The effectiveness of FBA-based interventions on social goals and behaviors of a student at risk of E/BD

Hsin-Ju Chen

University of Texas at El Paso, hchen2@miners.utep.edu

Follow this and additional works at: https://digitalcommons.utep.edu/open_etd

Part of the Special Education Administration Commons, and the Special Education and Teaching Commons

Recommended Citation

https://digitalcommons.utep.edu/open_etd/229

This is brought to you for free and open access by DigitalCommons@UTE. It has been accepted for inclusion in Open Access Theses & Dissertations by an authorized administrator of DigitalCommons@UTE. For more information, please contact lweber@utep.edu.
THE EFFECTIVENESS OF FBA-BASED INTERVENTIONS ON SOCIAL GOALS AND BEHAVIORS OF A STUDENT AT RISK OF E/BD

HSIN-JU CHEN

Department of Educational Psychology and Special Services

APPROVED:

____________________________________
Robert P. Trussell, Ph.D., Chair

____________________________________
Ana Schwartz, Ph.D.

____________________________________
Helen Hammond, Ph.D.

____________________________________
Beverly Argus-Calvo, Ph.D.

___________________________
Patricia D. Witherspoon, Ph.D.
Dean of the Graduate School
THE EFFECTIVENESS OF FBA-BASED INTERVENTIONS ON SOCIAL GOALS AND BEHAVIORS OF A STUDENT AT RISK OF E/BD

By

Hsin-Ju Chen, M.S.

THESIS

Presented to the Faculty of the Graduate School of

The University of Texas at El Paso

in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF ARTS

Department of Educational Psychology and Special Services

THE UNIVERSITY OF TEXAS AT EL PASO

August 2009
ACKNOWLEDGEMENTS

There are many people who have encouraged and helped me throughout my education to this level. The most important persons are my parents, Yu-Yi Chen and Shu-Chun Lin. They always unconditionally support me to pursue my dreams. Today, I would like to present this honor to my parents. Second, I would like to thank my husband, Li-Hao. If I had not met him, I would not have been here and would not have been able to get the Master’s degree. He is my wonderful partner. I also would like to thank my sisters, Hsin-Yi and Hsin-Hsin, and brother, Ching-Huang, for always being my back-ups for everything.

Moreover, I would like to acknowledge my advisor, Dr. Robert P. Trussell, who shared his educational expertise, always supported and encouraged me, and was patient to keep me on track until the end. I also appreciated my committees, Dr. Calvo, Dr. Hammond and Dr. Schwartz. I could fulfill this thesis and it could be close to perfection because of their specialized advice. In addition, I would like to thank two special friends, Claudia and Patti, for spending a lot of time to go through my PowerPoint and helping me to prepare my presentation. Last, I would like to thank my friends who live in Taiwan; because of their beliefs, I made it!
ABSTRACT

The purpose of this study was to examine the effectiveness of functional behavioral assessment (FBA) based interventions for improving prosocial goals and behaviors and reducing problem behaviors of a student at risk of emotional and behavioral disorders (E/BD). Specifically, this study was interested in whether the behavioral intervention plans based on the function of behavior had an impact on the student’s thought processes impacting prosocial decision making. There was one 11-year-old student who was placed in the behavior intervention class (BIC) participating in this study. Results showed that overall, the student’s problem behaviors seemed to decrease during the classroom universal interventions; however, it was not the case on his severe problem behaviors, including talking out, making noise, talking back, and leaving the seat. After implementing individual behavior interventions, the student’s severe problem behaviors were successfully reduced. In addition, the results indicated that the student’s social behaviors and goals in peer conflict situations were changed prosocially after implementing behavioral interventions. A unique contribution of this study was that the results demonstrated changes in both the student’s behaviors and his thinking processes. In short, effective behavioral interventions were able to reduce student’s problem behaviors while at the same time improve prosocial thinking.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Literature Review</td>
<td>4</td>
</tr>
<tr>
<td>Social Information Processing (SIP) Model</td>
<td>4</td>
</tr>
<tr>
<td>Functional Behavioral Assessment (FBA)</td>
<td>13</td>
</tr>
<tr>
<td>Limitations in the Literature</td>
<td>23</td>
</tr>
<tr>
<td>Statement of Purpose and Research Question</td>
<td>25</td>
</tr>
<tr>
<td>METHOD</td>
<td>26</td>
</tr>
<tr>
<td>Participant and Setting</td>
<td>26</td>
</tr>
<tr>
<td>Dependent Variables</td>
<td>28</td>
</tr>
<tr>
<td>Research Design</td>
<td>29</td>
</tr>
<tr>
<td>RESULTS</td>
<td>37</td>
</tr>
<tr>
<td>Functional Behavioral Assessment Summary</td>
<td>37</td>
</tr>
<tr>
<td>Classroom Universal and Individual Behavior Interventions</td>
<td>39</td>
</tr>
<tr>
<td>Social Goals of Ambiguous Peer Provocation Situations</td>
<td>45</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>48</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>56</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>68</td>
</tr>
<tr>
<td>CURRICULUM VITA</td>
<td>94</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1  Classroom Universal and Individual Behavior Interventions ........................................ 40
Table 2  The Mean Percent of Severe Problem Behaviors .......................................................... 43
Table 3  Inter-observer Agreement ............................................................................................ 45
Table 4  The Means and $t$ Values among Behaviors and Goals of Pre- and Post Behavioral Intervention .................................................................................................................. 47
LIST OF FIGURES

Figure 1  The Social Information-Processing Model of Children’s Social Adjustment ............... 6  
Figure 2  Percentage of Problem Behavior across Settings ......................................................... 44
CHAPTER I

INTRODUCTION

School is an important environment for all students to learn social skills. Within schools, students build both peer relationships and self-image through interactions with peers. Researches have shown that peer relations are instrumental in the development of prosocial behaviors during childhood (Coie & Cillessen, 1993). However, approximately 10–15% of students have poor peer relations (Asher & Rose, 1997). Additionally, socially rejected students may confront academic, behavior, emotional, and social difficulties in their later life (McFadyen-Ketchum & Dodge, 1998; Rubin & Mills, 1988). Students with poor social skills tend to engage in aggression and delinquent behaviors, drop out of high school, and develop psychological difficulties (Buhs & Ladd, 2001; Dodge, 1983; Gresham, MacMillan, & Bocian, 1997; Zettersgren, 2005). In addition, those students who are rejected at any given time will be rejected in following years (Asher et al., 1997; Coie & Dodge, 1983; Cillessen, Bukowski, & Haselager, 2000).

The rejected status often happens to students with or at risk of emotional and behavioral disorders (E/BD) (Buhs et al., 2001; Lopez, Olaizola, Ferrer, & Ochoa, 2006; Sabornie & Kauffman, 1985) and negatively impacts not only their academic performances (Cullinan, 2002) but also their relationships with peers and adults (Gresham, Lane, MacMillan, & Bocian, 1999). According to the annual report of the U.S. Department of Education (2005), 484,479 students received special education services under the category “emotional disturbance (ED)”. Problematic behavior patterns such as aggression and disruption are frequently displayed by students with or at risk of E/BD (Farmer & Hollowell, 1994). Kaiser, Hancock, Cai, Foster, and Hester (2000) indicated, “the disruptive and defiant behavior of students with emotional and behavioral disorders almost always leads to academic failure. This failure, in turn, disposes them to further antisocial
conduct”. For example, these students suffer from loneliness and social dissatisfaction, and have a higher likelihood of dropping out of school (Asher, Parkhurst, Hymel, & Williams, 1990; Erdley, 1996; Erdley & Asher, 1999; Kauffman & Landrum, 2009).

A possible explanation for the deficits in social skills development can attribute to the development of inappropriate social goals. Social goals are those cognitive choices that can influence students to achieve social outcomes when interacting with others. According to the social information processing (SIP) model (Crick & Dodge, 1994), students display problem behaviors due to their inappropriate social goals. Research results have found that there is a relationship between students’ social goals and their social behaviors. When students prefer to set prosocial goals in peer situations, they display prosocial behaviors, such as making accommodations, negotiating or compromising in order to maximize the needs of both parties (Chung & Asher, 1996; Delveaux & Daniels, 2000; Rose & Asher, 1999). Past behavior interventions, such as coaching, role play, and self-management have been fairly successful in improving social behaviors of students with or at risk of E/BD (Kerr & Nelson, 2006; Melloy, Davis, Wehby, Murry, & Leiber, 1998; Yell, Meadows, Drasgow, & Shriner, 2009). However, the limited generalization of new learned skills into other social situations is still a marked issue (Mathur & Rutherford, 1996). There are a variety of factors that affect student’s ability to generalize newly learned social behaviors. Included in these factors is the student’s social decision making (Crick et al., 1994). Therefore, pivotal to the development of social skills is the accompanying development of social decision making skills that lead to increases in prosocial decision making and behaviors.

Students with E/BD often require significant special education services in the areas of prosocial behavior development. An important advancement in promoting prosocial behaviors of
students with E/BD has been the use incorporation of Functional Behavioral Assessments (FBA). The use of FBAs has been shown to be a critical component in the process of identifying interventions for students exhibiting behaviors that interfere with their social development (Broussard, & Northup, 1997; Cihak, Alberto, & Fredrick, 2007; Wright-Gallo, Higbee, Reagon, & Davey, 2006). Researchers have found that intervention plans based on FBA were more effective, individualized, and appropriate to reduce problem social behaviors of student with or at risk of E/BD (Newcomer & Lewis, 2004).

FBA is a process of gathering information about problem behaviors in order to identify variables that predict and maintain problem behaviors (O’Neill et al, 1997; Gresham, Watson, & Skinner, 2001; Yell et al., 2009). The FBA process will yield a Behavior Intervention Plan (BIP) that will be individually designed to increase appropriate behaviors (O’Neill et al, 1997; Yell et al., 2009). The strategies of BIPs include teaching alternative behaviors, eliminating or neutralizing the setting events, modifying the antecedent events, and manipulating consequent events (Sugai, Lewis-Palmer, & Hagna-Burke, 1999-2000). Different from other interventions; the FBA-based intervention integrates systematic manipulation of environmental factors and teaching appropriate social skills in order to reduce problem behaviors and/or increase appropriate behaviors. In addition, the long-term effectiveness and generalization of FBA with students with or at risk of E/BD have been found (Clarke, et al., 1995; Dunlap, Kern-Dunlap, Clarke, & Robbins, 1991; Heckaman, Conroy, Fox, & Chait, 2000; Umbreit & Blair, 1997; Umbreit, 1995; Blair, Umbreit, & Bos, 1999).
Literature Review

The review of related literature will discuss the social information processing model and the impact of students’ social goals and behaviors. In addition, there is the review of fundamental principles of functional behavioral assessment and the effectiveness of improving behavior through using function-based intervention.

*Social Information Processing (SIP) Model*

*The Concept of SIP Model*

Researchers have utilized the social-cognitive approaches to understand students’ social adjustments and social difficulties. This investigative perspective premises that social cognitive approaches are mechanisms that contribute to social behaviors. Crick et al. (1994) stated that socially adjusted and antisocial students exhibit particular cognitive styles or difficulties that may contribute to maladjustment. Based on this theory, the social information processing (SIP) model was developed. The SIP emphasizes the importance of individuals’ thoughts in the performance of particular behaviors in social situations. In addition, the SIP model has provided advances in the understanding of students’ social behaviors in recent years (Chung et al., 1996; Delveaux et al., 2000; Dodge, 1986; Lemerise, Fredstrom, Kelley, Bowersox, & Waford, 2006; Rose et al., 1999).

The SIP model hypothesizes that individuals confront social situations with a set of biologically limited capabilities and past experiences (Arsenio & Lemerise, 2004; Crick et al., 1994; Erdley, 1996; Lemerise & Arsenio, 2000; McDonel, 1995). When individuals receive various cues from their environment, they process those cues and develop their behavioral
responses. The processing steps of SIP model include (Crick et al., 1994): (a) encoding of social cues, (b) interpretation and mental representation of those cues, (c) clarification or selection of a goal, (d) response access or construction, (e) response decision, and (f) behavioral enactment. The individualized explanation of SIP model processing is in the following paragraphs (Crick et al., 1994).

When individuals are faced with a social situation, the first step is to encode social cues. This model assumes that individuals will take notice of specific internal and external cues in the situations. During the interpretation stage, individuals will analyze, interpret, and give the meaning for the received cues. Interpretative knowledge gains from either previous experiences in memory or generates novel interpretations when the social cues do not match with possible interpretations from long-term memory. Knowledge may involve various interpretive processes, including a causal analysis of events, inferences of others intentions, an assessment of whether goals had been obtained in previous social interactions, evaluation of self-efficacy based on past performances, and attributing meaning about the self to the current situation. For example, a student who has been constantly bullied by peers at school is more likely to explain peer’s act such as being pushed or bumped to on purpose rather than by accident (Erdley & Asher, 1996; Orpinas & Horne, 2006).

After the meaning of particular cues is made, during Step 3, clarification of goals, individuals select a goal or desired outcome for the situation. The model is proposed that individuals have the opportunity to choose certain goals to the social situation. However, goals may be revised and reconstructed in response to novel situations. During Step 4, individuals engage in response access or construction from memory. If it is a new situation, they may generate new behaviors to response the immediate social cues. The possible responses are lead by long-term memory of similar conditions and by immediate social cues in the present situation. For example, a student with
E/BD may be more likely to demonstrate aggressive responses because his usable responses are mostly composed of those strategies (Orpinas & Horne, 2006; Waldman, 1996).

At Step 5, response decision, individuals evaluate the previously generated responses and choose what response best fits their social goal. At the same time, the outcome they expect, the amount of confidence they have in performing the response, and the appropriation of each response will be considered and evaluated when the decision is being made. During the final step, behavioral enactment, the chosen response is performed. Importantly, the SIP model is a nonlinear, circular, and automatic structure. Crick et al. believed that individuals simultaneously engage in multiple social information processing because each step in this model may influence the others through a series of feedback loops (Lemerise, et al., 2006; Erdley & Asher, 1996, 1998, 1999; Stein & Albro, 2001; Troop-Gordon & Asher, 2005).

Figure 1   The Social Information-Processing Model of Children’s Social Adjustment (Crick & Dodge, 1994)
The Relationship between Social Goals and Strategies

Individuals’ behaviors are the only step which can be directly observed in social situations. According to the SIP model, individuals select particular responses which are influenced by their decisions or goals. Recently, a number of researchers have attempted to understand the relation between students’ goals and behaviors in social situations. In addition, those researchers hypothesize that students’ goals have motivational effects on their behavioral performances in particular social situations (Chung et al., 1996; Delveaux et al., 2000; Lemerise et al., 2006). The goals that students select affect their cognitive information processing such as searching and selecting possible behavioral responses. In addition, students set particular social goals that predetermine students to respond in specific ways. The reason is students have learned which behavioral responses could succeed in achieving the goals in past social experiences (Chung et al., 1996).

