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Achieving a systematic service integration program for children with challenging behaviors in school setting in Lebanon

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To my loving parents
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Achieving a systematic service integration program for children with challenging behaviors in school setting in Lebanon

Hadeel Mahmoud

ABSTRACT

Students with behavioral problems display deficits in social skills, such as deficits initiating social interactions, lack of orientation towards a stimulus, and other social issues. Research showed that school based interventions aim at reducing disruptive behaviors, thus implementing school based interventions are of high importance. This study aims at implementing a social skills based program/intervention on a child with behavioral problems. Another purpose is to evaluate the efficacy of social skills training (SST) with a student with a behavioral problem. This case study took place at a school located in Mount Lebanon area. The results show that school-based interventions serve as a crucial factor in the treatment plan of the student. Another finding is that the disruptive behavior displayed by the student decreased throughout the intervention period. Future research requires more attention to school based interventions and social skills programs. However, there are limitations of this study, which need to be taken in consideration for further studies.

Keywords: Social skills training, Social cognitive theory, Behavioral problems, School-based interventions, Behavior modification
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Chapter One
Introduction

1.1 Overview

Children who have behavioral problems such as Autism, Asperger’s, and Attention Deficit Hyperactivity Disorders (ADHD) as well as students with certain learning disabilities (LD), exhibit social skills deficits (Cervantes, Matson, Adams, Williams, Goldin, & Jang, 2013; Lerner & Johns, 2012). These include impairments in the identification of emotions, lack of orientation towards a stimulus, inadequate use of eye contact, deficits initiating social interactions and other social issues. Social skills training was shown to be effective with treating such deficits, but more research is needed in this regard (Cervantes et al., 2013; Rao, Beidel, & Murray, 2007; Weiss & Harris, 2001).

Since those students mentioned above spend most of their time at school, therefore, school-based interventions play an important role in the treatment of their behavioral disorders. According to research, the majority of those students receive special education services, but lack school-based interventions, such as ABA based intervention programs, social skills interventions and many other behavioral interventions (Lopata et al., 2012). Regarding treatment, most programs at present have been based on Applied Behavioral Analysis (ABA) framework, making them predominant and effective feature of structured treatment models (Lopata et al., 2012).

In addition, social skills training is a crucial factor that should be present in any school-based intervention program, along with ABA, since the problems
presented are mostly social-behavioral. Social skills interventions serve to teach students skills that are essential for social communication and emotional functioning. Such interventions focus on concepts like conversational skills, perspective taking, emotional awareness, problem solving, and the unwritten rules of social communication. The methods used in the treatment sessions include modeling, coaching, turn taking and social scripts. Peer-mediated interventions have been supported by more than 20 years of research (Brunner & Seung 2009). Therefore, in order for a student to successfully manage his or her social competence, social skills programs are needed to be implemented in schools (Lane, Menzies, Barton-Arwood, Doukas, & Munton, 2005).

1.2 Purpose and Rationale

Students with Autism Spectrum Disorders (ASD), which includes Autism, Asperger’s Syndrome, High-Functioning Autism and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), Attention Deficit Hyperactivity Disorders (ADHD) and some students with Learning Disabilities (LD), display a deficit in social skills. Based on research and studies performed on children with ASD and ADHD, social skills are considered a core deficit in students with challenging behaviors. Social skills are underlying features that embrace all social interactions, both verbal and non-verbal in students with ASD (Rao et al., 2007, Cervantes et al., 2013).

However, many students with LD show social, emotional and/or behavioral problems that affect their school performance. Some of the social challenges include difficulty interacting with peers, trouble maintaining friendships and problems in meeting every day’s social demands. In addition, students with LD have emotional
challenges that affect their perception about themselves. A student might have a low self-concept that will lead him to develop a low self-esteem, which will hinder his/her ability to learn. Furthermore, behavioral challenges that are displayed by students with LD include aggressive and antisocial behaviors that might lead to diverse social problems such as aggression and peer rejection. These behaviors occur due to students’ daily struggle with learning making them frustrated and therefore, pushing them to engage in maladaptive behaviors (Lerner & Johns, 2012).

Students who display behavioral problems will experience negative outcomes such as peer and social rejection, school failure and restricted social involvement because of their lack of appropriate social communication skills (Lane et al., 2005). Consequently, school-based programs are proved to be effective since schools are a setting in which the environment is natural, structured and predictable (Koegel, Fredeen, Kim, Danial, Rubinstein & Koegel, 2012). Based on the literature, there is a need for systematic, structured and research-based programs that have a social skills framework, to deal with students that show behavioral problems. Since this is a major deficit in students who show disruptive behavioral problems, school-based interventions must be applied (Lopata et al., 2012).

The purpose of this study is to: (1) implement a behavioral based program/intervention on a student with a behavioral problem; (2) evaluate the efficacy of social skills training (SST) in two specific behaviors on a student with a behavioral problem.
1.3 Research Questions

The research questions addressed in this study are:

1. How will the implemented program fulfill the needs of the student with behavioral problem?
2. To what extent is social skills training beneficial with children with behavioral problems?
3. How will school based interventions affect the efficacy of the implemented program?

