addition to this instruction, Martin was also being rewarded for displaying appropriate behaviors and decreasing the target behaviors. Martin was rewarded with stickers at the end of each activity (reading, math, recess, etc.) if he did not display the target behaviors of physical aggression or tantruming. If he was able to obtain at least 3 stickers (3 activities) for appropriate behavior in the morning, he was rewarded with a piece of candy, which was his choice for reward. The same went for the afternoon.

Prior to this intervention, Martin’s teacher had been reinforcing him at the end of the day for a full day of good behavior. He had a sticker chart that was separated into morning and afternoon and in order to get his reinforcement at the end of the day, he had to earn stickers for both of these times. It was an “all or nothing” program and Martin
rarely received any reinforcers at the end of the day. There were no other behavior supports being utilized in the classroom at this time.

After speaking with Martin’s teacher, we decided it would be beneficial to reinforce Martin more frequently for not displaying the target behaviors. We also decided that it should not follow the “all or nothing” approach because we wanted Martin to feel successful. For these reasons, we decided to format his reinforcement schedule as we did, with sticker reinforcers at the end of every period or activity. We also provided the opportunity for Martin to earn another consumable reinforcer at two times during the day so that even if Martin had a difficult morning, he could still earn a reinforcer for good behavior in the afternoon. We felt that giving him multiple opportunities to experience success for making good choices, in addition to the problem solving curriculum, would help change his behavior patterns.

The instruction using the *I Can Problem Solve* curriculum took place throughout the 11 weeks. There were several days when Martin was absent during the scheduled time for this instruction, but he was able to get through 20 lessons. Martin received instruction in several problem solving skills, including basic problem solving vocabulary, feelings and how to tell how people feel, and finally some early listening skills. Martin received instruction 20/31 possible days; however, when taking into account his absences, he received instruction 20/23 days of the intervention.

The researcher was updated weekly on Martin’s progress, with 100% fidelity, and while the intervention was helping Martin to be successful, he began to display some new behaviors. Instead of being physically aggressive or tantrumming, Martin began to be
disruptive throughout the day by singing, humming, or roaming around the room almost constantly through the day. While he was not displaying the level of physical aggression at the beginning of the study, this new behavior was becoming even more problematic. Some examples of the new behaviors included, singing, talking, walking around the room, playing instead of working, and generally being “off-task.” The function of this behavior again seemed to be attention. The teacher was very concerned about this, because these behaviors were disrupting the class more than his physical behaviors were. So, midway through, the teachers and the researchers decided to include these disruptive behaviors to the behaviors that would keep Martin from receiving his reward. The classroom teacher explained this change to Martin and he was able to explain it back to her. However, unlike the physical aggression, he was given 3 chances to stop being disruptive before he lost his sticker. This was charted visually for him on the front chalkboard.

How Successful Were the Interventions That Were Developed for This Student Using This Model?

The success of the intervention was determined both by teacher responses and by the data related to his behaviors. The interventions that were developed for Martin were successful, even with the unexpected changes. Martin’s behavior was monitored by his teacher daily for a week. During the week that baseline was collected, Martin had an average of 7 instances of physical aggression/tantrumming per day. His teacher continued to monitor his behavior daily and report the average number of behaviors per day for each week of the intervention. During the last week of the study, Martin
averaged only 2 instances of physical aggression/tantrumming/classroom disruptions per day.

![Aggressive/Disruptive Behaviors Graph]

**Figure 1: Number of Aggressive/Disruptive Behaviors Displayed During Intervention**

While he was still displaying some of these behaviors, particularly the class disruptions, he did respond to the intervention and was able to demonstrate the correct way to obtain attention and respond to disappointment. His teacher noted that he would often “turn things around” after one or two warnings. Martin’s behaviors continued to be most frequent during unstructured periods of the day like lunch/recess and centers, but the frequency and intensity of the behaviors decreased. There was no significant difference in the time of day (morning or afternoon) that the behaviors occurred, similar to what was observed at baseline.

Martin’s classroom teacher was pleased with the progress that he made throughout the 11 weeks; his mother was also pleased because she was receiving less negative phone calls about his behaviors. Martin also showed a great interest in the
program. He said that he enjoyed doing the lessons with the push-in specialist and was very involved with his reinforcement plan. For example, if his teacher forgot to give him a sticker at the end of a period, Martin would remind her before they began a new activity. He was very active in the entire intervention plan and reported that he “liked it a lot.”

What Were the Experiences of the Teachers Who Participated in the FBA With This Student and Implemented the Interventions?

The teachers were very cooperative throughout the entire study and were willing to try anything to improve Martin’s behavior. From the very first introduction of the purpose of the study and the possible behavior benefits, the teachers were excited to start the process. The teacher interview is very in depth and has many questions for the teacher to answer. Despite the length of the interview, the teachers shared that they thought the format was good because “[you] asked questions that I wouldn’t have thought about having an effect on Martin” and that it allowed them to think about him and his behavior more critically.

The second thing I asked the teachers to complete in this process was a scatterplot of Martin’s behavior. As with their answers to the questions in the interview, they went above and beyond in their data collection. Martin’s classroom teacher provided very detailed descriptions of Martin’s daily behavior for the scatterplot data. She said that she wanted to make sure that since I was not able to be in the room every day that I would get a really clear picture of what she was dealing with on a daily basis. This information was incredibly helpful as we determined the function of Martin’s behavior as well as in the development of the behavior plan. The final piece in this process was actually
implementing the plan. While the teachers shared that they were comfortable with the program we were putting in place, they initially nervous about the time it would take. Despite their initial concerns, they said they would “give it their [our] best shot” because something needed to happen to change his behaviors.