According to the literature, there are four primary social goals and four primary social strategies (Chung et al., 1996; Delveaux et al., 2000; Erdley et al., 1996; Lochman, Wayland, & White, 1993; Renshaw & Asher, 1983; Rose et al. 1999). Social goals consist of prosocial goals, control goals, revenge goals, and avoiding trouble goals. Prosocial goals are defined as those intentions necessary for establishing good relationships, being fair to others and working things out peacefully. Control goals focus on meeting one’s own needs, having control over one’s own activities and possessions and, keeping the dominant position. Revenge goals mean trying get back at others. Avoiding trouble goals are those intentions associated with trying not to get in trouble with other peers and adults.

Social strategies are defined as the behavioral responses to peer conflict situation. There are four primary social strategies identified in the literature. Prosocial strategies are those that students
use to accommodate or make compromises to suit the needs of both parties, such as taking turns. Passive strategies are those that a student uses in order to avoid problems, for example, asking for an adult’s help or leaving the situation. Hostile strategies are those that incorporate using an aggressive or hostile manner to deal with others, such as verbal or physical aggression. Assertive strategies are those students use to insist that their own interests take precedence, such as stating what one wanted.

The relationship between goals and strategies in managing peer conflicts has been researched. Chung et al. (1996) studied fourth through sixth grade students’ goals and strategies in 12 conflict peer situations. The results showed that students engaged in positive relationship goals, including maintaining a good relationship with the other person, tended to select either prosocial strategies, such as accommodating the needs of both parties or passive strategies like giving in or forfeiting one’s own interests. On the contrary, students who endorsed more control goals, which are concerned with having control over one’s activities, possessions, and personal space, rarely selected prosocial, passive or adult-seeking strategies (requesting help from adults), but frequently performed hostile/ coercive strategies (directly counteracting the other person’s actions in an unfriendly manner). However, students with goals of avoiding trouble, favored prosocial and passive strategies than hostile/ coercive strategies.

Delveaux et al. (2000) examined the association between students’ social goals and strategies for peer conflict resolution. The study included physically aggressive strategies (e.g. pushing the target peer away), relationally aggressive strategies (e.g. stating ignore the peer or telling others not to play with him), and prosocial strategies (e.g. suggesting the peer to play together). 237 fourth through sixth grade students participated in this study. The results showed prosocial strategies were positively correlated with the desire to avoid trouble, and prosocial goals such as
maintaining equality, maintaining relationships with the target peer, and maintaining relationships with the peer group as a whole. For physically aggressive strategies and relationally aggressive strategies, both were positively correlated with control goals and revenge goals, and negatively correlated with prosocial goals. Additionally, students would tend to use relationally aggressive strategies to avoiding trouble and maintain relationships among the peer group.

Rose et al. (1999) examined whether friendship quality of students was predicted by their goals and strategies in friendship conflict situations. There were 696 fourth-grade and fifth-grade participants. They were asked to answer the goals and strategies in 30 hypothetical friendship conflict situations of the five contexts, thus each context would have six friendship situations. This study included three social goals (relationship maintenance, instrumental-control, and revenge goals) and three strategies (accommodation-compromise, hostile, and self-interest assertion strategies). Relationship maintenance goals were keeping friendly relationship, being fair to each other, and reducing. Instrumental-control goals focused on meeting one’s own needs and keeping control over one’s own activities. Revenge goals meant that students are trying to get back at others. For strategies, the accommodation-compromise strategies meant that students negotiate with the other in order to find the way which both parties all agree. The Hostile strategies were students using verbal aggression, leaving, and threatening of termination of the friendship. Self-interest assertion strategies meant that students insist their own interests. Like previous researches, the result indicated that students’ goals were strongly related to their strategies. The relationship maintenance goals were positively correlated with the accommodation-compromise strategies, and negatively correlated with the self-interest assertion strategies and the hostile strategies. On the contrary, the instrumental-control goals and the revenge goals were both positively correlated with the self-interest assertion strategies and the hostile strategies, and negatively correlated with the
accommodation-compromise strategies. In addition, the revenge goals and the hostile strategies would predict the number of best friends which students had. Poor friendship quality was predicted by the revenge goals. In short, the selected goals which students would pursue were highly and meaningfully related to the strategies which they chose for responding to peer conflict situations.

In summary, the results of these studies have shown the relationship between social goals and strategies. The specific goals would be followed by particular strategies in conflict situations. For example, when students set prosocial goals, such as maintaining relationship or equality, they would perform prosocial strategies, such as accommodating the needs of both. If students set control or revenge goals, they would tend to respond by aggression, threatening of termination of friendship or insist their own interest strategies in order to achieve the set goals. In addition, if students want to avoid trouble in conflict situations, they would prefer using passive strategies, such as giving up or forfeiting their interests.

Social Goals and Problem Behaviors

Understanding individual social goals may partially explain why individuals encountering similar situations respond in completely different ways. For example, in peer conflict situations, some students may be concerned about the importance of individual dominance while other students may be more concerned with having good peer relationships. The SIP model interprets the differences of students’ social competence by modeling how they explain and process social cues or information and make decisions to deal with situations (Crick et al., 1994). Dodge and Newman (1981) state that problem behaviors are usually due to inaccurate interpretations of peer’s behaviors being intentionally hostile. For example, aggressive students are more likely to believe that peers caused the harm on purpose and would react to the peer with aggression in ambiguous
provocation situations (Dodge, 1980; Erdley et al., 1996). The ambiguous provocation situations are not clear whether the peer caused the harm on purpose or by accident when the harm is happened to the student (Erdley et al., 1996, 1999). For instance, a student is riding his bike down a quiet street. He rides past a car parked on the side of the street. Another boy is sitting in the car. After he rides past the boy, the boy honks the horn of the car. It startles him and he falls off the bike and skins his hands and knees (Erdley et al., 1996). On the contrary, students who are less aggressive tend to believe that harm happened by accident and would not perform aggressive responses to peers (Dodge, 1980; Erdley et al., 1996). In addition, when students believed the legitimacy of aggression, they tend to behave more aggressively (Erdley et al., 1998).

Furthermore, Erdley et al. (1996) indicated that students’ social goals would be impacted by situation-specificity. Generally, when students try to join in peer’s activities, they tend to demonstrate their desires in friendly ways. On the contrary, most students would set hostile goals to deal with conflict situation (Renshaw et al., 1983). In other words, different situations would elicit certain goals. In a study conducted by Lochman et al. (1993), adolescent boys were asked to rate the importance of pursuing four different goals in response to a single ambiguous provocation. The results showed that aggressive boys rated a high value for revenge (e.g. get back at him) and dominance (e.g. let him know who’s boss) goals, on the contrary, they rated the low value for affiliation goal (e.g. work things out and get to know him better). In addition, those boys were more likely reported having committed a crime against a person and higher levels of drug and alcohol involvement. They also had peer rejection problem. On the basis of this assumption, Erdley et al. (1996) believed that using ambiguous situations could elicit a wide range of possible responses. The reason is students’ goals orientations have been drawn based on the specific situations. They believed that using ambiguous provocation is important to elicit a wide range of
possible goals because it could avoid eliciting particular goals due to certain situations. Therefore, they examined students’ social goals and self-efficacy perceptions in 10 ambiguous provocations which the situations do not clear display the purpose of actors. Research results indicated that fourth and fifth grade students who are aggressive responders endorsed more hostile social goals and felt able to achieve antisocial goals such as good at getting back at the peer and making the other feel bad. In addition, they were relatively more confident in their antisocial abilities. On the contrary, students who were nonaggressive, problem-solving and withdrawn responders, concerned with prosocial goals such as getting along with the protagonist, working out the problem peacefully, and solving the problem created by the protagonist. In addition, they had more confidence to achieve prosocial goals, but less confidence to accomplish antisocial goals. However, students who were withdrawn responders rated the goal of staying away from the protagonist higher than did the other two groups.

In conclusion, the SIP model (Crick & Dodge, 1994) emphasizes the importance of students’ social-cognitive processes which lead students to perform particular behaviors in social situations. Differences in students’ behaviors can be partially explained by how students explain, process social cues and make social decisions. The previous studies have indicated that students’ behaviors strongly related with their social goals. In other words, students select particular responses which are affected by their decisions or goals. Prosocial goals usually accompany prosocial behaviors such as sharing in social situations (Chung et al., 1996; Delveaux et al., 2000; Rose et al., 1999). However, students at risk of E/BD have difficulty in demonstrating prosocial behaviors. A possible explanation is that students at risk of E/BD tend to misinterpret peer interactions as being hostile. Further they also lack related knowledge of dealing with peer interaction situations (Dodge et al., 1981; Erdly et al., 1996; Ladd & Mize, 1983; Renshaw et al., 1983). Therefore, students at risk of
E/BD make inappropriate decisions or goals to handle social situations.

Wehby, Symons, and Hollo (1997) suggested that it is important to identify risk factors that may contribute to the development of problem behaviors in students at risk of E/BD. For example, Erdley et al. (1999) indicated that pursuing inappropriate goals was one of the risk factors associated with social problem behaviors. Other behavioral intervention studies of students at risk of E/BD have focused on teaching prosocial skills (Kerr et al., 2006; Melloy et al., 1998; Yell et al., 2009). However, the limited generalization of new learned skills into other social situations is still a problem in students at risk of E/BD (Mathur et al., 1996). A possible explanation for this is that although students at risk of E/BD have learned the new social skills, the inappropriate social goals which linked with the problem behaviors are still reserved (Erdley et al., 1999). Hence, Erdley (1996) suggested that interventions focusing on changing students’ thoughts would be more effective because social-cognitive processing plays an important role in motivating problem behaviors.

*Functional Behavioral Assessment (FBA)*

A variety of factors affect students’ behavior. From the perspective of the SIP model, problem behaviors are influenced by social goals (Crick et al., 1994). From a behavioral perspective, environmental factors are assessed and manipulated in order to explain the occurrence of and intervention for problem behaviors. A development in the behavioral perspective with regard to students with or at risk of E/BD has been the increasing emphasis on Functional Behavioral Assessments (FBA). There is a growing body of literature on the effectiveness of individual behavior interventions based on the results of conducting an FBA. Recent research has indicated that behavioral interventions based on functional assessment are more effective at
reducing problem behaviors of students with or at risk of E/BD compared to traditional intervention approaches (Newcomer & Lewis, 2004)

**Definition and Concept of FBA**

“Functional behavioral assessment (FBA) is a process for gathering information that can be used to maximize the effectiveness and efficiency of behavioral support” (O’Neill et al. 1997). The process of FBA is gathering information of antecedents, behaviors, and consequences in order to understand why problem behaviors occur (Gresham et al., 2001). FBA can help us to identify variables that predict and maintain problem behaviors (Horner & Carr, 1997). In other words, using FBA is an effective means of identifying problem behaviors’ environmental determinants (Smith & Churchill, 2002).

Additionally, FBA concludes the function of behavior that refers to a student’s intention and if the behavior is maintained by negative or positive reinforcement (Ingram, Lewis-Palmer, & Sugai, 2005). It is believed that student’s behavior has a purpose and serves a special function which is to make a desired change in the environment (Alberto & Troutman, 2009). Furthermore, understanding the function of student’s behavior would facilitate to develop an effective intervention plan. Generally, the functions of behavior could be classified into six categories: (a) social attention seeking (positive social reinforcement); (b) tangibles or preferred activities seeking (material or activity reinforcement); (c) internal stimulation seeking (sensory reinforcement); (d) escape task (negative reinforcement); (e) social avoidance (negative social reinforcement); (f) escape internal stimulation (negative sensory reinforcement) (Alberto et al., 2009; Carr, 1994; Ervin et al., 2001; Gresham et al., 2001).
Methodology of FBA

Sasso, Conroy, Stichter, and Fox (2001) indicated that the basic assumptions of conducting FBA are (a) identify environmental factors which relate to problem behaviors directly; (b) the environmental factors can be recognized through assessment process; (c) systematic manipulation of these factors in order to reduce problem behaviors or increase appropriate behaviors or skills. The idea of FBA is if we can identify the relation between conditions and problem behaviors, we can arrange environments in ways that reduce occurrences of problem behavior and teach appropriate behaviors that can replace problem behaviors (Mace, 1994).

There are three common methods of completing an FBA (Gresham et al., 2001). Indirect methods include functional assessment interviews, behavior rating scales, and archival records. Direct observations provide the researches to obtain information which relate to the problem behaviors, such as setting events, antecedent events, reactions, and consequences. Additionally, an experimental functional analysis is to develop an alternative behavioral intervention plan which re-designs the setting, antecedent, and consequence events in the natural environment to assess the student's behaviors or responses (Axelrod, 1987; Conroy, Asmus, Sellers, & Ladwig, 2005; Iwata, Dorsey, Slifer, Bauman, & Richman, 1994; Potoczak, Carr, & Michael, 2007).

Once data is gathered, five primary outcomes of FBA process have to be achieved in order to design an effective behavioral intervention. These outcomes include: (a) a clear description or definition of problem behaviors; (b) identification of events, times, and situations that elicit or inhibit problem behaviors; (c) identification of consequences which maintain problem behaviors; (d) developing of a hypothesis or hypotheses that describes specific behaviors, specific situations in which behaviors happen and outcomes of behaviors which maintain the behaviors; (e) direct observation data of problem behaviors that support the hypothesis or hypotheses (O’Neill et al.,
Behavioral Intervention Plan (BIP)

The purpose of FBA is to develop an effective and efficient behavior intervention plan for modifying students’ problem behaviors (O’Neill et al., 1997). FBA is developed from social learning theory that assumes a behavior happens within a particular condition and represents a unique purpose (Kauffman & Lanfrum, 2006). The reason of maintaining problem behaviors is that students learn the behaviors could meet desired outcomes. Therefore, only when they perceive the other responses or behaviors will more effectively achieve the desired outcome, students will change their behaviors (Gable, Quinn, Rutherford, Howell, & Hoffman, 1998).

Methodology of BIP. Sugai et al. (2000) described six steps how to develop a BIP. The first step is gathering information to determine in which situations the problem behaviors are present and absent. They suggested that researchers should pay attention on four important factors which are setting events, antecedent events, the function of problem behaviors, and consequence events. Setting events are events that increase the likelihood of problem behavior but they do not trigger the occurrence of problem behavior. Unlike setting events, antecedent events are events trigger problem behavior and happen immediately prior to the behavior. Consequence events are the events happen immediately after problem behavior and maintain the behavior (Yell et al., 2009).