1.4 Definition of Terms

1. Autism spectrum disorder (ASD), according to the DSM-V (2013), is considered to be a developmental disorder that encompasses four different disorders: Autistic Disorder, Asperger’s Disorder, Childhood Disintegrative Disorder, or Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). People affected by it will have communication deficits, difficulty building social relationships and they might be highly sensitive to changes in their environment.

2. Attention Deficit Hyperactivity Disorder (ADHD) is characterized by inattention, hyperactivity and impulsivity. A person affected by ADHD can either have one of these characteristics by themselves or combined. Symptoms include excessive talking, fidgeting, the inability to remain seated in an appropriate manner and difficulty organizing tasks. These factors can lead to deficits in performance in social, educational and work settings. (DSM-V, 2013).
3. Learning Disabilities (LD) is a neurological disorder that interferes with a student’s ability to learn by having difficulties in storing, processing or producing information. About 46% of all students with disabilities are identified to have a learning disability. Students with LD have difficulties in mental abilities such as memory, auditory and visual perception, oral language and thinking in which learning will be affected in different areas such as reading, comprehension, writing, reasoning, and calculation (Lerner & Johns, 2012).

4. Social skills refer to certain behaviors that are taken for granted, but are absent in children that show behavioral disorders. Some of these behaviors include raising one’s hand when he or she wants to speak in a classroom setting, waiting to be called upon to talk, understanding facial expressions, inviting a peer to join group activities, understanding concepts of sharing, turn taking, and respecting others. They are behaviors that should be taught, acquired and then practiced until mastered (Lane et al., 2005).

5. Social skills training refers to teaching students these skills by using different social techniques such as social stories, modeling, peer and adult-mediated intervention. Adult-mediated strategies refer to adults being as mediators for teaching the social skill to the student, whereas peer-mediated strategies refer to peers taking the role of the adult, to prompt social behavior. Usually, peers will be trained to prompt desired social skills (Weiss & Harris, 2001). Social stories is a technique that was developed by Carol Gray (1993) in order to enhance the social understanding of the child through simple short stories that describe social situations that they might encounter every day (Schreiber, 2011).
6. Behavioral strategies are techniques that include rewards, token economies, behavioral contracts, reinforcement schedules and are used to modify disruptive behavior. Applied Behavioral Analysis (ABA) is a behavioral strategy that is used with children who display behavioral problems (Wilson & Lipsey, 2007).
Chapter Two

Literature Review

2.1 Contextual Background

In the United States, an increasing body of literature has focused on social skills interventions and their effectiveness when implemented with children with behavioral problems (e.g., Rao et al., 2007, White & Keoning 2007, Weiss & Harris, 2001, Schreiber, 2011, Walker, Barry and Bader 2010). Many studies prove that a school setting is an important location for providing interventions that aim at reducing disruptive behaviors (Wilson & Lipsey, 2007). Furthermore, the quality of the students’ peer relations was found to be positively linked to their academic, behavioral and emotional adjustment (DeRosier, 2004). Thus, it can be inferred that social skills play a vital role in reducing disruptive behaviors in children who show behavioral problems, regardless of the disorder present.

In Lebanon, research on this topic is scarce; therefore a study highlighting the effectiveness of social skills training on children with behavioral problems is of significance and will shed light on the importance of school based interventions.

2.2 Review of the Literature

Numerous studies were conducted stating the link between behavioral problems and social skills interventions.

2.2.1 Emotional and Behavioral Problems

Over the years, research found that young children in schools exhibit emotional and behavioral problems that hinder their learning abilities (Gimpel &
Gimpel and Holland (2003) stated that children who display emotional and behavioral problems or instability in their behavior during their childhood years will persist to have such problems throughout their adolescent years. Therefore, treating such behaviors will benefit the child, and will help him/her to overcome the difficulties accompanied by the behavioral problem (Chazan et al., 1994).

Gimpel and Holland (2003) identified common emotional and behavioral problems that may affect school-aged children. These include externalizing problems, internalizing problems, disorders linked to abuse and neglect, pervasive developmental disorders and other problems. Externalizing problems include Attention-Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). According to Gimpel and Holland (2003), ADHD diagnosis is becoming more common in school-aged children and is receiving increased attention in research on school-aged children. The treatment for externalizing problems requires behavioral interventions that work on behavioral principles, such as Applied Behavioral Analysis (ABA), behavioral contracts, and other behavioral procedures. As for internalizing problems, they include; Separation Anxiety Disorder, Generalized Anxiety Disorder, social phobia, Obsessive-Compulsive Disorder, specific phobia, panic disorder, major depressive disorder and dysthymic disorder. These disorders tend to be less commonly diagnosed than externalizing problems in the school-age children. However, if an internalizing problem was diagnosed then a clinical treatment is recommended (Gimpel & Holland, 2003).
On the other hand, boys are more likely to display externalizing behavioral problems than girls in the preschool years. However, both, boys and girls, share the type and severity of behavioral problems during early childhood years, but boys tend to exhibit more inappropriate physical behavior than girls (Gimpel & Holland, 2003).