The researcher kept in contact with the teachers on a weekly basis and conducted an informal interview at the end of the study to discuss their thoughts and opinions. The classroom teachers who were in charge of implementing the intervention reported that they appreciated the frequent contact with the researcher, that they did not feel that they were “out on their [our] own,” which was often the case with other intervention teams they had been a part of. They also felt that the frequent contact was helpful because of the changes that needed to be made to the initial intervention plan. Because Martin’s behavior changed from aggressive to disruptive, there needed to be some adjustments made to the intervention plan, which the teachers did not feel comfortable changing on their own. His classroom teacher stated that she was, “happy we kept continuing to try things with Martin” even after these new behaviors emerged.

The teachers involved also expressed some concerns. The classroom teacher expressed that the frequency of reinforcement that Martin was getting was difficult for her. She stated that she felt rushed to give him feedback and/or a sticker after every period of the day. Although she saw the benefit it had, she viewed it as somewhat of an inconvenience for herself. While this was not a concern with the intervention itself, the push-in specialist who was giving doing the instruction for the I Can Problem Solve program felt like she was not allotting enough time to do as in depth of a lesson as she
wanted. She said that there were days when she felt rushed to get through the days
lessons because of other commitments. She said in the future, she would like to make
sure she set aside a full 20-25 minutes per day to do instruction with the program.
Martin’s classroom teacher shared this concern, but said she thought working with the
program, “might not have allowed us to see a lot of initial growth, but it definitely
planted a seed for skills he will use in the future.”

In general, the concerns they presented were with the time commitments
necessary for Martin and other students to be successful using this particular intervention.
They were also concerned with their own fidelity of intervention implementation because
of these time constraints. However, both teachers were observed doing rigorous
instruction and taking the time to give valuable feedback to the student, their perceived
fidelity of implementation was less than what the researcher observed and the results
suggest the implementation of the intervention was successful. Both teachers thought
that besides the time and fidelity concerns, that this was a very successful intervention.
They were both pleased with the progress that Martin made throughout the intervention
period. While they were concerned about the increase in general disruptive behaviors
(talking, singing, wandering around the room, etc.), they were pleased that Martin’s
aggressive and tantrumming behaviors decreased so significantly and stated that they
“prefer(red) the disruptions over the aggression any day.”
CHAPTER 5
DISCUSSION

This study measured the success of a behavior intervention plan designed and implemented based on results from an elaborate method of functional behavioral assessment. One student from an urban Midwest elementary school who demonstrated significant behavior concerns was evaluated using a functional behavioral assessment that addressed several domains (Instructional, Social, Physical, Non-School). The success of the interventions developed through use of this method were measured by addressing three specific research questions, (1) How well did the proposed FBA model hypothesize relationships between environmental events and the target behavior for a student with emotional/behavioral concerns? (2) How successful were the interventions that were developed for this student using this model? (3) What were the experiences of the teachers who participated in the FBA with this student and implemented the interventions?

Conclusions

The results of this study found that the specific method of FBA that was used was successful in designing an effective intervention that was feasible and acceptable for the classroom teachers to implement. At the beginning of the study, the student was displaying aggressive and excessive tantrumming behaviors multiple times a day, on a daily basis. At the conclusion of the study, following interventions developed based on information gathered from the functional behavioral assessment (FBA), the frequency of these behaviors decreased enormously. The FBA also allowed the researcher and
teachers to determine that the function of Martin’s behaviors was attention, from both peers and adults.

The intervention that was developed for this student was very successful because it decreased the occurrences of problem behaviors and taught Martin alternate ways to obtain attention. Not only can it be considered successful because of the positive impact it had on Martin’s behavior, but also because of the ease of use. The teacher implementing the *I Can Problem Solve* program with Martin thought that the 15-20 minute daily lessons were reasonable in time and in scope. She said that they were easy to follow and that Martin seemed to enjoy the activities embedded in them, all while learning how to behave in an appropriate way. The second aspect of the intervention was the sticker chart. While at first the teachers thought this might be too cumbersome and time consuming to complete after every activity, they quickly noticed that Martin enjoyed working for his stickers and the resulting reward and that as a result, his behaviors were decreasing. His teacher shared that even though it took some getting used to and some time management on her part that the end result of improved behavior, was definitely worth it.

Finally, the teachers shared that they had a very positive experience with the FBA and development and implementation of the BIP. In the past they had gotten the “run around” from people who said they would help develop a plan for Martin and they were happy that they had someone who understood what they were going through and that followed through with helping them out. Martin’s teachers, both his classroom and special education teacher, shared that they felt that process went very smoothly and that
since it was structured in a meaningful way, that they always knew what they were expected to do. While in this case the researcher was the leader of the team and the FBA process, she asked the teachers if they thought this was a process they could complete on their own, after some practice and with some guidance. The both said they would be nervous, but that if they knew that they could turn to someone with more experience, that they would be willing to try on their own to conduct a FBA and design a BIP. However, they also shared that they preferred to have someone outside of the day to day situations involved because they didn’t think that they could be fair.

The willingness of the teachers to conduct a FBA and design a BIP is encouraging considering the critical nature of many studies investigating the use of FBA in school settings. Van Acker et al., (2005) discussed the lack of training teachers and other school staff have in conducting a FBA and developing a successful behavior plan. Scott and Nelson (1999) suggest that classroom teachers would need to receive extensive coursework in order to produce a legally defensible FBA. The results of this study suggest the contrary may be true. The classroom teachers involved in this study felt that they would be able to conduct this process with future students, using the model presented in this study. While they knew they would require guidance and support from a school psychologist or another professional with more experience in the process, they felt that it would be feasible for them to use in their classrooms.

Essentially, the classroom teacher did all of the work and the researcher just helped them to interpret the data and formally document everything. Based on the success this student had and the willingness of these teachers, Etscheidt’s model of FBA
could and should be utilized by classroom teachers, with support from other professionals. Additionally, if classroom teachers did not feel comfortable facilitating the completion of the FBA, this study supports the fact that Etcheidt’s model of FBA can be used successfully in general education settings and has had a positive impact on student behavior.