After gathering sufficient information, the second step is to develop a testable hypothesis. This hypothesis statement describes problem behavior, setting events, triggering antecedent events, maintaining consequence events which indicate the conditions in which the behavior likelihood occurs. In step three, utilizing direct observation information confirms the accuracy of the hypothesis statement. Direct observation is systematic collection of antecedents and consequences.
data which relate to the problem behavior in multiple settings.

The fourth step is to develop a BIP, after the hypothesis statement is confirmed. The BIP is developed to increase appropriate behaviors and decrease problem behaviors. BIP specifies how to manipulate setting events, antecedent events, and consequences, and teach desired and acceptable alternative behaviors. The purpose of BIP is to identify changes that will make the problem behavior irrelevant by changing the conditions that evoke problem behaviors, inefficient by providing a student with replacement behaviors that result in the same consequence as problem behavior, and ineffective by reducing the reinforcement for problem behaviors and providing reinforcement for desirable behaviors (O’Neill et al., 1997; Yell, et al., 2009). The following step is to develop an implementation script. It includes the detailed information of how, when, and where to implement the behavioral intervention plan and by whom. In the last step, the behavioral intervention plan is monitored and data is collected to determine the effectiveness and efficiency of the plan.

The BIP involves strategies for (a) teaching alternative behaviors, (b) eliminating or neutralizing the setting events, (c) modifying the antecedent events, and (d) manipulating consequent events (Sugai et al., 1999-2000). First, students can be taught alternative behaviors to replace problem behaviors in order to perform appropriate behaviors. There are two types of alternative behavior, replacement behaviors and desired responses (Yell et al. 2009). Replacement behaviors are those behaviors serve the same consequence as the problem behavior. Replacement behaviors enable a student to perform in more socially acceptable ways, for example, teaching a student to ask for a break from work instead of throw the book on the floor to escape the task. However, teaching desirable behaviors which should occur and be our expected results are more important because those behaviors help a student to complete social or academic demands
(Alberto et al., 2009; Yell et al. 2009). Second, the purpose of eliminating the setting events is to reduce or prevent the probability of problem behaviors (Yell et al. 2009). For example, if a student is more likely not complete academic tasks when he is in large group activities, an appropriate setting event strategy would be to design small group activities, thus removing the event for the student to escape tasks. The other strategy for preventing problem behaviors is to modify the antecedent events. The function of antecedent strategies is to organize the environment in order to lessen the likelihood that the student will encounter the antecedent. There are some strategies to make the problem behavior irrelevant: altering the physical settings, enriching the environment, improving the curriculum, and increasing the student’s choice of activity (O’Neill et al., 1997). The difficulty of eliminating problem behaviors is that problem behaviors are continuously reinforced by consequences. Therefore, the principle of using consequence strategies is to provide reinforcement to increase alternative behaviors or socially acceptable behaviors and withdraw reinforcement for problem behaviors or unacceptable behaviors (Alberto et al., 2009; Yell et al, 2009).

Classroom setting intervention. Recently, more researches have emphasized on examining the influence of classroom environment on students’ behaviors (Luiselli & Cameron, 1998). Classroom setting events could be environmental, physiological or social (Alberto et al., 2009). Fox and Conroy (1995) defined that setting events are defined by their effects on the relationship between a students’ behavior of interest and its immediate antecedents and consequence. Educators could use antecedent-behavior-consequence (A-B-C) observation to identify the suspected setting events in order to manipulate classroom setting events to bring out desired behaviors of students or to reduce the probability of students’ problem behaviors (Alberto et al., 2009; Kazdin, 2000).
Classroom environment is complex. The contextual factors within classrooms included physical (such as classroom arrangement and density of students), environmental (such as the way in which teacher presents the tasks), and instructional factors (teacher’s praise and assistance) (Conroy & Stichter, 2003). Those factors have important influences on students’ behaviors. For example, Haring and Phillips (1962) indicated that structured classrooms increased the success and learning of student with E/BD. Kamps, Kravits, Ramps and Chung (2000) implemented a prevention program for student with or at risk for emotional disorder. The research result showed that high classroom structure (such as rules in place, organized schedules, variance in lesson formats, and student productivity expectations) could reduce students’ aggression and out-of-seat behaviors and increase their academic engagement level. Trussell, Lewis and Stichter (2008) examined the impact of classroom interventions for reducing problem behaviors of children with emotional/behavioral disorders (EBD). The study manipulated classroom variables including environmental and instructional factors that serve as setting events. The classroom interventions succeeded to reduce students’ problem behaviors.

Function verses non-function based BIP. Researchers have shown that FBA is an effective way to understand and analyze the relation of problem behaviors and environments, because FBA looks not only the immediately observed behaviors but also the factors that predict and maintain problem behaviors (Gresham et al., 2001; Newcomer et al., 2004; Smith et al., 2002).

Recently, three studies compared the effects of function-based interventions to non-function-based interventions for students who had problem behaviors. Ingram et al. (2005) using a withdrawal design (ABCBC) examined the effects of function-based interventions to non-function-base interventions for two middle school students. The result indicated that students’ problem behaviors dramatically decreased during the function-based interventions. The similar
result was also shown by Newcomer et al. (2004). They used a multiple-baseline across participants to compare the efficiency and efficacy between function-based intervention and a traditional intervention which focused on the topography of behaviors. Three elementary-age students who had significant problem behaviors that threatened their academic successes participated in this study. The result showed two of three students had remarkable reductions of problem behaviors in function-based intervention comparing to both baseline and non-function based intervention. In addition to directly address the problem behaviors, using function-based academic intervention also reduced problem behaviors (Filter & Horner, 2009). In this study, they compared the effects of academic interventions of function-based and non-function-based for students whose problem behaviors are maintained by academic variables. They found that students performed fewer problem behaviors and were more engaged in academic activities in function-based intervention than in non-function based intervention.

In summary, an FBA intervention plan is developed based on the defined function of the problem behavior and the hypothesis that treatment effectiveness increases when treatment is matched with the function of the problem behavior. The effectiveness of using FBA has been proved in numerous studies with different types of problem behaviors (Blair, Umbreit, & Bos, 1999; Umbreit et al., 1997), various individual (Stage, et al., 2008; Sugai, et al. 1998) and in varied settings (Ellingson, Miltenverger, Stricker, Galensky, & Garlinghous, 2000; Ellingson, Miltenberger, & Long, 1999; Hoff, Ervin, & Friman, 2005; McClean, et al., 2005).

**FBA and Students with or at Risk of Emotional and Behavioral Disorders (E/BD)**

The legal requirements in the Individuals with Disabilities Education Improvement Act (IDEA, 2004) indicate that students with disabilities can be suspended up to 10 days without
educational services, but required an FBA before a change of placement to a more restrictive education environment. In addition, researchers have shown that behavioral problems of students at risk of E/BD in the school could lead to academic failure (Cullinan, 2002; Kaiser et al., 2000) and their relationships with peers and adults (Gresham et al., 1999). These students often have significant requirements of special education services. The report of U.S. Department of Education (2005) indicated there are 484,479 students received special education services under the category “emotional disturbance” (ED). However, Ervin et al. (2001) reviewed 100 research studies of examined the effectiveness of FBA in schools. There were only 11.2% of participants who were diagnosed E/BD. FBA and BIP are an important part of the identification process and the education service for students exhibiting behaviors that interfere with their own and peer’s learning. For example, Newcomer et al. (2004) examined the effectiveness of intervention whether based on FBA or not. The result indicated the intervention plans based on FBA were more effective, individualized, and appropriate to reduce problem behaviors of students with or at risk of E/BD.

Over the past decade, there is a large and growing literature based on the value of individually behavioral interventions based on the results of FBA. Researchers have showed that behavioral interventions effectively reduced problem behaviors and/or increased appropriate behaviors (Kamps, Wendland, & Culpepper, 2006; Kern, Childs, Dunlap, Clarke, & Falk, 1994; Smith, & Sugai, 2000; Stage, et al. 2006; Umbreit et al., 1997). For example, Smith and Sugai (2000) applied the process of FBA to conducting the hypotheses about the disruptive and aggressive behaviors of a 12-year-old student with E/BD. A self-management intervention was derived from the hypotheses and the effectiveness of intervention was evaluated. The results showed a significant increase of on-task behavior and reduce of off-task behavior.

Some studies have evaluated the generalization and maintenance of interventions derived
from FBA. Heckaman et al. (2000) reviewed 22 studies that investigated the effectiveness of FBA with students with or at risk E/BD. The study indicated there were only two studies that evaluated the generalization of behavior change, and only seven studies collected that studied maintenance data of behavior change. For long-term effectiveness of interventions, Carr et al. (1999) found that 66% of FBA based intervention studies assessed the maintenance of interventions between 1 and 5 months. 5% of the studies evaluated the maintenance effect more than 13 months but no studies reported follow-up for longer than 2 years.

The effectiveness of maintenance has been found in previous researches which assessed the impact of FBA of students with or at risk of E/BD (Clarke et al., 1995; Dunlap et al., 1991; Umbreit, 1995). Blair et al. (1999) assessed a 4-year-old boy who was referred for noncompliant and aggressive behaviors. Based on the information obtained through FBA, the study hypothesized that the preferred activities were the variables associated with student’s problem behaviors. A multiple baseline design across circumstances was used to assess the effectiveness of intervention. Research results indicated that the student’s problem behaviors significantly decreased and the impact of intervention persisted 11 weeks. One research result even showed the FBA intervention effectiveness is durability over 3 years (Kern, Gallagher, Starosta, Hickman, & George, 2006).

There is some evidence that FBA-based interventions lead to generalization. Blair et al. (1999) conducted a study with four preschool students with behavioral disorders who presented aggressive, disruptive, off-task, and noncompliant behaviors. The study examined the effectiveness of preferred activities on students’ problem behaviors based on the results of FBA. The results showed that all students’ problem behaviors were decreased during intervention period in target situation (pre-academic curricular activities). In addition, two probe procedures were used
to assess the generalization of intervention effects to two non-targeted peers who were identified having the similar problem behaviors by teachers, and to other situations, table activity time and group circle time. The generalization of intervention effects were found from the non-targeted peers and situations.

Limitations in the Literature

Erdley et al. (1999) suggested that understanding students’ pursued social goals in social situations is important for improving social competence of students with or at risk of E/BD. They believe that an effective intervention should not only teach students prosocial skills but also encourage students to pursue prosocial goals, such as maintaining relationship with others rather than inappropriate goals like revenge.

Behavioral interventions were wildly used for modifying students’ inappropriate behaviors in the field of education, but these studies did not consider the relationship between behavioral intervention and cognitive processes. On the other hand, although many studies have successfully shown that students’ inappropriate social cognitive processes are related to their problem behaviors (Chung et al., 1996; Delveaux et al., 2000; Erdley et al., 1996; Rose et al., 1999), those studies did not provide an effective intervention for changing problem behaviors of student with or at risk of E/BD (Akhtar & Bradley, 1991; Erdley et al., 1999). Therefore, the present study attempts to fill in the gap between behavioral interventions and student’s cognitive processes. Additionally, there are several methodological limitations of reviewed studies of social goals and strategies. First, researchers have utilized many terms to describe varied social goals and strategies (Chung et al., 1996; Delveaux et al., 2000; Erdley et al., 1996; Heidgerken, Hughes, Cavell &
Willson, 2004; Mayeux & Cillessen, 2003; Rose et al., 1999). However, some articles usually did not specify the definition of social goals and strategies and only cited an example of each social goal and strategy (Delveaux et al., 2000; Heidgerken et al., 2004; Salmivalli, Ojanen, Haanpaa, & Peets, 2005). Second, measuring social cognition depends upon students’ reports and their expressive abilities. This measurement is not like measuring social competence, such as social status or behaviors which can be rated by teachers, peers, and parents. Third, the reliabilities of assessment instruments are questionable. Many studies have designed their assessments of examining students’ social goals and strategies in different situations. For example, Delveaux et al. (2000) examined students’ social goals and strategies in peer conflict situations. Rose et al. (1999) examined students’ social goals and strategies in friendship situations. Therefore, their social goals and strategies are not comparable. In addition, most of researchers did not report psychometric analyses data and did not provide the items in the assessments.

The final limitation of previous studies in social goals and strategies is the cultural diversity issue. Although those studies included students with different ethnic background, they did not examine whether there was a difference of students’ social goals and strategies in different ethnic groups (Erdley, et al., 1996; Rose, et al., 1999). For example, studies have indicated that African American boys were more aggressive than other ethic groups (Giles, Legare, & Samson, 2008), so it is possible this difference could influence on their social goals and strategies. Therefore, the cultural diversity issue should be an important factor on students’ social goals and strategies.
Statement of Purpose and Research Question

This study aimed to examine the relationship between student’s behaviors and social goals. There were two objectives in this study. The first goal was to examine the effectiveness of individually designed FBA interventions on the behaviors of students at risk of E/BD in classrooms. It has been shown that an effective functional behavioral assessment intervention can modify students’ problem behaviors and increase appropriate behaviors. The second goal was to examine whether student will tend to set prosocial goals when problem behaviors of student at risk of E/BD are addressed through interventions based on the specific function of behavior. This study was designed to answer the question: Can we predict that behavioral intervention plans based on the function of behavior will have an impact on the student at risk of E/BD’s thought processes impacting prosocial decision making?
CHAPTER II

METHOD

The research design of this study was a single subject multiple baseline across settings conducted through the following stages: (1) Pre-assessment: collecting data included identifying participant students, teachers and classrooms, incorporating indirect and direct functional behavioral assessments, developing hypothesis statements, and assessing social goals of ambiguous peer provocation situations. (2) Intervention: collecting baseline data on students’ problem behaviors, training teachers to use FBA; implementing individually designed functional behavioral assessment interventions. (3) Post-assessment: maintaining the functional behavior intervention, collecting probe data, and assessing the post-assessment data of second social goals of ambiguous peer provocation situations.