2.2.2 Stability of Behavioral Problems

According to Gimpel and Holland (2003), 50% of students who display behavioral problems will continue to have these problems over time. These problems may persist into adolescent and maybe into adulthood if kept untreated. Several longitudinal studies had been conducted by Campbell and her colleagues on school-aged children to determine whether behavioral problems persist over years or not. The results show that approximately half of preschool-aged children continued to display behavioral problems when they were reevaluated after years. In addition, two-thirds of the same students met the criteria for externalizing disorders after 3 years of reevaluation. Therefore, if interventions were to be adopted and were successful with these children, then the number of children with behavioral problems should dramatically decrease (Gimpel & Holland, 2003).

2.2.3 Behavior Modification

Martin and Pear (2014) defined behavior as anything a person does or says; in other words it is any muscular, glandular or even electrical activity of an organism. Behavior is characterized by duration, frequency and the intensity of a certain behavior or force. The duration reflects the time spent on a behavior; for example, the student played for 1 hour. The frequency of a behavior is the number of
occurrences that happen in a given period of time; for example, the student raised his hand 5 times in duration of 2 minutes. As for the intensity of a behavior, it is the effort or the physical energy that is involved in producing a behavior; for example, the student has a strong grip when holding the pencil.

Behavior modification refers to the techniques used to improve positive behaviors, such as sharing, abiding by rules and reduce negative behaviors such as aggression and non-compliance (Martin & Pear, 2014).

It is stated that the most crucial characteristic in behavior modification is:

“its strong emphasis on defining problems in terms of behavior that can be measured in some way and using changes in behavioral measure of the problem as the best indicator of the extent to which the problem is being helped.” (Martin & Pear, 2014, p.6).

The techniques or treatment procedures implemented on the student are used as ways to alter the student’s environment to help him/her function more effectively. In other words, behavior modification techniques involve the systematic utilization of learning principles to asses and improve the student’s covert and overt behaviors that serve their daily functioning in an appropriate manner (Martin & Pear, 2014).

Applied Behavior Analysis (ABA) refers to the scientific study of laws that govern the behavior of human beings and animals (Martin & Pear, 2014). During the year 1968, the first issue of the Journal of Applied Behavior Analysis was published, and it had an article by Baer, Wolf and Risley (1968) that stated the dimensions of ABA. They stated four dimensions; (1) ABA focuses on measurable behaviors that are socially important, (2) it has strong emphasis on operant conditioning to develop
treatment strategies, (3) measuring the behavior after the implementation of treatments were made to develop the link between treatment and improvement in behavior, and (4) demonstration of generalizable and continuing enhancement in behavior (Martin & Pear, 2014).

There are many behavioral modification techniques that are available and ready to use. Some of these include reinforcement schedules, punishments, shaping, fading, behavioral chaining, stimulus discrimination, stimulus generalization, modeling, guidance and conditioning (Martin & Pear, 2014). In this study, the researcher will be focusing on reinforcement, punishment, shaping and modeling techniques to increase desired behavior and to decrease undesired behaviors.

There are five types of reinforcements that are used with students to increase a behavior. These include consumable reinforcers, activity reinforcers, manipulative reinforcers, possessional reinforcers and social reinforcers. Consumable reinforcers include regular meal type foods, health foods, junk foods, sweets and different kinds of beverages. As for the activity reinforcers, they include all activities that the student likes to engage in, examples include playing in the playground, going to the library to choose a book, play in the computer lab and other school related activities. Manipulative reinforcers include the types of games and toys the student has an interest in, for example playing with puzzles, playing with play dough, and getting extra minutes to play in the playground. The things that the student likes to possess such as toys, stickers, stories, crayons and others are considered possessional reinforcers. The last type of reinforcements is social reinforcers and they are verbal or physical stimulation that the student receives from others. Examples of verbal stimulation include good boy/girl, nice try, and amazing job, whereas the physical
stimulation includes high five, hugging, tickling, and a tap on the shoulder (Martin & Pear, 2014).

The teacher or therapist who will be working with the student will have to discuss these types of reinforcements with him/her before they start working on target behaviors in order for the intervention to be effective. This can be done by using a reinforcement survey in which the therapist or teacher asks the student questions regarding what the student likes or dislikes from the list of reinforcers available. After completing the reinforcement survey, a reinforcement menu will be present, and it includes all the reinforcers that the student chose. The reinforcement menu will be used after the student engages in a positive behavior, to choose his/her reinforcement accordingly (Crone, Hawken & Horner, 2010).

On the other hand, token economy is considered to be a behavior modification program that is used with students to increase a desired behavior. Students earn tokens, which are used as conditioned reinforcers, for specific behaviors and they can trade in their tokens for reinforcers (Martin & Pear, 2014). In this study, the token economy used is a token economy board with six tokens to fill, and when they are all filled, the student can exchange the tokens with any reinforcer from the reinforcement menu. However, when the student engages in an undesired behavior, a token will be removed from his board.