In general, I think that everyone involved had a positive experience. As a team we were able to define a problem behavior, determine its function, and develop and implement a successful behavior intervention plan. As a result of the structured style of this process the team was able to work together very well and everyone always knew what was expected of them. The method of FBA that was used in this case study really allowed our team to narrow down exactly when and where the behaviors were occurring, which in turn, allowed us to determine why they were occurring. This information was invaluable when we developed the BIP and because it focused on the function of the behavior and when this specific behavior was targeted for intervention, we saw a significant decrease in the frequency of Martin’s disruptive and violent behaviors.

Implications for the Field of School Psychology

School psychologists are often the school staff members that conduct the FBA for special education students displaying challenging behaviors, which was the case in this study (VanAcker, et al., 2005). However, school psychologists have been given limited resources and guidance in the appropriate and most effective ways to conduct these influential assessments, thus, school psychologists must choose from a wide variety of formats and procedures (Hoff, et al., 2005). In addition to there being no standard
procedure, there is limited empirical evidence of a FBA process being used in the school setting for students with EBD (Hoff, et al., 2005). This case study contributes positively to the empirical research base that supports the use of FBA for students with EBD in traditional school settings. This study put to use a very specific method of FBA that would be beneficial for all school psychologists to use. Because it addresses four separate domains in great detail, with information coming from the school staff, parents, and the students themselves, the ability to determine the actual function of a student’s challenging behavior, is greatly increased.

Although the behavior intervention plans developed from information gathered through the FBA should be individualized, a standard FBA format, like the one used in this study, would be useful for all students struggling with challenging behaviors. Using the method of FBA used in this research will also save school psychologists a significant amount of time in finding assessments or interview formats to use. The method presented in this research has all the pieces of the assessment ready to use and is organized in a way that allows all areas of a student’s life to be examined as possible influences on their behaviors.

**Implications for Future Research**

Future research looking at the use of FBA for students with EBD in school settings continues to be necessary. Despite the positive results of this study, there were some limitations. First of all, this study did not involve a random selection of students. Only one student was used in this study and they were chosen for participation based on very specific inclusion criteria, like having EBD and displaying inappropriate behaviors.
on a regular basis in a general education setting. Secondly, this research only reports the results of one case study in a Midwest city and while the results for this individual student were positive, they cannot be generalized to other students and populations without further research into the area of FBA. In order for these results to be generalized this study need to be replicated with a greater number of students with varying degrees of disabilities, in a wider range of grade levels, and in different schools and settings.

Despite the limitations of this case study, the results contribute positively to the research base supporting the use of FBAs with students with EBD. I have come across few case studies that focus on conducting a FBA and developing a BIP for a student with EBD in the general education setting, so regardless of the results of this study, it will contribute to the lack of studies available in this area. Because conducting a FBA and developing and following a BIP have been mandated, school psychologists and other professionals need information from cases like this one to help in their own implementation of the FBA process.

Not only does it support the use for students with EBD, but it also provides support for conducting these assessments and eventual interventions in the general education setting, with success for the student. Many of the students I see displaying problem behaviors in the school are in general education settings and teachers are unsure of how to help them. The success that the student in this case study had adds to the small research base that supports the use of this process for all students in schools, not just for those students with significant disabilities.
In order to validate the use of the method of FBA used in this study, additional research must be completed. Some possibilities for future research include replicating the current study with similar students to determine the reliability of the process. Other possible research topics would include using this FBA process with students with EBD that are older; located in different geographic and socioeconomic areas; or display different behaviors than the ones seen in this study. A final possibility for future research would be to use this model of FBA for students who are not identified with EBD, but display significant problem behaviors in the classroom, and determine if this method of FBA allows for the development of a successful BIP for these students as well.
REFERENCES


APPENDIX A

SCRIPT FOR SCHOOL PSYCHOLOGIST CONTACT WITH PARENT
Script for School Psychologist Contact with Parents

After receiving a referral from a classroom teacher, the school psychologist will determine if the student is demonstrating a serious, recurring problem and thus, would be a viable candidate for the study. The school counselor will contact the student’s parents to get permission to give their contact information to the graduate student conducting the research. Following is the script the school counselor will follow when talking to a student’s parents.

Hello. My name is __________ and I am the school counselor at Local Elementary School. Your student’s teacher has referred him/her to me because of... concerns about their behavior... concerns about their difficulty meeting academic expectations.

Graduate students from UNI are working with students this semester as part of a research project looking at academic and behavioral needs of students in grades k-12. Would you be willing to talk to the graduate students about this project? Could I give your name and phone number to the graduate student so she could contact you, tell you about the project, and see if you would be interested in having __________ (student’s name) participate in this project? Once you’ve talked with them on the phone, they can send you some information about the project. Then you can decide if you’d like __________ (student’s name) to participate.

It is okay if you would rather not talk with one of the graduate students. Your child’s evaluation by the school psychologist or teacher will not be affected if you choose not to participate, or if you decline to participate. You and I can talk more about how I and the other support personnel at Local Elementary School can best help __________ (student’s name).
APPENDIX B

INTERVIEW FORMATS – TEACHER, PARENT, STUDENT
Teacher Interview Form – Elementary

Student: Martin Jones
Teacher: Mrs. Patience
Date: 11/29/07
Interviewer: Megan Brose

The information I gather from you today will help us develop interventions that are more effective for this student. The interview should take about 30 minutes. Thank you for making time to meet.

Description of Problem Behavior:
- too aggressive with peers, quick to frustrate
- doesn’t know how to act with other kids
- Specific behaviors: hitting, kicking, inappropriate touching, tantrumming, taking others things

Topography:
- Frustrated ➔ very loud crying, like a 2 year-old, for long periods of time
- Physical behaviors ➔ jumps on kids, hits them, too physical when he plays

Frequency:
- at least once every day, usually more than that

Duration:
- Crying ➔ 20 minutes max, usually 5 or 10 minutes
- Physical ➔ quick, impulsive aggressions

Intensity: 1 2 3 ❑ 4 5
(low) (high)

Indicate with a check (√) the days and times the student typically demonstrates the target behavior.