Participant and Setting

The study was conducted in a public elementary school in southwest region of the U.S. One student, John, participated in this study. John was an 11-year-old student in the fifth grade. He was chosen by his classroom teacher and administrator for continuous problem behaviors within the classroom. During The first three years in elementary, John displayed persistent and chronic behavior problems in the general education classroom. It was reported in his special education file that the teacher requested assistance from the school psychologist, diagnostician and special education instructional specialist to develop intervention strategies in the general education classroom for the start of the 4th grade academic year. After several months of intervention using
the good behavior game, it was determined that the student crisis continued with no intervention success. The referring campus completed a Request for Specialized Evaluation. After observations was completed and recommendations were made, it was determined that John was eligible for special education services and was diagnosed learning disabled (LD). It was the recommendation of the admission, review and dismissal (ARD) committee, school administrator and parent that John was placed in a self-contained unit (Behavior Improvement Classes). The Behavior Improvement Classes (BIC) are intended to provide secondary, special education students a non-traditional, instructional setting with an opportunity to learn the skills needed to demonstrate appropriate classroom behaviors, related social skills and behavior that is beneficial to furthering their education in the least restrictive setting possible. The purpose is to decrease the gap in the student’s educational performance by providing the student and his or her family with the support and additional services needed to improve. The program consists of one teacher and two teaching instructional aides that allows for adequate support and supervision in the educational setting. The teacher provides at least 70% of the time in direct support services to the student or parent. These BIC classrooms provide the opportunity to earn outside classes after achieving consistent appropriate behaviors. The teacher has a great responsibility for the implementation of the behavior management system as well as his academic achievement. Family interventions are frequent and the teacher is responsible for conducting one-hour group and social skills activities that are focused on the student mix at the time.

Further, both archival records and office discipline referrals indicated that he showed disruptive behaviors in the classroom over an extended period of time. For the secondary part of elementary, John has shown improvement in both his academic achievement and social skills. In 2008, John failed in TAKS-M both in Reading and Math. In 2009, he passed both TALS-M in
Reading and Math. Additionally, he was screened by Social Skill Rating System (SSRS) (Gresham & Elliot, 1990). The SSRS classified a student’s class performance in three dimensions; the Academic Competence, Problem Behaviors and Social Skills. The result of the SSRS showed that John’s Academic Competence was below average. In addition, although his Problem Behaviors were at an average level, his Social Skills were low. That was to say that he did not have more problem behaviors than other fifth grade students, but he had fewer social skills to interact with his peers appropriately.

According to these records, John was considered at-risk for emotional/behavioral disorder which would negatively impact his academic achievements and social relationships. Two classroom teachers participated in this study. They were chosen based on their willingness to assist in the study and their concern for John’s problem behaviors. The teachers were both certified to teach at the grade level they were teaching. One was a special education teacher in the BIC classroom. The other teacher taught Science in general education classrooms. Each phase of the study was conducted within the natural context of the classroom activities.

Dependent Variables

The dependent measures included both the student’s problem behaviors and social goal of ambiguous peer provocation situations. Student’s problem behaviors were defined as a behavior or a group of behaviors that were considered to disrupt the learning of the target student and peers, and negatively impact the social relationship with peers and adults. Social goals have been defined as arousal states that are oriented toward producing particular social outcomes (Crick et al., 1994; 1996). This study adopted eight social goals from Erdley et al.’s study(1996), (a) getting back at
the protagonist, (b) working out the problem peacefully, (c) avoiding the protagonist, (d) hurting the person’s feelings, (e) protecting the self, (f) taking care of the problem created by the protagonist, (g) maintaining the relationship, and (h) maintaining an assertive reputation.

Research Design

Since this study designed an individually behavioral intervention for the student, a single subject design methodology was important and qualified for the purposes of this study. The purpose of this study was to develop the effective behavioral intervention for individual student and examined the effectiveness of intervention. Data were collected across three phases within the natural context occurring school activities.

Direct observation data were plotted and visually analyzed. The data in this study were extracted using visual inspection to examine the intervention effects at different time points across settings. A graphic display of each observation session within baseline and each intervention phase were plotted. Data analysis included inspections of levels of performance from one phase to the next, the trend in performance across phases, the percentage of data overlap between phases, and the rapidity of behavior change within phases. In addition, using paired \( t \) test compared the difference of student’s performance on social goals between pre-intervention and post-intervention.
Pre-Assessment Procedures

Functional Behavioral Assessment

The study conducted a Functional Behavioral Assessment (FBA) for the student using the procedures described below. The purpose of conducting FBA was to (b) define each student’s topography of problem behaviors; (b) identify setting events that increased the likelihood of problem behaviors, antecedent events that set the occasion for the problem behaviors and consequence events that maintained the problem behaviors; (c) develop hypothesis statements regarding the function of the problem behaviors.

Archival review. Review the student’s file to identify possible antecedent and consequence that were the relative information of student’s problem behaviors. The information reviewed included discipline referrals, attendance history, academic assessment results and teachers’ comments.

Teacher interview. The interview was conducted using the Functional Assessment Interview (FAI) (O’Neill et al., 1997). The central focus of this interview was to determine primary behaviors of concern and then to identify conditions under which the behaviors were most or least likely to occur. Teacher was asked to describe (a) the concerned behaviors, (b) the possible physical and medical factors which relative to problem behaviors, (c) the circumstances that predicted the occurrence and nonoccurrence of the problem behaviors.

Student interview. The Student Assisted Functional Assessment Interview (SAFAI) (Kern, Dunlap, Clarke & Childs, 1994) was used. The purpose of this assessment was to interview a student to help determine problem behaviors, setting events, antecedents, and consequences that
impact behaviors. The interview encouraged a student to think about when the most and the least amounts of problems happened in school, what the causes of problems were, how the situation could be changed for the better, and what possible rewards he would like for demonstrating appropriate behaviors. In addition, the student was asked to answer the questions that related to preference for special subjects.

**Direct observation.** The study used A-B-C observations (Bijou, Peterson, & Ault, 1968) to gather a reliable record of the antecedents and consequences that were associated with the problem behaviors within the natural settings. At least 3 observations were conducted for the student. Each observation was at least 20 minutes and occurred in all three settings, Reading, Math, and Science classes. The observer recorded the immediate antecedents and consequences each time the problem behavior occurred in order to identify the relation between problem behaviors and antecedents and consequences.

**Hypothesis statements.** The researcher and teachers developed a hypothesis statement that included the problem behaviors, antecedent events and consequent events and the function of behavior based on the information of archive review, interventions and observations. The criteria for hypothesis statement was that it had to (a) be based on the interview and observational data, (b) identify the conditions under which improved behavior was likely, and (c) be directly testable within the context of naturally occurring activities in the classroom.

**Social Goals of Ambiguous Peer Provocation Situations**

The social goal of ambiguous peer provocation situations assessment (Erdley et al., 1996) was to examine a student’s social goals in relation to the ambiguous provocations. The social goal
assessment was conducted by the researcher at the first day of collecting direct observation data. The student and researcher were in the separated room during the whole assessment period. The student was allowed to take 5 minutes break if he needed. The assessment took about 40 minutes. The student responded to 10 ambiguous provocation vignettes. Each vignette described a hypothetical situation in which a peer of the same gender as the participant did something that brings harm to him (e.g., milk is spilled on a student) but it was not clear whether the peer had caused the harm on purpose or by accident. After each vignette, the student was asked to answer several questions. First, the student’s attribution of intent was measured by asking whether the other student caused the harm by accident or on purpose. Second, the student was asked to report how they would respond to the provocation. There were six behavioral alternatives, a physically aggressive response (e.g., pour milk on the boy’s back the next day), a verbally aggressive response (e.g., say something mean to him), a passive reaction (e.g., ignore it), an avoidance response (e.g., leave the table), a problem-solving behavior that involved repairing the problem created by the protagonist (e.g., ask the teacher to get a towel), and a request for clarification about why the provocation occurred (e.g., ask him how it happened). The student was asked to rate each behavioral alternative by circling “no”, “maybe”, “yes” which word best described whether he/she would engage in particular behavior. Following the behavior ratings, the student was asked to response 8 goal alternatives by circling 1 (really disagree) to 5 (really agree), (a) getting back at the protagonist, (b) working out the problem peacefully, (c) avoiding the protagonist, (d) hurting the person’s feelings, (e) protecting the self, (f) taking care of the problem created by the protagonist, (g) maintaining the relationship, and (h) maintaining an assertive reputation.

To examine the consistency of student intentionality judgments and behavioral responses across the 10 ambiguous provocation situations, coefficient alphas were calculated. The internal
reliability of students’ social goal was assessed and the reliability was fairly high and consistent ($\alpha=.66 - .93$). The coefficient alphas of students’ behaviors were .58 to .94. Additionally, Erdley et al. (1996) examined whether there were any systematic differences in the particular situations and the result showed that there was no confound between the specific stories to which they responded.

*Intervention Procedures*

*Classroom Universal Intervention*

The results of the FBA were used to help to develop classroom universals which served as setting event interventions for John. Literature suggested that the amount of time for instruction depended to the student’s grade level, such as 5 to 25 minutes for fourth or fifth grade. In this study, the instruction time was 30 minutes including 20 minutes lecture and 10 minutes seat work. In addition, students were allowed to take away one question or problem when they got one answer correct. Students were also allowed to work with peers. Moreover, if students did not finish seat work, they had to complete all work during preferred activity time. The teacher would move around the room and provide assistance.

*Behavioral Intervention Plan (BIP)*

The Competing Behavior Model (CBM) (O’Neill et al., 1997) was used to create a Behavioral Intervention Plan (BIP) that was based on FBA information for the student. The CBM consisted of 3 steps (see appendix E). First, the functional assessment summary statement was included in the diagram. The second step of the CBM was to clarify alternative or competing behaviors and consequences of those behaviors. Last, interventions based on the CBM were developed with the intent of making the problem behavior irrelevant, inefficient and ineffective.
After completing the CBM, multiple strategies and procedures were identified and selected for intervention. The strategies included four components, setting event strategies, antecedent strategies, teaching strategies, and consequence strategies. In addition, the BIP was tested experimentally using multiple-baseline design across situations.

**Teacher Training**

*Training process.* Teachers were trained using the following processes in order to precisely implement BIP. First, teachers participated in developing hypothesis statements. Second, the results of the baseline data were shared with teachers. Third, the recommended interventions were shared. In addition, teachers were asked in terms of their abilities to apply these interventions and any complications that need to be addressed before applying the interventions. Four, the researcher modeled the intervention for teachers if necessary. Fifth, teachers received daily feedback in order to make sure whether teachers implement interventions accurately.

*Integrity Measure.* The behavior intervention plans were applied on a daily basis. Integrity of application was measured by incorporating an individually designed BIP checklist for teachers. Teachers were asked to self-evaluate whether the strategies on checklist were applied. The checklist included setting event, antecedent, replace behavior, and consequence strategies.

**Data Collector Training**

Data collectors were trained using videotaped samples. First, the researcher explained what interval recording was and how to record target behaviors. Second, the researcher demonstrated how to record data using videotaped sample. Third, data collectors were asked to record data individually at the same time. Next, the researcher calculated the inter-observer agreement, and
shared the results with data collectors. Then, data collectors were asked to compare their data, and explained the possible reasons for their differences on the data. Fourth, the third step was repeated until the inter-observer agreement reached 95%.

Measure of Student’s Behaviors

The student’s targeted behaviors were directly observed during each phase of the study (assessment, baseline, intervention and post-assessment) using a six second partial interval recording instrument. Inter-observer agreement data were collected and expected above 0.80. Direct observation data were plotted and visually analyzed. The data in this study were evaluated using visual inspection examining the intervention effects at different points in time across subjects. A graphic display of each observation session within baseline and each intervention phase was plotted. Data analysis included inspections of levels of performance from one phase to the next, the trend in performance across phase, the percentage of data overlapped between phases, and the rapidity of behavior change with phases. The probe procedure was used to assess the maintenance of intervention.

Post-Assessment Procedures

The student’s social goals in ambiguous peer provocation situations were assessed in post-assessment stage using the same questionnaire as the pre-assessment stage. The post-social goal assessment was also conducted by the researcher 18 days after completing interventions. The student and researcher were in the separate room during the whole assessment period. The student was allowed to take 5 minutes break if he needed. The purpose of assessing student’s social goals at a different time was to examine the extent to which student’s interpretation of social cues and
prosocial decision making was impacted by behavioral interventions which were designed to increase prosocial behaviors. In addition, the study maintained probe procedure. However, the probe procedure of post-assessment stage reduced of the number of observation times such as twice a week.
CHAPTER III

RESULTS

Results will be presented in three sections. The first section is a summary of functional behavioral assessment. The second section presents the content and results of behavioral interventions. The last section uses statistical analysis to test whether there was a difference of social goals between pre- and post-interventions.

Functional Behavioral Assessment Summary

Teacher Interview

John’s problem behaviors included talking out, arguing with peer, talking back to teacher, leaving the seat without teacher’s permission or making noise such as tapping pencil or kicking table. He also had many off task problem behaviors which began leaning back, putting his pen or book down, stop working, and escalated to lay face downward to the table.

In addition, the teacher indicated that John showed those problem behaviors every day, and the worse behaviors usually appeared on Monday and Friday. Specifically, his teacher indicated that John’s problem behaviors were usually related reading activities; for example, when he was asked to read aloud by himself. Problem behaviors were less when teacher guided him in individual activities or he was asked to response orally. Furthermore, the result of Problem Behavior Questionnaire Profile showed the student tended to escape from teacher.
**Student Interview**

According to the results of SAFAI, John indicated that he felt that sometimes the work was too hard, too challenging, and too long for him. In addition, he never felt the work was too easy or too short. He also said that he was always distracted by other things in the classroom. He disliked Reading, Social Studies and English more than other subjects. The reason was that he thought that Reading and English courses were too long and too difficult, and he did not know how to spell correctly.

**Direct Observation**

Direct observation confirmed the teacher’s interview. Observations indicated that John engaged in many problem behaviors, such as talking out, talking back, making noise, and leaving the seat that were disruptive to both his own and peers studying during class activities. These problem behaviors appeared in multiple circumstances, such as teacher instruction, small group and independent work. According to the observations, the teacher and peers responded to John when he engaged in problem behaviors. For example, when John often talked out questions irrelative to academic, such as “what time is it”, the teacher and peers would answer him. Observations also indicated that John usually paid attention to instruction during the first 3-5 minutes. Then, he would look around or stare. The teacher would call his name and ask him to get back to the class by asking him a question. However, sometimes John would not response to teacher. The teacher would try a couple of times to engage John in class work. If he did not respond, the teacher would ignore him and continued the teaching. Sometime he tried to answer a question; however, if he could not answer correctly or read a sentence fluently, he would give up immediately and lay his face downward to the table or argued with other students or
teacher. Moreover, during independent work, he would leave his seat without asking teacher’s permission. When the teacher asked him to go back to work, he would talk back to teacher. After he returned to his seat, he would not work on his assignment and make noises, such as kicking his table. The teacher asked him to stop and restated the assignment several times. He would stop making noise, but would not do the assignment. Sometimes he would sit quietly and not do anything until the class ended. Sometimes he would find any excuse to argue with peers.