Another behavioral modification method used to make a new behavior to occur is shaping. It is defined as

“the development of a new behavior by the reinforcement of successive approximations of that behavior and the extinction of earlier approximations of that behavior until the new behavior occurs” (Martin & Pear, 2014, p. 129).
By using this method, the student will learn a new behavior that he/she didn’t have in his/her behavioral repertoire. Another method is modeling, in which a given behavior is performed in front of the student to persuade him/her to engage in a similar behavior. By modeling a behavior, the student knows that the modeled behavior is the appropriate behavior to engage in, rather than what behavior he/she were performing (Martin & Pear, 2014).

Eliminating a negative behavior also is a crucial part of behavior modification programs. There should be reinforcers and punishers when dealing with a target behavior. Martin and Pear (2014) defined punishers as a stimulus whose presentation after a specific behavior causes a decrease in the frequency of such behavior. For example, the removal of a token from the token board is considered a punisher, since the student misses out on one point, and has to work harder to get another one. There are different types of punishers that are used to reduce the frequency of a behavior, they include reprimands, timeout, and response cost (Martin & Pear, 2014).

2.2.4 Tools for Measuring Behavioral Problems

Several tools are used to measure behavioral problems, the most common being rating scales and observation forms. Examples of behavioral rating scales include Child Behavior Checklist and Teacher’s Report Form, Behavior Assessment System for Children, Conners’ Rating Scales, Preschool and Kindergarten Behavior Scales, Eyberg Child Behavior Inventory, Social Skills Rating System, ADHD Rating Scale and many others (Gimpel & Holland, 2003). Alternatively, observation is a crucial tool in measuring behavioral problems, since children communicate more through behavior than words. Gimpel and Holland (2003) agreed that there are several procedures that should be made prior to observing a child. Those include defining the observable behavior and choosing
the best observational method. The observable behavior or the target behavior must be clearly identified in order to obtain useful information. After choosing the target behavior to be observed, the observational method will be selected, either formal or informal observation.

The formal observational method includes structured observations, in which the observer would observe the student at different times of the day while the student is engaged in different activities. In addition, the observer would interview the teacher or the person in charge of the student in order to obtain extra information on the child’s behavior. Another example of formal observations is naturalistic observation. In this type of observations, the student engages in his/her daily activities, and the observer determines the antecedents (what happens before the behavior) and the consequence (what happens after the behavior), of the child’s behaviors. On the other hand, informal observations are observations made without the use of an observational system. Typically, informal observations are made upon a request from the teacher or clinician in order to keep track of a certain behavior. These observations are less structured than formal observations (Gimpel & Holland, 2003).

2.2.5 Social Cognitive Theory

The social cognitive theory states that people learn through observation and modeling. Observational learning, modeling, and imitation are considered to be core concepts in the social cognitive theory. The theory was founded by Albert Bandura (1963) and evolved throughout the years, and many others built on his theory, such as Zimmerman and Schunk (Ormrod, 2009).
There are several key principles in the social cognitive theory. These concepts serve as a blueprint for what social cognitive learning is about. The first principle is that people can learn by observing the behaviors of others; according to social cognitive theorists, people learn through watching someone model the behavior in front of them. This act is called modeling. The second key concept is that the consequence of a certain behavior plays a role in learning that behavior. This means that depending on the outcome of a certain behavior, the individual can know whether or not it’s a desired behavior. The third concept is that people have significant control over their environment, therefore once they learn appropriate behavior they can manage to direct the environment to serve their purpose (Ormrod, 2009).

As stated earlier, modeling is a crucial principle in the social cognitive theory. Modeling teaches new behaviors, people can learn a certain behavior by observing others performing the behavior. Another effect is that modeling influences the frequency of previously learned behaviors. This occurs when an individual sees another person being reinforced for a previously learned behavior; he/she is more likely to exhibit such behavior. On the other hand, modeling may encourage previously forbidden behaviors. Forbidden behaviors are more likely to occur when someone models an undesired behavior and gets reinforced on it. The last effect of modeling is that it increases the frequency of similar behaviors; people tend to engage in a behavior that is similar to the behavior that is reinforced (Ormrod, 2009).
2.2.6 Social Skills Training

Rao, Beidel and Murray (2007) defined social skills as:

“Specific behaviors that result in positive social interactions and encompass both verbal and non-verbal behaviors necessary for effective interpersonal communication” (Rao et al., 2007, p. 353).

Such behaviors include smiling, maintaining eye contact, responding to questions and concepts like sharing and taking turns. The behavioral repertoire that is essential for interacting with people around us is gone astray in children who have a deficit in social skills. This affects the child academically and in their social development (Rao et al., 2007).