** Teacher stated she sees the behaviors ALL DAY long, but most frequently seen during the marked times—UNSTRUCTURED TIMES**

<table>
<thead>
<tr>
<th>Before School</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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<tr>
<td>Morning Session</td>
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<tr>
<td>Recess</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Morning Session</td>
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<tr>
<td>Lunch</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Afternoon Session</td>
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</tbody>
</table>
Behavior Influences

Instructional Domain

1. Describe the student’s achievement in reading, math, writing, etc.
2. What are the student’s academic strengths? Weaknesses?
3. How does the student’s performance compare with others in class?
4. Describe what is happening instructionally when the behavior occurs.
5. Describe what the student is expected to be doing at this time.
6. If different from the student, describe what other classmates expected to be doing at this time.
7. Describe how the student works independently.
8. Describe how the student works with classmates.
9. Looking at the scatter plot we completed earlier, is there anything different about instruction at times that the behavior occurs?

Social Domain

1. Describe who and what is near the student’s seat.
2. Do either who or what is near the student seem to predict the target behavior?
3. Describe the student’s interactions with classmates before the behavior happens.
4. Are classmates involved before the student demonstrates the target behavior?
5. Are classmates involved when the student demonstrates the target behavior?
6. Describe the student’s relationships with other students in class.
7. Does the student have friends in class?
8. How does the target behavior affect the student’s relationships with classmates?
9. Looking at the scatter plot we completed earlier, is there anything different about the student’s social interactions at times that the behavior occurs?

Physical Domain

1. Describe the arrangement of your classroom.
1. Describe where the student sits in the classroom.
2. Describe the area around the student (i.e., overhead projector, windows, bulletin boards).
3. Is the student easily distractible in class? Describe.
4. Looking at the scatter plot we completed earlier, is there anything different about the classroom environment at times that the behavior occurs?

**Non-School Domain**

1. Describe your contacts with the student’s parents/guardians.
2. Describe what you know about the relationship between the student and parent/guardian.
3. Is there anything you believe to be significant happening in the student’s life outside of school?
4. Has the student experienced any significant life changes (i.e., death in family, divorce, move)?
5. Is the student currently taking any medications? Name of medication? Reason for taking it?
6. Has the student taken medication in the past? Name of medication? Reason for taking it?

**Antecedents & Consequences**

1. What would seem to predict a “good” instructional period?
2. What would seem to predict a “poor” instructional period?
3. What would seem to predict “good” social interactions?
4. What would seem to predict “poor” social interactions?
5. What classroom arrangement best supports this student’s behavior?
6. What classroom arrangement is most difficult for this student to handle?
7. Are classmates involved after the student demonstrates the target behavior?
8. Describe your response when the behavior occurs.
9. Describe the response of other students who are present when the behavior occurs.
10. Describe the response of adults who are present when the behavior occurs (i.e., aides, parents, etc.).
11. Describe what happens if the student is removed from the classroom because of the behavior.
12. What happens if the student misses instructional time because of the behavior?
13. What happens if other students miss instructional time because of the behavior?
14. Describe the student’s interactions with classmates before the behavior happens.
Purpose of Behavior

1. Describe the purpose(s) that this behavior may serve for this student.
2. What could the student “get” from this behavior?
3. What could the student “get out of” with this behavior?

Behavior Usefulness

1. How often does this behavior help the student “get something” or “get out of something”?
2. How long between the times the student demonstrates the behavior and the time that he/she “gets” or “gets out of” something? Immediately? Several minutes? Longer?

Behavior Strengths

1. Does the student have an appropriate behavior that serves the same purpose as the target behavior?
2. How often does the student demonstrate this behavior unprompted?
3. When and where does the student demonstrate this behavior?
Teacher Interview Summary

Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)
- one of lowest performing students academically.
- difficulty following directions
- Strength- worked well in small group settings
- working independently or in a large group, having to share with his peers or work closely with his peers without adults around = antecedents

Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)
- If Martin was within touching distance of peers, more likely to display aggressive behaviors (Antecedent= peers in close proximity)
- Does not share well or react well when other people have something he wants (Antecedent= cannot have something he wants (toy, etc.))
- Other students sometimes antagonize him (responds by crying or aggressing)
- Does not know how to make or keep friends.
- Does not respond to frustrations or disappointments in prosocial way (crying when he is reprimanded or denied a request)
- Peers almost always involved when Martin displayed inappropriate behaviors
- No friends because his behaviors pushed them away

Physical Domain (influences, antecedents & consequences, purpose, usefulness, strengths)
- unable to keep hands to himself at table (3 other students in his group sit out of arms reach ( Martin has a “moat” around him to prevent touching))
- student sits in back edge of classroom (they are not at “desks” often) because less people pass by him, less opportunities for distractions and behavior
- thinking about moving him to his own desk away from everyone to help him focus
- during group carpet times, he sits right in front of the teacher on a designated “X”
- Keeping him away from other kids helps decrease behaviors, but also limits possibilities for positive interactions, so desk time is limited.

Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)
- Positive home/school relationship. Mom wanted updates daily on his behavior, but the teacher provided weekly updates unless something major occurred.
- Didn’t know a lot about home, but noticed Martin was very attached to his mother and cried for her a lot and talked about her a lot.
- Also noted mom was “hands off” and felt like unlike other parents who take their
child's behavior personally, she did not seem concerned with what she could be
doing to influence his behaviors.
- Not aware of any specific issues at home, no moves or family tragedies note.
- Thought he had a lot of influence from older cousins and they might be
  “teaching” him some of the negative behaviors.