Statement of Behavioral Function

Based on direct and indirect data collection, a hypothesis statement was development. John exhibited problem behaviors when there were require reading activities. When John was asked to read aloud, he rejected to read or displayed “melting down” behaviors. During independent works, John became off-task by leaving his seat, talking with peers, talking back to teacher and peers. The function of his problem behaviors was to escape reading activities.

Classroom Universal and Individual Behavior Interventions

There were two phases of intervention in this study. The first phase was classroom universal interventions and the second phrase was classroom universal interventions with individual behavior interventions. The reason for implementing classroom universal interventions was that John’s problem behaviors were tied to escaping any reading related activities. The purpose of classroom universal interventions (see table 1) was to rearrange the classroom environment in order to offer all students the opportunity to escape a part of the task. By implementing classroom universals to all students, the teacher has created a setting event intervention that matches the
needs of John while benefiting all the students in the class. After implementing classroom universal interventions, the individual behavior intervention (see table 1) was also implemented.

Table 1  Classroom Universal and Individual Behavior Interventions

<table>
<thead>
<tr>
<th>Classroom Universal Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The maximum of time period is 30 minutes including lecture and seat work.</td>
</tr>
<tr>
<td>2. The time limit of seat work is 10 minutes.</td>
</tr>
<tr>
<td>3. When students get one answer correct, they will be allowed to take away one question/problem.</td>
</tr>
<tr>
<td>4. Students are allowed to work with peers.</td>
</tr>
<tr>
<td>5. If students do not finish seat work, then students have to complete all work during preferred activity time.</td>
</tr>
<tr>
<td>6. Teacher will move around the room and provide assistance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Behavior Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting Event Strategies</td>
</tr>
<tr>
<td>1. Intensive reading instruction is given in the morning.</td>
</tr>
<tr>
<td>2. Provide food in the morning before the class starts.</td>
</tr>
<tr>
<td>3. Record his reading so that he can see and hear his own progress.</td>
</tr>
<tr>
<td>4. Provide a preview of materials for the upcoming week.</td>
</tr>
<tr>
<td>5. Review social skills in social skill class (see appendix F).</td>
</tr>
<tr>
<td>6. Re-teach social skills.</td>
</tr>
<tr>
<td>Antecedent Strategies</td>
</tr>
<tr>
<td>1. Break tasks into 30 minute intervals.</td>
</tr>
<tr>
<td>2. Provide pre-corrects for replacement behaviors.</td>
</tr>
<tr>
<td>3. Ask disruptive students come to the classroom earlier in order not to distract John.</td>
</tr>
<tr>
<td>4. Pre-correct inappropriate behaviors.</td>
</tr>
<tr>
<td>5. Provide teacher’s praise.</td>
</tr>
<tr>
<td>Replacement Behaviors</td>
</tr>
<tr>
<td>1. Complete 2 problems correctly and then skip one.</td>
</tr>
<tr>
<td>2. Work with a peer.</td>
</tr>
<tr>
<td>3. Appropriately ask for teachers’ assistance.</td>
</tr>
<tr>
<td>4. Move around room to access information with teacher’s permission.</td>
</tr>
<tr>
<td>5. Appropriately ask peers to stop the disruptive behaviors.</td>
</tr>
<tr>
<td>6. Appropriately ask the teacher to stop peers’ disruptive behaviors.</td>
</tr>
<tr>
<td>7. Appropriately ask the teacher for permission to move to the other place.</td>
</tr>
<tr>
<td>Consequence Strategies</td>
</tr>
<tr>
<td>1. By using the replacement behaviors, John will be able to escape part of the assigned work in a socially and academically appropriate manner.</td>
</tr>
<tr>
<td>2. When a work is completed John can access to his brother during recess and transitions.</td>
</tr>
<tr>
<td>3. If a problem behavior continues, then the teacher will extend 5 minutes working time incrementally until replacement behaviors are utilized and work is complete.</td>
</tr>
</tbody>
</table>
The Results of Classroom Universal Interventions

Direct observation data were plotted and visually analyzed (see figure 1). For Reading class, the baseline data showed an increasing trend of problem behaviors. The mean percent of problem behaviors was 49% with the range from 36.5% to 68%. Following the classroom universal interventions, the overall data showed a descending trend of problem behaviors (mean of 35% with a range of 14% to 74.5%). However, there was a notable increase of problem behaviors on the 8th session. After the 8th session, the data showed an obvious descending trend during classroom universal interventions and the last three sessions had the mean of 21% with a range of 14% to 25%.

For Math class, the baseline data showed a stable trend of problem behaviors around the mean of 32.5% with range of 19.5% to 47%. When the classroom universal interventions were implemented, data showed a descending trend (mean of 27% with a range of 51.5% to 2%). John’s problem behaviors rebounded at the 13th session and then the obviously decreased again. For Science class, the baseline data showed the lowest baseline data of three classes (mean of 24% of a range of 3.5% to 25.5%). During classroom universal interventions, problem behaviors decreased (mean of 5% of with a range of 1.5% to 14.5%). The last three sessions of the classroom universal interventions had a mean of 3% with a range of 1.5% to 6%.

In summary, John’s problem behaviors decreased during the classroom universal interventions. For Reading class, the mean percent of problem behaviors decreased from 49% at baseline to 35% at classroom universal interventions. For Math class, the mean percent of problem behaviors decreased from 32.5% at baseline to 27% at classroom universal interventions. For Science class, the mean percent of problem behaviors decreased from 24% at baseline to 5% at classroom universal interventions.
Overall, John’s problem behaviors seemed decreasing during the classroom universal interventions, however, it was not the case on his severe problem behaviors. The severe problem behaviors were defined as the destructive behaviors to other students’ studies including talking out, making noise, talking back and leaving the seat. The mean percent of severe problem behaviors across three classrooms and different data collection phases was presented in table 2. The mean percent of severe problem behaviors was 12% in baseline and 29% in classroom universal interventions in Reading class. That was to say overall problem behaviors decreased, the severe problem behaviors increased. For Math class, the mean percent of severe problem behaviors was the same in baseline (20%) between classroom universal interventions (20%). For Science class, the severe problem behaviors are equivalent between baseline (3%) and classroom universal interventions (1%).

*The Result of Classroom Universal with Individual Behavior Interventions*

Visual analysis of the classroom universal with individual behavior interventions showed decreasing trends of problem behaviors in all three classes (see figure 2). Overall, the problem behaviors were less in this integrated intervention comparing with only classroom universal intervention alone. For Reading class, except higher problem behaviors (above 20%) at 16th and 17th sessions, a sharp reduction was found with mean of 11% with a range of 2.5% to 32.5%. In addition, the last three sessions had the mean of 6.5% with a range of 2.5% to 9.5%. For Math class, the data also showed a sharp decrease of problem behaviors with the mean of 10% with a range of 4.5% to 16.5%. For Science class, the problem behaviors decreased close to zero (mean of 0.1% with a range of 0% to 0.5%). The problem behaviors in the last three sessions were all down to 0%.
More important, the mean percent of severe problem behaviors decreased during classroom universal with individual behavior interventions in all three classes like the results of problem behaviors (see table 2). For Reading class, the mean percent of severe problem behaviors showed a notably decreasing from 29% in classroom universal interventions to 9% in classroom universal with individual behavior interventions. The severe problem behaviors were down to 4% in Math class and 1% in Science class in classroom universal with individual behavior interventions.

Table 2  The Mean Percent of Severe Problem Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Universal Interventions</th>
<th>Universal &amp; Individual Interventions</th>
<th>Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>12%</td>
<td>29%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Math</td>
<td>20%</td>
<td>20%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Science</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Figure 2  Percentage of Problem Behavior across Settings
Inter-Observer Agreement

The agreement percentages were computed on a session by session basis during baseline, classroom universal interventions and classroom universal with individual behavior interventions in three settings. 44% sessions included second observer (46% in Reading; 46% in Math; 40% in Science). The average agreement across all sessions was 97% with a range of 85% to 100% agreement. The detail information of inter-observer agreement was conducted (see Table 3).

<table>
<thead>
<tr>
<th></th>
<th>Reading</th>
<th></th>
<th>Math</th>
<th></th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Range</td>
<td>Mean</td>
<td>Range</td>
<td>Mean</td>
</tr>
<tr>
<td>Baseline</td>
<td>97%</td>
<td>95% - 99%</td>
<td>93%</td>
<td>85% - 99%</td>
<td>96%</td>
</tr>
<tr>
<td>Universal Interventions</td>
<td>96%</td>
<td>94% - 99%</td>
<td>97%</td>
<td>93% - 100%</td>
<td>99%</td>
</tr>
<tr>
<td>Universal &amp; Individual Interventions</td>
<td>97%</td>
<td>90% - 100%</td>
<td>98%</td>
<td>98% - 99%</td>
<td>100%</td>
</tr>
<tr>
<td>Probe</td>
<td>99%</td>
<td>99% - 100%</td>
<td>98%</td>
<td>97% - 99%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Social Goals of Ambiguous Peer Provocation Situations

The purpose of this study was to answer whether the behavioral interventions based on the function of behavior will have a positive influence on the student at risk of E/BD’s thought processes impacting prosocial decision making. The social goal of ambiguous peer provocation situations assessment was used to examine the student’s responses before and after the behavioral intervention. There were ten ambiguous provocation vignettes including six behavioral alternatives, (1) physical aggression, (2) verbal aggression, (3) avoidance, (4) problem-solving behavior, (5) passive reaction, and (6) request for clarification, and eight goal alternatives, (1)
getting back at the protagonist, (2) working out the problem peacefully, (3) avoiding the protagonist, (4) hurting the person's feelings, (5) protecting the self, (6) taking care of the problem created by the protagonist, (7) maintaining the relationship, and (8) maintaining an assertive reputation. The student were asked to response on a 3-point Likert scales as to how much he agreed that behavioral response would be his behaviors, and to response on a 5-point Likert scales as to how much he agreed that goal would be his goal.

The means and t values for each of the goals and behaviors were presented in Table 4. The descriptive statistics showed John gave higher ratings on physical aggression (M = 3.0), verbal aggression (M = 3.0) and problem-solving behavior (M = 2.9) before implementing behavioral interventions. After behavioral interventions, John still gave the highest rating of behaviors to problem-solving behavior (M = 2.9). Pair t tests were conducted to determine whether there were differences between pre- and post behavioral intervention for the student’s behavioral responses. The results showed that there were significant differences on physical aggression (t (9) = -2.33, p < .05; for pre-intervention, M = 3.0; for post-intervention, M = 2.3), verbal aggression (t (9) = -3.0, p < .05; for pre-intervention, M = 3.0; for post-intervention, M = 2.0) and passive reaction (t (9) = 4.71, p < .01; for pre-intervention, M = 1.0; for post-intervention, M = 2.1). The results implied that John’s physical aggression and verbal aggression were decreased after behavioral interventions implemented, and would use more passive reactions after behavioral interventions.

For social goals, before implementing behavioral interventions, John were most likely to set social goals including getting back from the other (M = 5.0), hurting peer's feelings (M = 5.0) and taking care of the problem created by the other (M = 5.0), least likely to select social goals such as working out the problem peacefully (M = 1.0), maintaining the relationship (M = 1.0), and maintaining his reputation (M = 1.1). However, after implementing behavioral interventions, the
result showed that he most likely agreed to select maintaining his reputation goal \((M = 4.9)\) and least likely agreed to set getting back at the other goal and hurting the other’s feelings goal in conflict situations. Pair \(t\) tests were performed to examine whether there were differences between pre- and post- interventions in social goals. The pre- and post- interventions differences were found for getting back at the other \((t(9) = -6, p < .01)\), hurting the other’s feelings \((t(9) = -6, p < .01)\), working out the problem peacefully \((t(9) = 3, p < .05)\), maintaining the relationship \((t(9) = 4.58, p < .01)\), and maintaining his reputation \((t(9) = 28.5, p < .01)\). Moreover, John would tend to maintain the relationship and his own reputation and work out the problem peacefully in conflict situations after implementing behavioral interventions. He would prefer not to set negative social goals such as getting back at the other and hurting the other’s feelings in conflict situations.

Table 4  The Means and \(t\) Values among Behaviors and Goals of Pre- and Post Behavioral Intervention

<table>
<thead>
<tr>
<th>Measure</th>
<th>(M)</th>
<th>(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Physical aggression</td>
<td>3.0</td>
<td>2.3</td>
</tr>
<tr>
<td>2. Verbal aggression</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>3. Passive reaction</td>
<td>1.0</td>
<td>2.1</td>
</tr>
<tr>
<td>4. Avoidance</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>5. Problem-solving behavior</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>6. Request for clarification</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Getting back</td>
<td>5.0</td>
<td>1.8</td>
</tr>
<tr>
<td>2. Peacefully</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>3. Stay away</td>
<td>3.4</td>
<td>2.8</td>
</tr>
<tr>
<td>4. Other feel bad</td>
<td>5.0</td>
<td>1.8</td>
</tr>
<tr>
<td>5. Protect myself</td>
<td>4.6</td>
<td>3.8</td>
</tr>
<tr>
<td>6. Taking care</td>
<td>5.0</td>
<td>3.8</td>
</tr>
<tr>
<td>7. Get along</td>
<td>1.0</td>
<td>3.8</td>
</tr>
<tr>
<td>8. Look strong</td>
<td>1.1</td>
<td>4.9</td>
</tr>
</tbody>
</table>

*\(p < .05\)  **\(p < .01\)
CHAPTER IV

DISCUSSION

The purpose of this study was to explore the influence of FBA based behavioral interventions on a student at risk for E/BD’s prosocial decision making processes. The results of this study showed a change in the student’s thinking processes after implementing behavioral interventions. The behavioral interventions not only reduced student’s problem behaviors but also influenced student’s thinking about social events. The following discussion will present the significance of the major findings from this study. Moreover, the limitations of the study, the implications for practice and future study will also be discussed.

This study was able to confirm the effectiveness of FBA-based interventions on student’s problem behaviors. This study followed the principles of FBA and developed two phase interventions. The first phase included universal classroom interventions that served as setting events directed towards reducing the need for escape/avoidant behaviors. The second phase was an individually designed BIP focusing on teaching and supporting replacement behaviors.