Another definition of social skills was pinpointed by Young, Caldarella, Richardson and Young, (2012), as specific behaviors that are essential for students in order to productively interact and communicate with their peers and people around them. They stated that the term social corresponds to interpersonal interactions that occur between two or more people, whereas the term skills indicate that an action should take place. Furthermore, a social skill should be a positive interaction between people, and not a negative one such as aggression. For example, if a student engaged in hitting or fighting with another peer, it is not considered a social skill, whereas problem solving is considered a social skill since the student is engaging in conflict resolution. Social skills interventions teach students replacement behaviors of negative behaviors such as aggression; fighting, hitting, saying bad words and shouting. Young, Caldarella, Richardson and Young, (2012) stipulated that when designing a social skills intervention plan, the therapist should highlight the
behaviors that they need the child to acquire instead of focusing on eliminating negative behaviors.

On the other hand, students who display deficits in social skills, experience negative outcomes such as peer rejection, social rejection, school failure, and limited social involvement (Lane et al., 2005). Therefore, social skills interventions are of high importance in order for the student to be included in the school environment, in particular and the social world in general. Lane et al. (2005) stated that such skills need to be taught, acquired and practiced until the skill is mastered by the student in the right environment.

In a school setting, students are expected to abide by rules, follow directions, respect authority figures and show positive play behaviors. Students who act accordingly are considered to have adequate social skills. However, assessing the culture in which the student is present in is very important since social values change across cultures. Therefore, socially accepted behaviors should be assessed (Young et al., 2012).

In addition, there are few social terms that should be highlighted. These terms are skill deficits, performance deficits, fluency deficits and competing problem behaviors (Lane et al, 2005). Skill deficits refer certain behaviors that are not in the student’s behavioral repertoire, which means that the student does not know how to perform a certain skill. Therefore, the student must be taught the skill through explicit instruction, which includes modeling, coaching and other behavioral techniques. On the other hand, a performance deficit is when a student knows a certain skill, but does not engage in the desired skill when necessary. In such cases, the behavior is in the student’s behavioral repertoire but due to certain reasons the
student is choosing not to perform the behavior. Consequently, interventions should be addressed in order to target the desired behavior, by including behavioral modification techniques which include motivation and reinforcement. As for when the student performs a certain skill, but in an awkward manner this is called fluency deficit, since the student is not performing the behavior fluently. In this case, interventions that shed light on retrial create opportunities for practice and give corrective feedback work best. The last term is competing problem behaviors. Social skills are influenced by behavior problems such as non-compliance, aggression and hyperactivity, therefore targeting these behaviors along with social skills targets would be beneficial for the student (Lane et al, 2005).

Furthermore, students should know the rationale behind learning social skills. Once the student understands why they are performing such behaviors, it would be much easier for them to generalize the skills in other social settings, such as with peers, teachers and family members at school, at home, and other social context areas. The most effective rational must be brief, believable and personal to the student. In addition, the student must know the possible negative consequences that may follow any misbehavior (Young et al., 2012).

2.2.7 Disorders Characterized by Deficits of Social Skills

*Autism Spectrum Disorders.* Most literature on social skills training was found in autism spectrum disorders research since social skills is a major deficit in these. Little research was conducted on social skills and other related disorders. Students with Autism Spectrum Disorders (ASD), which includes autism, Asperger’s Syndrome, High Functioning Autism and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), display a deficit in social skills.
Based on research and studies performed on children with ASD, social skills are considered a core deficit in students with challenging behaviors. Social skills are underlying features that embrace all social interactions, both verbal and non-verbal in students with ASD (Rao et al., 2007).

Autism is considered to be the second common developmental disorder amongst children (Brunner & Seung, 2009). It is estimated that ASD occurs in 1 out of 68, with a high prevalence in boys than girls. Data shows that 1 in 42 boys are affected, whereas 1 in 189 girls are identified with ASD. Furthermore, white children are more likely to be diagnosed with ASD than are Hispanic or black children (CDC, 2014).

Treatment and providing services for students with ASD is persistently challenging. According to research, the efficacy of evidence-based treatments has not yet been well recognized (Brunner & Seung, 2009). However, Brunner and Seung (2009) stated that there is substantial evidence that supports the usage of communication-based interventions for students with ASD. They noted that adult-directed treatments, peer-mediated intervention, family and/or parent based interventions, usage of visual support and self-monitoring techniques proved to be effective.

There are seven treatment categories that Brunner and Seung (2009) identified: Applied Behavior Analysis (ABA), naturalistic behavioral, developmental, classroom-based, video modeling, social skills and augmentative and alternative communication. ABA involves intensive one-to-one instruction that aims at teaching positive behaviors and eliminates negative and undesired behaviors. Naturalistic behavioral approach employs strategies of behavioral treatment and
occurs in natural setting. As for developmental intervention, language development is refined by positive adult-child interactions. Therapists who follow such intervention method focus on the function of social communication and on the student’s verbal productions.

Classroom-based interventions are considered as a natural environment for delivering treatment. There are several programs that have been developed that could be used in the classroom such as TEACCH, (Treatment and Education of Autistic and Related Communication-Handicapped Children), and Project DATA, (Developmentally Appropriate Treatment for Autism). As for video modeling type of treatment, it offers an alternative intervention to classic modeling methods. This type of intervention highlights the visual preference of children with ASD by eliminating distracting elements from the treatment sessions leading to an increase in the student’s attention to the skill being modeled in the video. Video modeling consists of several features which include the child watching repeated clips of the behavior targeted, the child practices the behavior modeled with a parent or a therapist, and the video can be repeated as necessary.