Operational Definition of Target Behavior:
Martin displays aggressive behaviors that include: hitting, kicking, pinching, slapping
and other inappropriate touching. Martin also displayed tantrumming behavior, which is
defined as excessive crying lasting more than 5 minutes.
Parent Interview Form

Student: Martin Jones               Date: 01/27/2008
Parent: Ms. Jones                      Interviewer: Megan Brose

I'd like to talk to you about your child's experiences at school and home. The more honest you are with me, the more I will be able to help. Nothing you tell me will get your child in trouble.

Operational Definition of Target Behavior (from teacher interview):
Martin displays aggressive behaviors that include: hitting, kicking, pinching, slapping and other inappropriate touching. Martin also displayed tantrumming behavior, which is defined as excessive crying lasting more than 5 minutes.

Indicate with a check (✓) when the child typically demonstrates the target behavior at home. Then for each day and time, describe the behavior in more detail.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>Before School</td>
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<tr>
<td>Between School &amp; Dinner</td>
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<td>Dinner</td>
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<td>Between Dinner &amp; Bedtime</td>
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<td>Routine</td>
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<tr>
<td>During Bedtime Routine</td>
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<tr>
<td>Other Time (specify):</td>
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<td>Other Time (specify):</td>
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** Mom reports that there are no behaviors like this at home at any time. Reports that when his cousins are around there is more confrontation, but nothing like what is being described as happening at school. Also, interview was via phone as Mom did not have time to meet in person after several options were given.
Behavior Influences

Instructional Domain

10. Describe your child’s attitude towards school.
11. How does your student talk about school at home?
12. Describe your child’s relationship with his/her teacher.
13. Describe your child’s relationship with his/her peers.
14. Do you think your child understands what is expected of him/her academically?
15. Do you think your child understands what is expected of him/her behaviorally?
16. What types of activities do you think your child enjoys in school?
17. Describe your contacts with your child’s teacher and school.
18. What are your expectations for your child at school?

Social Domain

10. How does your child get along with other children?
11. How does your child get along with adults?
12. Does your child have friends at school?
13. Does your child have friends other than school friends?
14. What does your child like to do after school and on weekends?

Non-School Domain

7. Who is in your family?
8. Who lives in your home?
9. Does the target behavior happen at home? Describe this behavior at home.
10. Have you noticed any changes in your child’s behavior at home?
11. Have there been any life changes for your child (i.e., divorce, death, move, etc.)?
12. Is your child currently taking any medications? What is the medication and reason for taking it?
13. Has your child taken medication in the past? What was the medication and reason for taking it?
14. Describe your child’s morning getting ready for school.
15. Describe your child’s after school & evening time.
16. Describe homework time in your home.

Antecedents & Consequences

1. If you know that the target behavior has happened at school, what is your response at home?
2. What seems to predict a “good” behavior day at your home?
3. What seems to predict a “poor” behavior day at your home?
4. If the target behavior happens at home, how do you respond to it?
5. If the target behavior happens at home, how do other adults respond to it?
6. If the target behavior happens at home, how do siblings respond to it?

**Purpose of Behavior**

4. Describe the function(s) that this behavior may serve for your child.
5. What could your child “get” from this behavior?
6. What could your child “get out of” with this behavior?

**Behavior Usefulness**

3. How often does this behavior help your child “get something” or “get out of something”?
4. How long between the times your child demonstrates the behavior and the time that he/she “gets” or “gets out of” something? Immediately? Several minutes? Longer?

**Behavior Strengths**

4. Does your child do something else that is okay, that gets him/her to the same end as this behavior?
5. How often does your child demonstrate this behavior unprompted?
6. When and where does your child demonstrate this behavior?
Parent Interview Summary

Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Says Martin does not like school, but likes his teacher
- Says Martin does not understand why school is important, but she tries to help him a lot.
- Does not think he enjoys academics, but likes the free time activities, like ramps
- Happy with email correspondence with teacher.
- Wants him to learn what he needs to in order to get into 1st grade

Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- He gets along with other kids just fine; he plays with his family members at home with no problems.
- He is good with adults because he doesn’t have a choice at home but to be respectful and do what he is told.
- Reports that Martin talks about his friends a lot and always comes home and tells her he had fun with them and had a great day.
- No friends outside of school, just family
- Martin likes to play with his cousins and his learning games.

Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- No big changes at home, no significant events
- Large extended family they spend a lot of time with
- One cousin lived with them, but recently moved out, said Martin was sad about that.
- Never does any bad behaviors at home, might cry if he gets yelled out, but nothing like what happens at school.
- No medications or illnesses
- Follows a strict routine in morning and evening, says falling asleep is hard for him, but when he does, he sleeps well.
Hi! I’d like to talk to you about school so I can help find ways to make school better for you. The more honest you are with me, the more I can help. Nothing you tell me will get you in trouble.

What do you do that usually gets you in trouble at school? (i.e., talking, fighting, unfinished work)
  - “for hitting kids”

What about hitting kids (describe target behavior from teacher interview if not reported above)? Do you ever get in trouble for this?
  - “a little bit”

Why do you think you get in trouble for hitting (target behavior)?
  - “because it wasn’t an accident”

What happens just before you get in trouble for hitting (target behavior)?
- Martin described what happens AFTER he hits someone. After several interviewer prompts and rewording the question, he still described what happened AFTER.

What happens after you get in trouble for hitting (target behavior)?
  - “I say sorry”
  - “I go to time out or sit out”
  - “I go to the office”
  - “I go to the chalk board” – his name is written on the chalk board.

Indicate with a check (√) when the student reports getting in trouble for hitting (target behavior).
Lunch
Afternoon Session
Recess
Afternoon Session
After School
Art
Music
Gym
Hallway Times
To and From School

**Martin said that he did not know any times that he got in trouble more or less for hitting. This activity and questions was much too detailed and complex for him to grasp**

*Draw me a picture of your classroom. In your picture, include your desk and your classmates’ desks. Show me where the door is and where the windows are. Please put an X on your desk.*

Give the student blank paper and a pencil. Encourage them to draw a detailed picture of their classroom.