The results supported that using FBA interventions can reduce student’s problem behaviors. First, this study implemented the classroom universal interventions. The results showed that compared to baseline levels, student’s problem behaviors were reduced during interventions that were classroom-wide but served the function of the target student. The classroom universal interventions served as setting events which manipulated environmental factors, such as reducing the time period of class and providing task-escaping opportunity. Previous researcher has shown that modifying the classroom environment, such as establishing structured classroom, classroom’s rules and maintaining routines would facilitate students’ learning and reduces the probability of
problem behaviors (Mayer, 1995; Marzano, 2003). In this study, the targeted student’s problem behaviors decreased during the classroom universal interventions in all three settings. This outcome supported the research of Trussell, Lewis, and Stichter (2008). Trussell et al. (2008) indicated that classroom supports can alter the classroom environment which provides a means for students to increase escape opportunities or attract others’ attention in an appropriate way. Therefore, students’ problem behaviors would be less effective than replacement behaviors. One important contribution of this study is that it showed that classroom universal interventions could also be designed to support the student who is escape/avoidant. The reason is that the classroom universal interventions provided an overall classroom environment that was full of appropriate escape opportunities for students that did not interrupt the normal class activities. In this study, the classroom universal interventions included shortening the time period of class, keeping short seat works, working with peers, providing occasions to escape seat work, and providing teacher’s assistance. Those interventions met the student’s escape needs to and resulted in a decrease in the probability of problem behaviors.

However, the same effectiveness of classroom universal interventions did not reduce severe problem behaviors, including talking out, making noise, talking back and leaving the seat. The reasons may be due to that the classroom universal interventions were designed to support setting event interventions and did not include interventions to address antecedent strategies, replacement behaviors, and consequence strategies. Therefore, no notable change on student’s severe problem behaviors was found.

Second, student’s overall problem behaviors and severe problem behaviors were greatly reduced after introducing the classroom universal with individual behavior interventions. The results of present study also paralleled with previous research on FBA-based interventions.
(Newcomer et al., 2004; McClean, et al., 2005; Stage, et al., 2008). Because FBA looks beyond the immediate observed behaviors and focuses on the factors of predicting and maintaining the problem behaviors, it is possible that FBA-based interventions alter predictable patterns of problem behaviors, and then reduce the probability of problem behaviors. This study provided further support to FBA-based interventions. Although student’s overall problem behaviors decreased during the classroom universal intervention, severe problem behaviors were only reduced after introducing FBA-based individually behavioral intervention. In other words, although the classroom universal intervention can improve students’ behaviors by modifying classroom environment, the individually FBA-based behavioral intervention is more successful in reducing students’ problem behaviors by replacing appropriate behaviors.

Third, the results of this study were consistent with prior research regarding the effectiveness of the generalization of replacement behaviors over time (Heckaman et al., 2000; Kern, et al., 2006). The present study collected three probe data points18 days after completing behavior interventions in Reading and Math classes. The probe data in the reading class (mean of 2%) showed that the percent of student’s problem behaviors was lower during classroom universal interventions and classroom universal with individual behavior interventions. The probe data in Math class (mean of 4%) kept the same level as during classroom universal with individual behavior interventions. Unfortunately, the study would not be able to collect probe data in Science class because of the school’s academic schedule.

In summary, this study supported the existing researches. FBA-based interventions which match with the function of problem behaviors and through alter student’s environmental factors (including setting, antecedent and consequence events) and teach replacement behaviors could reduce student’s problem behaviors effectively. In addition, the effect of reducing problem
behaviors could be maintained. Summarize unique results including being able to incorporate classroom universals with an emphasis on escape/avoidance – increases in on-task behaviors and work completion.

After the effectiveness of behavioral interventions was confirmed, a t-test was used to examine the research question: *Can we predict that behavioral intervention plans based on the function of behavior will have an impact on the student at risk of E/BD’s thought processes impacting prosocial decision making?*

According to the social information processing model, students display particular behaviors based on their goals (Crick et al. 1994). Previous researchers have shown a strong relationship between student’s goals and behaviors and that specific goals were followed by particular strategies. (Lemerise et al., 2006). When students select prosocial goals such as working thing out peacefully or maintaining relationships, they use prosocial strategies or behaviors to meet these goals. If students set negative social goals like control goals, they would perform more aggressive behaviors (Chung et al., 1996; Delveaux et al., 2000; Rose et al., 1999).

The results of this study showed that during pre-tests the student tended to select more aggressive behaviors and preferred to set control and revenge goals in peer conflict situations. However, once the behavioral interventions were in place, the student’s aggressive behaviors decreased and the student tended to set prosocial goals (e.g. maintain relationship or working thing out peacefully). This finding corresponds to the past study that has found that aggressive students tend to set negative social goals, such as control goals, and perform negative behaviors, such as aggression in conflict situations (Erdley et al., 1996, 1998). However, there is no available research to date that has focused on answering whether the behavioral interventions can change students’ social goals. In this study, the results showed that the student’s social behaviors and goals in peer
conflict situations were changed after implementing behavioral interventions. First, there were changes in both physical aggression and verbal aggression. Before implementing behavioral interventions, the student’s major behavioral strategies to deal with peer conflicts were physical and verbal aggression. After the behavioral interventions, the likelihood of performing aggressive behaviors decreased. The possible explanation is that the student learned that the aggressive behaviors were no longer serving his needs; therefore, he would not need to behave aggressively. On the other hand, the result also showed his passive reactions, such as ignoring or forgetting about the situations increased after the behavioral interventions. It is possible that his passive reactions were due to limited prosocial strategies in his behavioral repertoire. Therefore, he chose to use passive strategies to minimize the damage in the peer relationship to avoid further conflict.

Second, the present study also found that 5 out of 8 social goals changed after the interventions. The results indicated that the student tended to set prosocial goals, including working out problems peacefully and maintaining relationships more than before behavioral interventions were implemented. After the behavioral interventions, the student did not set negative social goals, such as getting back at peers or hurting peer’s feeling in conflict situations. In addition, he cared about his own reputation after the interventions. According to the results of this study, effective behavioral interventions could improve not only student’s behaviors, but also change the thinking process as well. With an effective behavior intervention plan in place, the student tended to get more positive feedback from others when he performed prosocial behaviors. As a result, higher rates of positive feedback encourage the student to pursue prosocial goals that lead to prosocial behaviors while avoiding peer conflict.

There were some possible explanations of why the effective behavioral interventions had the influence on the student’s thinking. According to the SIP model, the change of behaviors could
influence the cognitive process such as individual’s data base and response decisions. First, the FBA based interventions changed the student’s problem behaviors by teaching social skills which helped student to understand that there were other appropriate ways to deal with conflict situations without getting into trouble. Therefore, the student’s cognitive data base was extended. In addition, the interventions provided the environment which strengthened the connection between appropriate behaviors and desired consequence, at the same time; weakened the connection between problem behaviors and desired consequence. Second, when the student performed appropriate behaviors, the student would receive more positive feedback from teachers and peers. Since the student learned more appropriate social skills to response conflict situations and those social skills were also reinforced by other people’s positive feedback, the student would understand appropriate behaviors which could lead into his desired consequence without negative feedback or punishment. This understanding could increase the student’s wills to pursue prosocial goals. Therefore, when the student experienced more and more success in performing appropriate behaviors, he would have the ability and confidence to pursue prosocial goals and present appropriate behaviors to solve conflict situations.

In conclusion, the results of this study supported the both the effectiveness of classroom universals targeting escape/avoidant behaviors and the use of FBA to develop behavioral interventions. In addition, a unique contribution of this study is that the results demonstrated changes in both the student’s behaviors and his thinking processes. Effective behavioral interventions were able to reduce students’ problem behaviors while at the same time improve prosocial thinking.

There are some limitations that should be noted. The first limitation of this study is the small sample size. There was only one student participating in this study which causes the problem of
generalization. However, the single subject research design has been applied and proven valid with repetition across subjects, times and places. In addition, the student’s problem behaviors of this study were maintained by escape/avoidance of tasks and FBA based behavioral interventions were designed to address the escape function. However, past research has indicated that there are different functions of behaviors including social attention seeking, tangibles or preferred activities seeking, social avoidance and internal stimulation seeking or escaping (Alberto et al, 2009; Ervin et al., 2001; Gresham et al, 2001). Therefore, the results of this study did not explore whether the same results will exist with other functions of behaviors.

A second limitation is that the observed settings limited the possibility of peer conflict. The present study focused specifically on the student’s behaviors and goals on peer conflict situations. Previous literatures indicated that peer conflict most often occurs during the unstructured activities and environments such as playground (Hirschstein, Van Schoiack Edstrom, Frey, Snell, & MacKenzie, 2007; Leff, Costigan, & Power, 2004). Nevertheless, this study was conducted during classroom academic activities; it may underestimate student’s problem behaviors. The last limitation of this study was that the results of social strategies and goals in peer conflicts were reported by targeted student. The student may give unreliable answers in order to match social expectation (Babbie, 2001). Especially, some items’ responses of Social Goal Assessment Questionnaire are negative statements which the student was asked to response.

This study provides several suggestions for educators. First, applying classroom universal intervention assists teachers to structure their classroom environment in which teachers could effectively use limited time to reduce students’ overall problem behaviors. Moreover, classroom universal interventions can serve as setting event strategies in FBA-based individually behavioral intervention, therefore, by precisely evaluating and developing classroom universal interventions,
the effectiveness of applying FBA-based intervention will be increased.

Second, this study also suggests that by applying FBA-based interventions students will experience both academic success and increased success in social relationships. Third, this study suggested that the effective behavioral intervention plans could not only change targeted student’s behaviors but also modify his thinking processes. It is possible why the FBA-based interventions could maintain even after the intervention and generalize to other settings.

There are several directions for future research. First, since there was only one student in the present study, future study should recruit either more students with the same function of problem behaviors or different function of problem behaviors to increase the reliability of the results. Second, this study examined peer conflict issues in the classroom only. Therefore, future research could compare the effectiveness of FBA-based interventions in different settings, including structured classroom activities and unstructured settings, such as cafeteria and playground. Lastly, the student’s responses to social goals and strategies in conflict situations were reported by himself. Self-reported responses may be unreliable due to satisfying the social expectation. Therefore, future studies should also collect direct observation data of student’s responses in peer conflict situations and compare these with the results of self-report questionnaires.
REFERENCES


students with or at risk for ED: Moderating effects of variation in treatment and classroom structure. *Journal of Emotional and Behavioral Disorders*. 8, 141-154.


Leff, S. S., Costigan, T., & Power, T. J. (2004). Using participatory research to develop a


Appendix A  Functional Assessment Interview

Student:_____________________.
Date:_______________________.
Interview:_____________________.

Instructions: IEP team interview including team members who have observed the behavior of the student for an extended period of time in a variety of settings and conditions. When the answer is YES, add details on the line provided.

I. Description of the Behavior of Concern (specifically describe what the behavior looks like):
   a. What does the behavior look like from start to finish? What does the chain or sequence of behaviors look like?
   b. How often does the behavior occur (hourly, daily, weekly)?
   c. How much time passes between behavior incidents?
   d. Compared with peers, rate the severity of the behaviors (mild, moderate, severe)

II. Physiological and Medical Factors:
   1. Could the behavior be a result of a medical condition or any form of physical discomfort (asthma, allergies, rashes, sinus infections, seizures, diabetes, etc.)
   2. Could the behavior be related to a side effect of medication? (Check with school nurse or medical professional)
   3. Could the behavior be the result of some physical deprivation condition (sleeping routine and diet.)?

III. Other outside events that may influence behaviors (family circumstances, etc.):

IV. Antecedents (Setting Events):
   1. Are there circumstances in which the behavior always occurs?
      Time of Day:
      Most Likely:
      Least Likely:
      N/A:
Day of Week:
   Most Likely:
   Least Likely:
   N/A:

Settings (Locations):
   Most Likely:
   Least Likely:
   N/A:

Social Circumstance (alone, small group, large group)
   Most Likely:
   Least Likely:
   N/A:

Environment (structured v. unstructured):
   Most Likely:
   Least Likely:
   N/A:

Changes (transitions, schedule change, personnel change, etc.):
   Most Likely:
   Least Likely:
   N/A:

2. Does the behavior occur only or more often during particular activities?

Leisure/Solitary:
   Most Likely:
   Least Likely:
   N/A:

Leisure/Social:
   Most Likely:
   Least Likely:
   N/A:

Transitions:
   Most Likely:
   Least Likely:
   N/A:

Academic work alone:
   Most Likely:
   Least Likely:
N/A:
Academic work small group:
   Most Likely:
   Least Likely:
   N/A:
Academic work large group:
   Most Likely:
   Least Likely:
   N/A:
Academic work with teacher:
   Most Likely:
   Least Likely:
   N/A:
Subjects:
   Most Likely:
   Least Likely:
   N/A:
Specials:
   Most Likely:
   Least Likely:
   N/A:
3. Does the behavior occur with (or more likely with) certain people:
   School Personnel:
   Most Likely:
   Least Likely:
   N/A:
   Peer:
   Most Likely:
   Least Likely:
   N/A:

V. Trigger Events:
1. Does the behavior occur in response to certain stimuli?
   Types of demands:
   Most Likely:
   Least Likely:
N/A:
Termination of preferred activity:
 Most Likely:
 Least Likely:
 N/A:
Tone of voice:
 Most Likely:
 Least Likely:
 N/A:
Noise level:
 Most Likely:
 Least Likely:
 N/A:
When ignored:
 Most Likely:
 Least Likely:
 N/A:
Change in routine:
 Most Likely:
 Least Likely:
 N/A:
Transitions:
 Most Likely:
 Least Likely:
 N/A:
Number of people in room:
 Most Likely:
 Least Likely:
 N/A:
Attention given to others:
 Most Likely:
 Least Likely:
 N/A:
Denied access to preferred object/activity:
 Most Likely:
 Least Likely:
N/A:
Provoked by peer:
Most Likely:
Least Likely:
N/A:
Types of peer interactions:
Most Likely:
Least Likely:
N/A:
Types of teacher interactions:
Most Likely:
Least Likely:
N/A:

2. Could the behavior be related to any skill deficits:
   a. **Communication**: Examples: The student appears “off track” and loses his/her train of thought. The student’s volume and/or tone of voice are inappropriate. The student has difficulty getting messages across successfully and/or lacks the social skills to function productively in group activities. The student has difficulty processing verbal messages. The student does not use active listening habits such as eye contact, head nods, asking, clarifying, or verifying questions.
   b. **Sensory Processing**: Examples: The student has difficulty interpreting sensory information (i.e., sights, sounds, movements, touch, tastes, smells) and/or organizing multiple sensory information. The student seems unable to ignore irrelevant sensory information and/or focus on relevant sensory information.
   c. **Task requirements are too difficult**: No: Yes:

**VI. Consequence Factors:**
1. Does the behavior allow the student to GAIN anything?
   A. Preferred activities or items?
      Indicators: The behavior often occurs when you take a particular item away from the student or when you terminate a preferred activity. The behavior often occurs when you inform the student that he/she cannot have a certain item or cannot engage in a particular activity. The behavior rarely occurs when you give the student free access to his or her favorite items or activities.
B. Peer or adult attention?
   **Indicators:** The student frequently approaches you or others. The student frequently initiates social interaction. When the behavior occurs, you or others usually respond by interacting with the student in some way. The behavior rarely occurs when the student is receiving lots of attention.
   No:
   Yes:

2. Does the behavior allow the student to postpone, avoid, or escape anything (demands, social interaction, etc.)?
   **Indicators:** The behavior often occurs when you place demands on the student. The behavior often occurs when the immediate environment is very noisy or crowded. The behavior rarely occurs when you place few demands on the student or when you leave the student alone. The student is often noncompliant when asked to complete tasks.
   No:
   Yes:

3. Does the behavior provide stimulation activity (an alternative to a lack of active engagement in activities)?
   **Indicators:** the behavior occurs frequently when the student is alone or unoccupied. The student seems to have few known reinforcers or rarely engages in appropriate object manipulation or “play” behavior. The student is generally unresponsive to social stimulation. When the student engages in the behavior, you and others usually respond by not attending to the behavior.
   No:
   Yes:

**Hypothesis Statement:**

________________________________________________________________________ behaviors may be related to the following physiological and medical concerns:
These behaviors are most likely to occur during the following circumstances:
These behaviors are more likely to occur during the following activities:
The behaviors are more likely to occur with the following people (don’t name other students):
The behaviors are more likely triggered by the following events:
The probable function of this behavior is:
Appendix B  Student-Assisted Functional Assessment Interview

Student: __________________ Date: __________________ Interviewer: __________________

SECTION I

<table>
<thead>
<tr>
<th>Question</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In general, is your work too hard for you?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. In general, is your work too easy for you?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. When you ask for help appropriately, do you get it?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you think work periods for each subject are too long?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Do you think work periods for each subject are too short?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. When you do seatwork, do you do better when someone works with you?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you think people notice when you do a good job?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you think you get the points or rewards you deserve when you do good work?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. In general, do you find your work interesting?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Are there things in the classroom that distract you?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Is your work challenging enough for you?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION II

1. When do you think you have the fewest problems with ____________ in school? (target behavior)
2. Why do you not have problems during this/these time(s)?
3. When do you think you have the most problems with ____________ in school? (target behavior)
4. Why do you have problems during this/these time(s)?
5. What changes could be made so you would have fewer problems with ____________? (target behavior)
6. What kind of rewards would you like to earn for good behavior or good school work?
7. What are your favorite activities at school?
8. What are your hobbies or interests?
9. If you had the chance, what activities would you like to do that you don’t have the opportunity to do now?
SECTION III

Rate how much you like the following subjects:

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Fair</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Math</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Spelling</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Handwriting</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>P.E.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Computers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Art</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other:</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

SECTION IV

What do you like about Reading? What don’t you like about Reading?
What do you like about Math? What don’t you like about Math?
What do you like about Spelling? What don’t you like about Spelling?
What do you like about Handwriting? What don’t you like about Handwriting?
What do you like about Science? What don’t you like about Science?
What do you like about Social Studies? What don’t you like about Social Studies?
What do you like about English? What don’t you like about English?
What do you like about Music? What don’t you like about Music?
What do you like about P.E.? What don’t you like about P.E.?
What do you like about Computers? What don’t you like about Computers?
What do you like about Art? What don’t you like about Art?
Appendix C  Social Goal Assessment

Student: _____________________
Session: _____________________
Date: ________________________

Practice Story
Imagine that you are riding your bike down a quiet street. You ride past a car parked on the side of the street. Another boy is sitting in the car. After you ride past the boy, he honks the horn of the car. It startles you and you fall off the bike and skin your hands and knees.

*Please note: This is the version for boys. Girls’ stories involve them and another girl.

1. Why did that boy honk the horn and startle you?
   A. He leaned against the horn by accident.
   B. The boy wanted to scare me.
   C. The boy was honking it to be friendly and say “hello.”
   D. The boy wanted me to fall.

2. Do you think that the boy startled you:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy startled you?
   A. Clean off my hands and knees. no maybe yes
   B. Keep away from that boy after that. no maybe yes
   C. Get back at that boy the next day. no maybe yes
   D. Ask him why he did it. no maybe yes
   E. Tell that boy that he is a jerk. no maybe yes
   F. Ignore the boy. no maybe yes

4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?
1. I would be trying to get back at the other boy. 1 2 3 4 5
2. I would be trying to work things out peacefully. 1 2 3 4 5
3. I would be trying to stay away from the other boy. 1 2 3 4 5
4. I would be trying to make the other boy feel bad. 1 2 3 4 5
5. I would be trying to protect myself. 1 2 3 4 5
6. I would be trying to take care of my _______. 1 2 3 4 5
7. I would be trying to still get along with the boy. 1 2 3 4 5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp. 1 2 3 4 5

**Story 1**

Imagine that you are sitting at the lunch table at school, eating lunch. You look up and see another boy coming over to your table with a carton of milk. You turn around to eat your lunch, and the next think that happens is that the boy spills milk all over your back. The milk gets your shirt all wet.

1. Why did that boy get milk all over your back?
   A. He slipped on something.
   B. He just does stupid things like that to me.
   C. He wanted to make fun of me.
   D. He wasn’t looking and didn’t see me.

2. Do you think that he got milk all over you:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy poured milk on you?
   A. Ignore it. no maybe yes
   B. Say something mean to him. no maybe yes
   C. Leave the table. no maybe yes
   D. Ask the teacher to get a towel or something. no maybe yes
   E. Pour milk on the boy’s back the next day. no maybe yes
   F. Ask him how it happened. no maybe yes
4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?

<table>
<thead>
<tr>
<th>Question</th>
<th>really agree</th>
<th>really disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would be trying to get back at the other boy.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>2. I would be trying to work things out peacefully.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3. I would be trying to stay away from the other boy.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4. I would be trying to make the other boy feel bad.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5. I would be trying to protect myself.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>6. I would be trying to take care of my _______.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7. I would be trying to still get along with the boy.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

**Story 2**

Imagine that you are standing on the playground, playing catch with a number of children. You throw the ball to another boy and the boy catches it. You turn around, and the next thing you realize is that the boy has thrown the ball and hit you in the middle of your back. The ball hits you hard, and it hurts a lot.

1. Why did that boy hit you in the back?
   A. The boy slipped and it hit me.
   B. The boy was being mean.
   C. The boy was mad at me for something.
   D. I shouldn’t have turned around.

2. Do you think that he hit you in the back:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy hit you?
   A. Ask him why he did it.          no maybe yes
   B. Do nothing.                    no maybe yes
   C. Call him a name.               no maybe yes
   D. Quit playing.                  no maybe yes
   E. Hit the boy with the ball.      no maybe yes
4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?

1. I would be trying to get back at the other boy.  
2. I would be trying to work things out peacefully.  
3. I would be trying to stay away from the other boy.  
4. I would be trying to make the other boy feel bad.  
5. I would be trying to protect myself.  
6. I would be trying to take care of my _______.  
7. I would be trying to still get along with the boy.  
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp.

Story 3

Imagine that you are walking to school and you’re wearing your new tennis shoes. You really like your new shoes and this is the first day you have worn them. Suddenly, you are bumped from behind by another boy. You stumble and fall into a mud puddle and your new shoes get muddy.

1. Why did the boy bump you from behind?  
   A. The boy was being mean.  
   B. The boy was fooling around and pushed too hard by accident.  
   C. The boy was running down the street and didn’t see me.  
   D. The boy was trying to push me down.  

2. Do you think that the boy bumped you:
   A. on purpose?  
   B. by accident?  

3. What would you do next after the boy bumped you?
   A. Clean up my shoes.  
   B. Walk away from the boy.  
   C. Forget about it.  

   really agree  really disagree
   1  2  3  4  5

   1  2  3  4  5

   1  2  3  4  5

   1  2  3  4  5

   1  2  3  4  5

   no  maybe  yes

   no  maybe  yes

   no  maybe  yes

   79
D. Tell him he’s a jerk.  no  maybe  yes
E. Ask him why he did it.  no  maybe  yes
F. Push the boy in the mud.  no  maybe  yes

4. Do you think the boy should be:
A. punished a lot?
B. punished a little?
C. not punished?

1. I would be trying to get back at the other boy.  1  2  3  4  5
2. I would be trying to work things out peacefully.  1  2  3  4  5
3. I would be trying to stay away from the other boy.  1  2  3  4  5
4. I would be trying to make the other boy feel bad.  1  2  3  4  5
5. I would be trying to protect myself.  1  2  3  4  5
6. I would be trying to take care of my _______.  1  2  3  4  5
7. I would be trying to still get along with the boy.  1  2  3  4  5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp.  1  2  3  4  5

Story 4

Imagine that you have finished an art project for school. You’ve worked on it a long time and you’re really proud of it. Another boy comes over to look at your project. The boy is holding a jar of paint. You turn away for a minute and when you look back the boy has spilled paint on your art project. You worked on the project for a long time and now it’s ruined.

1. Why did the boy spill paint on your project?
A. The boy is a mean kid.
B. The boy bumped into the paint by accident.
C. The boy is kind of clumsy.
D. The boy wanted to ruin your project.

2. Do you think the boy spilled the paint:
A. on purpose?
B. by accident?

3. What would you do next after the boy spilled paint on your project?
A. Try to fix the project. no maybe yes
B. Act like nothing happened. no maybe yes
C. Spill paint on the boy. no maybe yes
D. Ask him why he did it. no maybe yes
E. Avoid being near the boy in the future. no maybe yes
F. Tell him he’s a clumsy idiot. no maybe yes
4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?
   
   really
   agree disagree

1. I would be trying to get back at the other boy. 1 2 3 4 5
2. I would be trying to work things out peacefully. 1 2 3 4 5
3. I would be trying to stay away from the other boy. 1 2 3 4 5
4. I would be trying to make the other boy feel bad. 1 2 3 4 5
5. I would be trying to protect myself. 1 2 3 4 5
6. I would be trying to take care of my _______. 1 2 3 4 5
7. I would be trying to still get along with the boy. 1 2 3 4 5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp. 1 2 3 4 5

Story 5

Imagine that you are on the playground. You and some other kids are having a race. Another boy is standing on the side, bouncing a basketball. The next thing you know is that the boy has bounced the ball and it has rolled under your feet, making you fall. You skin your knee and someone else wins the race.

1. Why did the boy bounce the ball under your feet?
   A. The boy wanted to get back at me for something.
   B. The boy didn’t see me coming.
   C. It accidentally got away from the boy.
   D. The boy wanted me to lose the race.

2. Do you think that the boy bumped you:
A.  on purpose?  
B.  by accident?  

3.  What would you do next after the boy made you fall?  
   A.  Go to another area of the playground.  
   B.  Ask him how it happened.  
   C.  Try to forget it.  
   D.  Say something mean to him.  
   E.  Trip him on the playground.  
   F.  Take care of my knee.  

4.  Do you think the boy should be:  
   A.  punished a lot?  
   B.  punished a little?  
   C.  not punished?  

| 1. | I would be trying to get back at the other boy. | 1 2 3 4 5 |
| 2. | I would be trying to work things out peacefully. | 1 2 3 4 5 |
| 3. | I would be trying to stay away from the other boy. | 1 2 3 4 5 |
| 4. | I would be trying to make the other boy feel bad. | 1 2 3 4 5 |
| 5. | I would be trying to protect myself. | 1 2 3 4 5 |
| 6. | I would be trying to take care of my _______. | 1 2 3 4 5 |
| 7. | I would be trying to still get along with the boy. | 1 2 3 4 5 |
| 8. | I would be trying to look strong and make sure the other boy didn’t think I was a wimp. | 1 2 3 4 5 |

**Story 6**

Imagine that you brought your new radio to school today. You saved up your allowance to buy the radio and you want to show it to the other kids at school. You let another boy play with it for a few minutes while you go get a drink of water. When you get back you realize that the boy has broken your brand new radio.

1.  Why did the boy break your radio?  
   A.  The radio wasn’t made well.  
   B.  It was an accident.  
   C.  The boy was mad at me.  
   D.  The boy was jealous of me.
2. Do you think that the boy broke it:
   A. on purpose?
   B. by accident?
3. What would you do next after the boy broke your radio?
   A. Warn him that I’m going to get back at him. no maybe yes
   B. Not play with the boy again. no maybe yes
   C. Ask him how it happened. no maybe yes
   D. Break something that belongs to that boy. no maybe yes
   E. Try to figure out what’s wrong with the radio. no maybe yes
   F. Do nothing. no maybe yes
4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished? really agree disagree

1. I would be trying to get back at the other boy. 1 2 3 4 5
2. I would be trying to work things out peacefully. 1 2 3 4 5
3. I would be trying to stay away from the other boy. 1 2 3 4 5
4. I would be trying to make the other boy feel bad. 1 2 3 4 5
5. I would be trying to protect myself. 1 2 3 4 5
6. I would be trying to take care of my _______. 1 2 3 4 5
7. I would be trying to still get along with the boy. 1 2 3 4 5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp. 1 2 3 4 5

Story 7

Imagine that you are in the lunchroom. You’ve just gotten your tray, and you’re walking to a table. Suddenly, another boy bumps into your arm, and you drop your tray. Your food is spilled all over the floor.

1. Why did the boy bump your arm?
   A. The boy wasn’t looking and didn’t see me.
   B. The boy wanted to make me look silly.
C. The boy was being mean.
D. The boy slipped on something.

2. Do you think that the boy bumped your arm:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy bumped you?
   A. Make the boy spill his food another day. no maybe yes
   B. Just ignore it. no maybe yes
   C. Get a lunch lady to help clean up the food. no maybe yes
   D. Get away from the boy as soon as I can. no maybe yes
   E. Say something mean to the boy. no maybe yes
   F. Ask him how it happened. no maybe yes

4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?

really agree really disagree
1. I would be trying to get back at the other boy. 1 2 3 4 5
2. I would be trying to work things out peacefully. 1 2 3 4 5
3. I would be trying to stay away from the other boy. 1 2 3 4 5
4. I would be trying to make the other boy feel bad. 1 2 3 4 5
5. I would be trying to protect myself. 1 2 3 4 5
6. I would be trying to take care of my ______. 1 2 3 4 5
7. I would be trying to still get along with the boy. 1 2 3 4 5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp. 1 2 3 4 5

Story 8

Imagine that you are beside a water fountain waiting to get a drink. There is another boy taking his turn at the fountain. The next thing you know, the boy has splashed some water on your face.
1. Why did the boy splash water on your face?
A. The water fountain wasn’t working right.
B. The boy wanted to get back at me for something.
C. He just does stupid things like that to me.
D. His finger slipped, and too much water came out.