When it comes to social skills interventions, social skills training serves to teach ASD students skills that are crucial for social communication and emotional functioning. Such treatment focuses on concepts such as conversational skills, perspective taking, emotional awareness, problem solving, and the unwritten rules of social communication. The methods used in treatment sessions include modeling, coaching, turn taking and social scripts. Peer-mediated interventions have been supported by more than 20 years of research. The last type of treatment stated in this article is augmentative and alternative communication, and it could be used with students with all ages and levels of cognitive abilities. PECS, which is a behavioral
intervention system that is designed to target visual-graphic symbols for communication, is a form of augmentative and alternative communication. It is used in a school setting, and students are taught to use printed picture cards to communicate their needs. Usually, this method is used with students who are nonverbal.

Hence, behavioral treatments serve as the basis for all types of treatments. Social skills and ABA are among the most used interventions that can be used in a classroom setting and in a therapeutic environment.

**Attention Deficit Hyperactivity Disorder.** Attention Deficit Hyperactivity Disorder (ADHD) is a chronic neurological disorder that affects children’s behavior in school and social settings. It is difficult for these children to control their behavior. ADHD is considered to be one of the most common chronic conditions of childhood. It is characterized by inattention, impulsiveness and hyperactivity. Inattention refers to the inability to focus on a task, whereas impulsiveness is the tendency to act without thinking about the consequences that may follow an action. Hyperactivity is the term used to describe a behavior that is a constant driving motor activity. Children with ADHD may exhibit problems in all of these areas or in just one or two areas (Lerner & Johns, 2012).

According to the DSM-V (2013), there are three types of ADHD; (1) ADHD-IA, (2) ADHD-HI and (3) ADHD-C. Children that display symptoms of the first subtype are considered to have symptoms of inattention only. This includes having difficulty in sustaining attention, and organizing tasks, being easily distracted by external stimuli, appearing not to listen, failing to give attention to details, making careless mistakes and not finishing tasks. As for the second subtype, children show
symptoms of hyperactivity and impulsivity only, and not inattention. Symptoms of hyperactivity include fidgeting with hands or feet, wiggling in seat, running about, talking excessively, they cannot sit still, and have difficulty playing or engaging in leisure activities quietly. Furthermore, the symptoms of impulsivity consist of blurting out answers before questions are completed, difficulty in awaiting turn, and interrupting others. The last subtype is the combined subtype which includes symptoms of the first two subtypes; inattention, hyperactivity and impulsivity.

There are several treatment procedures to deal with ADHD. Lerner and Johns (2012) stated two different treatment methods used with students who are affected with ADHD. The first treatment method is a multimodal treatment which integrates several methods; (1) effective educational instruction, (2) behavior management strategies, (3) family and child counseling, (4) home management, and (5) medication. It is stated that treatment is in its peak when all of the treatment’s elements are working simultaneously. The second treatment method is medication to control hyperactive behavior. Based on research, 56% of all cases of ADHD are on medication. Several medications exist in today’s market. Psychostimulant medications are used by about 75% to 85% of individuals with ADHD. This type of medication affects the brain of children with ADHD by increasing the arousal of the central nervous system (CNS) (Lerner & Johns, 2012).

On the other hand, children with ADHD exhibit deficits in social skills. A link was found between ASD and ADHD. Researchers observed that deficits in adaptive functioning and presence of maladaptive behaviors were present in both disorders. Children with ADHD engage in inappropriate social behavior that includes
interrupting others while talking or doing an activity and talking or engaging in a conversation when it’s not their turn (Cervantes et al., 2013).

Social skills deficits in children with ADHD have been divided into two types; negative/aggressive interactions and restless and intrusive behaviors. The first type includes behaviors such as verbal and physical aggression, rule violations and hostility, as for the second type, behaviors include running around, excessive talking, climbing, yelling, and interrupting others. All of these behaviors are associated with peer rejection. Impairment in socialization starts off in childhood and persists throughout the child’s lifetime (Cervantes et al., 2013). Therefore, dealing with such behaviors, by teaching appropriate social behaviors will benefit the child and will teach them how to maintain their relationship with their peers.

When comparing social deficits in ASD students with social deficits in ADHD students, it is stated that students with ASD lack knowledge of social skills rules while students with ADHD lack the proper application of these rules. However, other researchers imply that students with ADHD may also exhibit lack of comprehension of others’ point of view and have a limited social repertoire, just like students with ASD (Cervantes et al., 2013).