**Martin drew his classroom but then decided to draw random designs and snakes all over the page too and he was unable to describe the picture for me, besides the snakes**
Behavior Influences

Instructional

1. Is any of your schoolwork too hard for you? If so, what is too hard?
2. Is any of your schoolwork too easy for you? If so, what is too easy?
3. Do you get help in class if you ask for it appropriately?
4. Does your teacher notice when you do good work in class?
5. Do you ever feel that you don’t have enough time to finish your work at school? When?
6. Do you ever feel that there is too much time to finish work at school? When?
7. Does it help you when your teacher helps you with your work?
8. Does it help you when a classmate helps you with your work?
9. What is your most favorite class? Why?
10. What is your least favorite class? Why?

Physical

(Use the student’s drawing to have him/her show you, as well as tell you, answers to these questions.)

1. Show me your favorite place to work in your classroom.
2. Why is this your most favorite?
3. Show me your least favorite place to work in your classroom.
4. Why is this your least favorite?
5. Show me the place in the room where you get in trouble the most.
6. Show me the place in the room where you get in trouble the least.
7. Is there anything in your classroom that gets in your way when you’re trying to learn?
8. Is there anything in your classroom that gets in your way of getting along with other kids in class?

Social

1. Do you have friends in class? Show me on your picture where they sit.
2. Are there kids in your class who you don’t like? Show me where they sit.
3. When you get in trouble, do other kids get in trouble too? Show me where they sit.
4. Are other kids bothered when you ____________ in class?
5. Whom in your class do you think your behavior bug?
6. Do other kids bug you in class?

Non-School

1. What happens when you get in trouble at home?
2. Do you get in trouble for ____________ at home?
3. What happens when you get in trouble for ___________ at home?
4. Do you ever think about things that happen at home or in your neighborhood when you’re at school?
5. Is it ever hard to focus on school because of stuff that’s happening at home or in your neighborhood?

**Antecedents & Consequences**

1. What do your friends do when you ________________?
2. What does your teacher do when you ________________?
3. What do your parents/guardians do when you ________________?
4. What happens at school just before you ________________?
5. What happens at school just after you ________________?
6. What happens at home just before you ________________?
7. What happens at home just after you ________________?
8. How do you feel after you get in trouble for ________________?

**Purpose of Behavior**

1. What do you want to get when you ________________?
2. What do you want to get out of when you ________________?

**Behavior Usefulness**

1. How well is ________________ working for you?
2. Are you getting/getting out of what you want?

**Behavior Strengths**

1. Are there other things you can do besides ________________ to get what you want without getting in trouble?
2. Tell me about these other things you can do.
3. What happens when you do these things?
4. Are there other things you can do besides ________________ to get out of something without getting in trouble?
5. Tell me about these other things you can do.
6. What happens when you do these things?
Student Interview Summary

**Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)**
- nothing in school was easy and that cutting paper with scissors was the hardest
- said that teachers would help him if he asked, but it didn’t help him
- Favorite thing in school was ramps because he “liked it” and his least favorite part was coloring because he “didn’t want to do it.”
- Martin did not understand several of the questions related to this domain.

**Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)**
- says he doesn’t have any friends in class
- Said he liked everyone, then said he did not like everyone, but couldn’t tell me who.
- Said other kids get in trouble for hitting him, but didn’t know who
- Janie is his behavior bug, because she wouldn’t let him sit by her, then said no other kids bug him

**Physical Domain (influences, antecedents & consequences, purpose, usefulness, strengths)**
- favorite place to work in the classroom is during group because “I like it”
- least favorite place to work is ramps, but likes legos (inconsistent) because ramps take too long
- the place he gets in trouble in the room was “by people hitting me then I hit them back outside”
- thought he got in trouble least at centers
- said the kids get in his way when he is trying to learn

**Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)**
- gets in trouble at home for “messing up” his room and he was sent to bed
- says he does get in trouble if he hits at home but couldn’t tell what the consequence was specifically
- did not understand some of the questions asked of him
Classroom Observation Form

Student: Martin Jones  Date: 12/13/2007
Teacher: Mrs. Patience  Location of observation: Classroom
Observer: Megan Brose  Start Time: 8:45 am  End Time: 9:45 am

Operational Definition of Target Behavior (from teacher interview):

Martin displays aggressive behaviors that include: hitting, kicking, pinching, slapping and other inappropriate touching. Martin also displayed tantrumming behavior, which is defined as excessive crying lasting more than 5 minutes.

Physical Aggression: hitting, kicking, pinching, pushing, slapping; Tantrumming/Crying; Verbal Aggression: name calling, mean/inappropriate words, etc.

Use the space below for the narrative observation. Include all possible information pertaining to the antecedents and consequences of the target behavior, along with possible environmental influences.

8:45 am, Martin starts yelling at a girl about his chair. He is messing around with it, moving it around, and then starts yelling “HELP ME!” at the girl. He then switches chairs with a peer. Once the chair situation is taken care of, Martin sits down and starts practicing writing his first and last name. He starts talking to a peer, “I saw you Susie!” She did not respond to him. Then he started talking to another peer saying “WAKE UP! I got my boots here and you gotta help me with my chair and you didn’t!” I am not sure which peer he was talking to because none of them responded to him.

During announcements, Martin was not paying attention. He was walking around the room and talking to himself and others. The rest of the class remained in their seats quietly working; Martin was the only student off task. He then gets in one peers face, jokingly saying, “Stop playing with my pencils!” They were eye to eye and laughing about it. At this time Martin was redirected by the teacher asking him, “What is your next job?” Martin started whining and would not move to his seat. Martin had to be carried back to his seat by his teacher, which he laughed about. His next job was to read silently. He chose a book to read, but he was still talking to his peers. He then took his book and was pushing it towards his peers saying, “Read this book!” in a very demanding voice. At this point the peer tells the teacher that Martin is being bossy. Martin’s response was to attempt to hit the peer’s hand.