2. Do you think that the boy splashed water on your face:
A. on purpose?
B. by accident?

3. What would you do next after the boy splashed water on your face?
A. Ask him why he did it. no maybe yes
B. Wipe off my face. no maybe yes
C. Warn him that I’m going to get back at him. no maybe yes
D. Go back to my desk. no maybe yes
E. Splash water on him another day. no maybe yes
F. Just ignore it. no maybe yes

4. Do you think the boy should be:
A. punished a lot?
B. punished a little?
C. not punished?

<table>
<thead>
<tr>
<th>really agree</th>
<th>really disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
**Story 9**

Imagine that you are working on a math assignment at your desk. You go to sharpen your pencil, and as you walk back to your desk there’s a boy walking just in front of you. The boy passes your desk before you get there. The next thing you know, the boy has knocked all of your papers off of your desk, and they are all over the floor.

1. Why did the boy knock your papers onto the floor?
   A. He wanted to mess up my papers.
   B. He accidentally walked too close to my desk.
   C. He tripped and bumped my desk.
   D. He likes to bother people.

2. Do you think the boy knocked your papers onto the floor:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy knocked your papers onto the floor?
   A. Call him a name.        no  maybe  yes
   B. Pick up the papers.      no  maybe  yes
   C. Do nothing.              no  maybe  yes
   D. Ask him why he did it.   no  maybe  yes
   E. Stay away from the boy.  no  maybe  yes
   F. Mess up his papers a little later. no  maybe  yes

4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?

<table>
<thead>
<tr>
<th></th>
<th>really agree</th>
<th>really disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I would be trying to get back at the other boy.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2</td>
<td>I would be trying to work things out peacefully.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3</td>
<td>I would be trying to stay away from the other boy.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4</td>
<td>I would be trying to make the other boy feel bad.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>I would be trying to protect myself.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>I would be trying to take care of my _______.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>I would be trying to still get along with the boy.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8</td>
<td>I would be trying to look strong and make sure the other boy didn’t think I was a wimp.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Story 10

Imagine that you are standing on a chair in your classroom trying to hand on the wall a picture you have drawn. Another boy comes over towards you, and as he does, the boy runs into the leg of your chair. You slip and the picture you have worked on a long time gets ripped really badly.

1. Why did the boy run into your chair?
   A. The boy wanted me to fall.
   B. The boy wasn’t watching where he was going.
   C. The boy wanted to get back at me for something.
   D. The boy is kind of clumsy.

2. Do you think the boy ran into your chair:
   A. on purpose?
   B. by accident?

3. What would you do next after the boy ran into your chair?
   A. Act like nothing happened. no maybe yes
   B. Ask him now it happened. no maybe yes
   C. Stay away from the boy in the future. no maybe yes
   D. Push the boy. no maybe yes
   E. Get some tape and try to fix the picture. no maybe yes
   F. Yell at him for being clumsy. no maybe yes

4. Do you think the boy should be:
   A. punished a lot?
   B. punished a little?
   C. not punished?

really agree really disagree
1. I would be trying to get back at the other boy. 1 2 3 4 5
2. I would be trying to work things out peacefully. 1 2 3 4 5
3. I would be trying to stay away from the other boy. 1 2 3 4 5
4. I would be trying to make the other boy feel bad. 1 2 3 4 5
5. I would be trying to protect myself. 1 2 3 4 5
6. I would be trying to take care of my _______. 1 2 3 4 5
7. I would be trying to still get along with the boy. 1 2 3 4 5
8. I would be trying to look strong and make sure the other boy didn’t think I was a wimp. 1 2 3 4 5
Appendix D  Social Skill Rating System
Next, read each item on pages 2 and 3 (items 1 - 48) and think about this student's behavior during the past month or two. Decide how often the student does the behavior described.

- If the student never does this behavior, circle the 0.
- If the student sometimes does this behavior, circle the 1.
- If the student very often does this behavior, circle the 2.

For items 1 - 30, you should also rate how important each of these behaviors is for success in your classroom.

- If the behavior is not important for success in your classroom, circle the 0.
- If the behavior is important for success in your classroom, circle the 1.
- If the behavior is critical for success in your classroom, circle the 2.

Here are two examples:

<table>
<thead>
<tr>
<th>Shows empathy for peers.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asks questions of you when unsure of what to do in schoolwork.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

This student very often shows empathy for classmates. Also, this student sometimes asks questions when unsure of schoolwork. This teacher thinks that showing empathy is important for success in his or her classroom and that asking questions is critical for success.

Please do not skip any items. In some cases you may not have observed the student perform a particular behavior. Make an estimate of the degree to which you think the student would probably perform that behavior.

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Controls temper in conflict situations with peers.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduces herself or himself to new people without being told.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appropriately questions rules that may be unfair.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compromises in conflict situations by changing own ideas to reach agreement.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responds appropriately to peer pressure.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Says nice things about himself or herself when appropriate.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Invites others to join in activities.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uses free time in an acceptable way.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finishes class assignments within time limits.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Makes friends easily.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responds appropriately to teasing by peers.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Controls temper in conflict situations with adults.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Receives criticism well.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiates conversations with peers.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uses time appropriately while waiting for help.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Produces correct schoolwork.</th>
<th>How Often?</th>
<th>How Important?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never 0</td>
<td>Sometimes 1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
### Social Skills (cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Sometimes</th>
<th>Vary Often</th>
<th>Not Important</th>
<th>Important</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate suggests you when he or she thinks you have treated him or her unfairly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accepts peers' ideas for group activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives compliments to peers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follows your directions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puts work materials or school property away.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperates with peers without prompting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers to help peers with classroom tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joins ongoing activity or group without being told to do so.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responds appropriately when pushed or hit by other children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ignores peer distractions when doing class work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeps desk clean and neat without being reminded.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attends to your instructions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easily makes transition from one classroom activity to another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gets along with people who are different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Problem Behaviors

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Sometimes</th>
<th>Vary Often</th>
<th>Not Important</th>
<th>Important</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fights with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has low self-esteem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threatens or bullies others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appears lonely.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is easily distracted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrupts conversations of others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disturbs ongoing activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shows anxiety about being with a group of children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is easily embarrassed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t listen to what others say.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argues with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talks back to adults when corrected.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gets angry easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has temper tantrums.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likes to be alone.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts sad or depressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts impulsively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fidgets or moves excessively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Go on to Page 4. ➡️
Academic Competence

The next nine items require your judgments of this student's academic or learning behaviors as observed in your classroom. Compare the student with other children who are in the same classroom.

Rate all items using a scale of 1 to 5. Circle the number that best represents your judgment. The number 1 indicates the lowest or least favorable performance, placing the student in the lowest 10% of the class. Number 5 indicates the highest or most favorable performance, placing the student in the highest 10% compared with other students in the classroom.

<table>
<thead>
<tr>
<th>FOR OFFICE USE ONLY</th>
<th>Lowest 10%</th>
<th>Next Lowest 20%</th>
<th>Middle 40%</th>
<th>Next Highest 20%</th>
<th>Highest 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>49. Compared with other children in my classroom, the <strong>overall academic performance</strong> of this child is:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. In <strong>reading</strong>, how does this child compare with other students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51. In <strong>mathematics</strong>, how does this child compare with other students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52. In terms of grade-level expectations, this child's skills in <strong>reading</strong> are:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53. In terms of grade-level expectations, this child's skills in <strong>mathematics</strong> are:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54. This child's <strong>overall motivation</strong> to succeed academically is:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55. This child's <strong>parental encouragement</strong> to succeed academically is:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56. Compared with other children in my classroom this child's <strong>intellectual functioning</strong> is:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57. Compared with other children in my classroom this child's <strong>overall classroom behavior</strong> is:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Stop. Please check to be sure all items have been marked.

---

**SUMMARY**

<table>
<thead>
<tr>
<th>SOCIAL SKILLS</th>
<th>PROBLEM BEHAVIORS</th>
<th>ACADEMIC COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOW OFTEN? TOTAL (see Appendix A)</td>
<td>BEHAVIOR LEVEL (see Appendix A)</td>
<td>HOW OFTEN? TOTAL (see Appendix A)</td>
</tr>
<tr>
<td>(scores from page 3)</td>
<td>(sum from page 3)</td>
<td>(scores from page 3)</td>
</tr>
<tr>
<td>C + E + I + H</td>
<td></td>
<td>E + I + H</td>
</tr>
<tr>
<td>Standard Score</td>
<td>Percentile Rank</td>
<td>Standard Score</td>
</tr>
<tr>
<td>(see Appendix E)</td>
<td>(see Appendix E)</td>
<td>(see Appendix E)</td>
</tr>
<tr>
<td>SEM * 68% 95%</td>
<td>Confidence Level</td>
<td>SEM * 68% 95%</td>
</tr>
<tr>
<td>Confidence Band</td>
<td>(standard scores)</td>
<td>Confidence Band</td>
</tr>
</tbody>
</table>

Norms used: Handicapped  Nonhandicapped

Note: To obtain a detailed analysis of this student's Social Skills strengths and weaknesses, complete the Assessment-Intervention Record.
Appendix E Competing Behavior Model Form

**Diagram Summary Statement and Competing Behavior Paths**

Desired Behavior → Maintaining Consequences

Problem Behavior → Maintaining Consequences

Alternative/Replacement Behavior

**List Strategies that Make the Problem Behavior Irrelevant, Ineffective, & Inefficient**

<table>
<thead>
<tr>
<th>Setting Event Strategies</th>
<th>Predictor Strategies</th>
<th>Teaching Strategies</th>
<th>Consequence Strategies</th>
</tr>
</thead>
</table>
### # 1 Following Instructions
1. Look at the person.
2. Say ‘Okay.’
3. Do what you’ve been asked right away.
4. Check back.

### # 2 Accepting Criticism or a Consequence
1. Look at the person.
2. Say ‘Okay.’
3. Don’t argue.

### # 3 Accepting ‘No’ for an Answer
1. Look at the person.
2. Say ‘Okay.’
4. If you disagree, ask later.

### # 4 Greeting Others
1. Look at the person.
2. Use a pleasant voice.
3. Say ‘Hi’ or ‘Hello.’

### # 5 Getting the Teacher’s Attention
1. Look at the teacher.
2. Raise your hand. Stay calm.
3. Wait until the teacher says your name.
4. Ask your question.

### # 6 Asking for What You Want (Making a Request)
1. Look at the person.
2. Use a clear, pleasant voice.
3. Explain exactly what you are asking for. Say ‘Please.’
4. If the answer is ‘Yes,’ say ‘Thank you.’
5. If not, remember to accept ‘No’ for an answer.

### # 7 Disagreeing ( Appropriately)
1. Look at the person.
2. Use a pleasant voice.
3. Say ‘I understand how you feel.’
4. Tell why you feel differently.
5. Give a reason.
6. Listen to the other person.

### # 8 Giving Criticism
1. Look at the person.
2. Stay calm. Use a pleasant voice.
3. Say something positive or ‘I understand.’
4. Describe exactly what you are criticizing.
5. Tell why this is a problem.

### # 9 Saying No (Resisting Peer Pressure)
1. Look at the person.
2. Use a calm voice.
3. Say clearly that you do not want to participate.
4. Suggest something else to do.
5. If necessary, continue to say ‘No.’
6. Leave the situation.

### # 10 Saying You’re Sorry (Making an Apology)
1. Look at the person.
2. Use a serious, sincere voice.
3. Say ‘I’m sorry for…’ or ‘I want to apologize for…’
4. Don’t make excuses.
5. Explain how you plan to do better in the future.
6. Say ‘Thanks for listening.’

### # 11 Talking with Others
1. Look at the person.
2. Use a pleasant voice.
3. Ask questions.
4. Don’t interrupt.

### # 12 Giving Compliments
1. Look at the person.
2. Smile.
3. Speak clearly and enthusiastically.
4. Tell the person exactly what you like.

### # 13 Accepting Compliments
1. Look at the person.
2. Use a pleasant voice.
3. Say ‘Thank you.’
4. Don’t look away, mumble, or deny the compliment.
5. Do not disagree with the compliment.

### # 14 Offering to Help (Volunteering)
1. Look at the person.
2. Use a pleasant, enthusiastic voice.
3. Ask if you can help. Describe the activity or task you are offering to do.
4. Thank the person.
5. Check back when you have finished.

### # 15 Reporting to the Teacher
(Other Youths’ Behavior)
1. Look at the teacher or adult.
2. Use a calm voice. Ask to talk to him or her privately.
3. Describe the inappropriate behavior you are reporting.
4. Explain why you are making the report.
5. Answer any questions the adult has.
6. Thank the adult for listening.

### # 16 Introducing Yourself
1. Look at the person. Smile.
2. Use a pleasant voice.
3. Offer a greeting. Say ‘Hi, my name is…’
4. Shake the person’s hand.
5. When you leave, say, ‘It was nice to meet you.’
Hsin-Ju Chen was born in Taipei, Taiwan. She was a registered nurse from 1995 to 1997. During this period, she was willing to pursue further education in order to contribute herself to society in the future. In the fall of 1998, she entered Chung Yuan Christian University in Taiwan and spent two and half years to get her bachelor’s degree in psychology. While pursuing the bachelor’s degree, she was an undergraduate research assistant and after-school teacher in an elementary school and a kindergarten, where she had the opportunity to observe children’s behaviors more closely. Her expanded interest in research on children’s development motivated her to pursue a master’s degree in psychology. After she graduated from her master’s degree in psychology in 2007, she was thinking about how she could apply the research findings benefiting children, teachers and their families. Therefore, she pursued the other master’s degree in the emotional and behavioral disorders (E/BD) program in special education at the University of Texas at El Paso since fall 2007. During her graduate studying in psychology and special education, she was able to attend and present her research at the Taiwan Psychology Association Conference in 2005, the 2007 European Congress of Psychology in Prague, the 2007 Third Annual Fall Research Symposium of the College of Education at the University of Texas at El Paso, and the CEC 2009 Convention and Exposition Conference in Seattle. She also worked as a research assistant and teaching assistant for the SPSS lab section of applied research design. She received her Master of Arts degree in Special Education in August, 2009.

Permanent Address: 2F., No.13, Ln. 63, Linyi St., Zhongzheng Dist.,
Taipei City 10059, Taiwan (R.O.C.)