Social skills intervention is crucial for students that have ASD and ADHD. Therapists or special educators will provide more opportunities for students to experience interaction with peers in order to help students practice the skills that will be taught. By providing social skills training to these students, they will be more socially accepted by peers and they will learn how to show positive behaviors instead of negative or undesirable behaviors in a social setting.
**Learning Disabilities.** Moreover, many students with learning disabilities (LD) show social, emotional and/or behavioral problems that affect their school performance. Some of the social challenges include difficulty interacting with peers, trouble maintaining friendships and problems in meeting everyday’s social demands. In addition, students with LD have emotional challenges that affect their perception about themselves. A student might have a low self-concept leading to a low self esteem, the fact that will hinder their ability to learn. Furthermore, behavioral challenges that are displayed by students with LD include aggressive and antisocial behaviors that might lead to diverse social problems such as school suspension. These behaviors occur because students have a daily struggle with learning and become frustrated, so they will engage in acting out behaviors. In addition, it is estimated that one third of the students display social skills problems (Lerner & Johns, 2012).

### 2.2.8 Effectiveness of School-Based Interventions

Research has found that classrooms are considered to be a naturalistic environment is effective for delivering behavioral and social skills interventions (Brunner & Seung, 2009; Lopata et al., 2012; DeRosier, 2004; Wilson & Lipsey, 2007). According to Wilson and Lipsey (2007) schools play a vital role in reducing and preventing aggressive behavior, but only if the right intervention was implemented. This is because the school serves as a setting where interpersonal communication, whether positive or negative, takes place. Therefore, implementing school based interventions has proven to be effective.

According to Reid and Johnson (2012), a school-based multimodal treatment model should be put into action when it comes to treatment for students with ADHD.
They stated four aspects of the model; the first is that the students are evaluated from
different viewpoints and different school settings, such as circle time, playground
time, group activities and many others. The second aspect is to formulate a treatment
plan that meets the needs of the student, and the third step is implementing this
program in a school setting. The last step is monitoring and evaluating the progress
of the treatment plan on an ongoing basis.

Schools play a crucial role in the treatment of students with behavioral
problems. Young et al., (2012) highlighted the importance of a positive school
environment that should be present in order for an effective treatment plan or
intervention to take place. The characteristics of a positive school environment,
school climate, includes programs and resources available to students and staff,
physical aspects for school facilities, school leadership support, instructional
management strategies and parent and teacher support. The presence of a positive
school climate will also enhance school-based interventions (Young et al., 2012).

Social skills are best taught in a school setting, since it’s the place where
most social engagement occurs. The school serves as a naturalistic environment since
social skills can be taught in the classroom and playground and they can also be
taught using one to one sessions. In addition, social skills should be taught using the
same methods and procedures that are used to teach academic skills such as direct
instruction, modeling, practice opportunities, giving constructive feedback and
reinforcement. Social skills training requires behavioral rehearsal opportunities that
is most applicable in a school setting, since it’s a naturalistic setting, in order to
promote the usage of the taught behaviors and the mastery of these skills (Young et
al., 2012).
In conclusion, research has shown that social skills training and school based interventions have been proven to be effective with students with behavioral problems. The students will benefit from interventions when implemented in the correct setting. In addition, social skills training methods, based on the social cognitive theory, are used to teach students’ appropriate behaviors that will replace their inappropriate behaviors.
3.1 Research Design

This study follows the mixed research approach. The researcher has applied this research design because the methods used are quantitative and qualitative research methods. The rationale behind the usage of this method is that the strengths of both methods, quantitative and qualitative, will balance each other and counteract the weakness of each method (Fraenkel et al., 2012). For the quantitative research method, this study followed an A-B-A design, since an intervention was implemented. Data was collected in three phases: A, which is the baseline, B which is the intervention and A, which is another baseline after the intervention has been made (Fraenkel, Wallen, & Hyun, 2012). As for the qualitative research method, an interview was conducted with the class teacher before and after the treatment. Her input on the student’s behavior was established during pre and post intervention. In addition, the researcher’s observations in the pre-intervention phase and information from therapists about the student’s case were used to identify the problems.

This study falls under a single-subject research method as well. This type of research method is used to study the behavior changes that occur after the participant is exposed to a certain type of intervention (Fraenkel, et al., 2012).
3.2 Sample

The sample in this study is a purposive sample. The participant in this study is a student with a behavioral problem that has been formally assessed and diagnosed with ADHD and LD. School setting is a crucial factor in this study, since it is the place where the intervention will take place. The school was chosen based on the availability of a special education program.

3.2.1 School

The school presented in this study is located in Baabda and founded in 1860 by Mrs. Lucy Brown. As part of the Lebanese Evangelical Society, they

“Aim to maintain an educational institution which will have a special emphasis on moral and spiritual values, and which will be a centre of working Christian Fellowship and witness. The development of the whole of the child's personality is our aim. Therefore, we strive to provide opportunities for learning through shared experiences, to enable the student to learn, develop and recognize the resources within themselves to know how to deal with the pressures of today's society and make a constructive contribution to it” (School document, n.d).

At this school, educators have tried to “provide a secure environment for students with a wide range of academic ability. Within this general framework they endeavor to encourage those who find lessons difficult and, at the same time, to challenge those who find academic work easy. As far as possible we resist the temptation to drop students for academic or disciplinary reasons, unless it becomes clear that a change of school might benefit them” (School document, n.d).
Program description and service delivery. An interview was conducted with the Special Needs coordinator to know more about the school’s special education department.