There was no redirection or consequence for his behavior from the teacher. Martin then flips through his book quickly and then stands up from his seat. Upon standing up, he hits a peer picking up crayons off the floor two times. After hitting him twice, Martin helped him pick up the rest of the crayons. The students were then directed
to make their way to the carpet. Martin pushes Susie and says “come on Susie!” and then moves past her to a seat in the front row on the carpet. The other students on the way to the carpet avoid sitting by him and those who were at the carpet before him move so they are further away from him. Martin then starts to hit the peer that is closest to him. When the peer asks him to stop, Martin complies, and instead starts hitting himself in the head.

John, another peer, sits close to him and starts touching Martin’s face and head, which doesn’t seem to bother Martin at all. When the teacher started her lesson, the peer stopped touching him. At this point, Martin was playing with the decorative Christmas tree at the front of the room and said to the teacher, “I ain’t brought my book,” even though the teacher had not prompted him with a question about a book. The teacher redirects him away from the tree. He stops touching the tree, but then starts humming and “dancing.” Instead of participating in the counting activity, Martin resumes playing with the Christmas tree, playing with random ornaments that he can reach from his seat. He then starts to bother a peer next to him by putting his hands on his arms and legs. His teacher redirects him by asking, “Martin, what are your hands supposed to be doing now?” While he stops bothering the peer, he goes back to playing with the ornaments until the teacher looks at him. When she looks away again, he is back to the ornament. Again, he is redirected with a question, “Where should your hands be? Hands in your lap and sit flat please.” He responds by lying on the floor.

At 9:10 the do the pledges, but Martin does not participate. When they sit back down he yells at his neighbor to scoot over and pushes them out of the way. Finally, he is sitting still and listening and paying attention to the book they are reading about healthy and unhealthy foods. One of the unhealthy foods is soda. Martin blurts out, “Teacher! A pop is too hot because if you do this it burns you!” The teacher took that to mean that the fizz tingles and burns when you drink it. He seems to be very engaged in this book and activity. He is actively participating, raising his hand to comment, and also blurt out answers. At one point, when he was not called on, Martin shouted, “Teacher! I want to say that!” and he pouts and whines for about a minute, while the teacher moves on and ignores him. He then yells, “Teacher! Teacher!” and stands up and tries to turn the pages of the book. The teacher directs him to sit back down and he complies. Almost immediately after he sat back down, Martin pushes Sam and starts pulling on his shirt. He pulls on him hard enough that he falls over, hitting another peer. Martin doesn’t seem to notice and continues to pull on Sam. The peer who was accidentally hit in the process asks Martin to stop, to which Martin replies, “Leave me alone!” and then covers his face with his hands, pouting again. Again, there are no consequences from the teacher for his behavior.

Around 9:25 the teacher is still doing a reading lesson. With nobody touching him, Martin yells out, “Stop pushing me!” But, he is still engaged in the less and participating by sometimes raising his hand and sometimes just blurt out an answer. After blurt out an answer, Martin is distracted by a peer and hits him on his knee and then begins to playfully wrestle with him. The teacher sort of puts her hand down to separate them and Martin responds by grabbing the peers hand and kissing it. After that, Martin hits the peer in his private area and shouts “Scoot over!” and pushes him away.
Throughout all of this the teacher has continued to discuss the story with those students who are actively listening and participating. Martin gets back to being on task and participating at about 9:30. Again, when he was not called on to give an answer he yells out, “I was gonna say that! I was raising my hand!” and then makes a “hmmphhh” noise and pouts. Right after this he crawls away from the group and lies on the floor and cries for 2 minutes. He was crying, “I want my mommy!” and as the class got louder, so did he. The teacher did not respond to this behavior and after his two minute tantrum he simply stands up and goes to his reading group like the rest of the students.

When he gets to the reading group he starts out by slapping a peer in his face two times with no teacher reprimands. He also has his hood up and is asked by the teacher to take it down. He complies with the request, but he pounds on the table after he does it. When the teacher hands out the groups reading books, Martin follows along in his book and reads with the rest of the group. When the teacher hands out a letter writing practice sheet, Martin just plays with his crayons until the teacher takes them away from him. Following this, he continues to work on the worksheet until the end of the observation.

In addition to a Continuous Observation Log, the following observation methods should be considered as appropriate: event recording, duration recording, momentary time sampling. Data gathered from any additional observations should be included below.

Identify the antecedents and consequences for the observed target behavior, including observational data to support conclusions.

**Observation Summary – Antecedents of Behavior:**

**Instructional Domain**

<table>
<thead>
<tr>
<th>Identify Antecedent</th>
<th>Describe observational evidence supporting the antecedent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large group math lesson, no individual attention</td>
<td>Touches peers arms and legs that is close to him after teacher redirects him away from Christmas tree.</td>
</tr>
<tr>
<td>Teacher does not call on him</td>
<td>Martin raises hand to answer, is not called on, whines and pouts in response</td>
</tr>
<tr>
<td>Redirected by teacher</td>
<td>Stands up and turns pages of book without being asked, teacher asks him to sit down, he pulls on peer, pushes him over, inadvertently hurts another student</td>
</tr>
<tr>
<td>Teacher does not call on him</td>
<td>Martin is not called on again, cries for a couple of minutes and the teacher ignores him</td>
</tr>
</tbody>
</table>

**Social Domain**

<table>
<thead>
<tr>
<th>Identify Antecedent</th>
<th>Describe observational evidence supporting the antecedent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer tattled on him</td>
<td>He was being bossy so his peer told the teacher; his response</td>
</tr>
</tbody>
</table>
immediately was to hit the peer.

Peer asks him to stop
After being knocked over, the peer asks him to stop and Martin yells at her, then pouts and whines.

**Physical Domain**

<table>
<thead>
<tr>
<th>Identify Antecedent</th>
<th>Describe observational evidence supporting the antecedent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer in close proximity, no attention</td>
<td>Peer completing own task near Martin, Martin hits him 2 times without being provoked besides the proximity of the peer.</td>
</tr>
<tr>
<td>Peer in close proximity, no attention</td>
<td>Walking to carpet, peer within his reach, pushes her and then pushes past her.</td>
</tr>
<tr>
<td>Peer in close proximity, no attention</td>
<td>Students move away from him, peer closest to him gets hit.</td>
</tr>
<tr>
<td>Peer in close proximity, STOPS attention</td>
<td>Peer was paying attention, removes attention from Martin at which point he kisses his hand then hits his private parts.</td>
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</tbody>
</table>

**Observation Summary – Consequences of Behavior**

<table>
<thead>
<tr>
<th>Identify Consequence</th>
<th>Describe observational evidence supporting the antecedent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redirection</td>
<td>When Martin is caught doing something inappropriate, he is redirected, then he either bothers another student or cries as a response.</td>
</tr>
<tr>
<td>Tattled on</td>
<td>Students tattle on Martin after a behavior, but the teacher did not provide any other consequences</td>
</tr>
</tbody>
</table>
Teacher Scatterplot Form

Student: Martin Jones  
Teacher: Mrs. Patience

Week(s) of: 01/22/08- 01/28/08  
Interval: 30 minutes _X_ 60 minutes ___

Use the symbols below – 1 for low intensity, 2 for medium intensity, 3 for high intensity – to describe student’s demonstration of the target behavior during the selected interval time, either 30 or 60 minutes. Next to the boxes below, describe what the target behavior looks like at each intensity level.

1. Low Intensity Behavior Description: verbal aggression, disruptive behaviors (talking, singing, etc.)

2. Medium Intensity Behavior Description: crying, tantrums

3. High Intensity Behavior Description: physical aggression

ABSENT 1 of the days. Teacher also noted # of occurrences of low intensity behaviors. (1/#x)

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<thead>
<tr>
<th>Time of Day</th>
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<th>W</th>
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APPENDIX D

SUMMARY & HYPOTHESIS FORM, & BEHAVIOR INTERVENTION PLAN
Functional Assessment – Summary & Hypothesis Form

Definition of Target Behavior:
Physical aggression: hitting, kicking, pinching, pushing, slapping; Tantrumming/Crying: longer than 5 minutes; Verbal aggression: name calling, swearing, mean words, etc.

Review all information gathered from scatterplots, interviews, and observations. Briefly summarize what is known across each of the domains: instructional, social, physical, and non-school.

Instructional:
Martin has the most difficulties during unstructured times during the school day. He also has difficulties when he is in a large group setting and there are peers in close proximity to him. When Martin is not allowed to participate (is not called on), he gets upset and will either cry or become physically aggressive with a student that is near him. He displays similar behaviors when he is reprimanded for his behaviors. Martin is not able to sit very long and is unable to focus for more than about 3-5 minutes at a time.

Social:
Peers are very intolerant of Martin’s behaviors. Peer’s ignore and avoid Martin because of his behaviors. Martin does not know how to talk to his peers and is very bossy and talks to them inappropriately. When peers ask Martin to stop his behaviors he responds much like he does when the teacher asks him to stop, by yelling and crying.

Physical:
When peers are in close proximity to Martin, it is likely that they will be the victim of aggression. Martin does not respect personal space and almost every time a peer was within arms reach of him, he displayed some sign of physical aggression.

Non-School:
Parents do not report any of these behaviors at home.

Target Behavior is Most Likely to Happen When:
There are peers in close proximity to him and they are not giving him attention.

Target Behavior is Least Likely to Happen When:
Martin is working with an adult in a small group setting.

Develop a hypothesis that describes the functional relationship between antecedents and consequences. The hypothesis should include: 1) antecedents (instructional, social, physical, non-school) associated with target behavior, 2) the target behavior, and 3) consequences associated with the target behavior.
Hypothesis:
When peers in close proximity to Martin are withholding attention, Martin will exhibit aggressive behaviors (hit, kick, slap, etc.) towards the student, which results in negative attention (yelling, tattling) from the peer and/or adults.
Behavioral Intervention Plan (BIP)

Student Name: Martin Jones
D.O.B.: 01/18/2002
School: Local Elementary
Grade: Kindergarten

Target Behavior:
Physical aggression: hitting, kicking, pinching, pushing, slapping;
Tantrumming/Crying: longer than 5 minutes;
Verbal aggression: name calling, swearing, mean words, etc.

Working Hypothesis:
When peers in close proximity to Martin are withholding attention, Martin will exhibit aggressive behaviors (hit, kick, slap, etc.) towards the student, which results in negative attention (yelling, tattling) from the peer and/or adults.

Intervention(s):

1) Daily 1:1 social skills instruction for 20-25 minutes using the I Can Problem Solve curriculum
2) Rewards chart
   - Receive stickers at the end of each instructional period for NOT displaying any of the target behaviors.
   - If he receives at least 3 stickers before lunch, he gets a consumable reward of his choice (candy)
   - If he receives at least 3 stickers after lunch, he gets a second consumable reward of his choice (candy)
   - NOT ALL OR NOTHING. Has the chance to earn reward later in day if he had a bad morning.
Progress Monitoring Plan

Target Behavior:
Physical aggression: hitting, kicking, pinching, pushing, slapping;
Tantrumming/Crying: longer than 5 minutes;
Verbal aggression: name calling, swearing, mean words, etc

Observation Method:
(e.g., event, time sampling, anecdotal)

Event recording, anecdotal

Description of Procedures:
(e.g., when observations will be conducted, who will collect the data, where the data will be collected)

Classroom teacher will monitor Martin’s behavior daily through use of the sticker chart. She will record instances of target behavior on the chart. The average number of behaviors displayed per day will be graphed weekly by the researcher who will collect the daily charts.

Progress Review Meeting Scheduled:
Weekly progress monitoring, will reconvene in 3 weeks unless there is a need for an earlier need.