The special education department at the school consists of: special education coordinator, counselors, and therapists with different specializations such as speech therapists (8 therapists), psychomotor therapists (1 therapist), occupational therapists (3 therapist), counselors (6 therapists), and special education teachers. This team works together in a collaborative manner. They hold several meetings during the year discussing the students’ needs and whether they have met the objectives of the IEP. Each student in this department has a file which includes the assessment provided by the parents, the therapists’ observation and progress reports, the teacher-parent meeting discussion, and an IEP (Special Needs Coordinator, personal communication, March, 2015).

At this school, students with special needs are integrated differently, each depending on his/her needs. There are students who are fully included in the general education classroom, but with special educators (shadow teachers), others are placed in self-contained classrooms, and some are pulled out from their classrooms to go to therapy sessions (Special Needs Coordinator, personal communication, March, 2015).

Therapies Offered

There are three therapies that are offered at the school; occupational therapy, speech therapy, and counseling sessions. In occupational therapy, the therapists help the students who have psychomotor delays to improve in gross and fine motor skills. Students undergo a maximum of two sessions per week, depending
on the student’s needs. In addition, a progress report is sent to the parents three times per year (Special Needs Coordinator, personal communication, March, 2015).

As for speech therapy, the therapists help the students who have speech delays and stuttering to improve their speech. Students undergo a maximum of two sessions per week, depending on the student’s needs. In addition, a progress report is sent to the parents three times per year (Special Needs Coordinator, personal communication, March, 2015).

In counseling sessions, the therapists help the students who have social emotional and/or behavioral problems to cope with the environment and to socialize with peers. Students undergo a maximum of two sessions per week, depending on the student’s needs. In addition, a progress report is sent to the parents three times per year (Special Needs Coordinator, personal communication, March, 2015).

3.2.2 Student’s Profile

Parental consent was provided before the researcher started her intervention with the chosen student. He is a 7 year old male who was diagnosed with ADHD and LD (see Appendix F). The student was placed in a KG2 class that he is repeating due to a shift from a French educational system to an English education system. He was placed in a mainstream classroom with 30 students. He had a shadow teacher who was working with him on both academic and behavioral targets throughout the school year. Furthermore, the student was pulled out of class six times per week to
undergo therapy sessions. He had speech therapy sessions, counseling sessions, and occupational therapy sessions, twice per week. At the end of each semester, a report was sent to the parents from each therapist to highlight the strengths and weakness of the student and to draw attention to the progress made throughout the sessions. The therapy sessions were recommended by the school, since they were offered on the school premises, and it was his first year of therapy.

3.3 Instruments

3.3.1 Building Blocks Program

A social skills based school program was implemented. The program that the researcher worked on was an adaptation of the work of Mather and Goldstein (2008) to the Lebanese school setting.

Building blocks of learning is a framework that is stated by Mather and Goldstein (2008) in their book “Learning Disabilities and Challenging Behaviors: A Guide to Intervention & Classroom Management”. This model consists of a three-level, triangular framework that reflects foundational skills, symbolic or perceptual processing skills, and conceptual or thinking skills. This model serves as a bridge between research and educational practice. The rationale behind the building blocks of learning model is to help educators deal with children who have behavioral problems.

The model comprises of 10 building blocks that are placed into the shape of a pyramid. The base of this pyramid includes four blocks which are attention and self-regulation, emotions, behavior and self-esteem. These are considered to reflect the foundational skills. The middle level includes three blocks which are phonology,
orthography and motor. These represent the symbolic or perceptual processing skills. The last level contains language, images and strategies and they are part of the conceptual or thinking skills (Mather & Goldstein, 2008).

In this program, the researcher focused on the foundational blocks, since they deal with behavioral problems and serve as a basis for the following blocks. As a support system for all learning, the foundational blocks should be strong enough in order for efficient learning to occur. The first building block, is attention and self-regulation, which includes the child’s ability to pay attention, self-regulate behavior and control impulses. These aspects play a vital role in learning. Emotions, which are the second building block, include a child’s general mood and temperament. Internalizing disorders, such as depression, anxiety, and motivation, can affect a child’s ability to learn. The building block of behavior includes social skills and compliance, in addition to a student’s overt and covert actions. Disruptive behaviors influence interactions with teachers and peers, and hinder the learning process. As for the last building block in the foundational part, self-esteem relates to how students perceive themselves and their attitudes towards success and failure (Mather & Goldstein, 2008).

3.3.2 Checklists and Assessment Forms

Checklists provided from the program were used to collect data regarding the baseline, and regarding the behaviors before and after intervention (see Appendix E). There were three checklists and observation forms to fill out; (1) building blocks questionnaire, (2) behavioral observation form, (3) the talking out/out of seat/attention problem/disruption (TOAD) system.
The first checklist was the building blocks questionnaire, which served as a tool to provide the researcher with a general overview about the student’s behavior. However, only the behavioral parts were filled out. The second form was the behavioral observation form, and it served as a tool to determine the frequency of time the student spends on task and off task. In addition, this tool records the discrepancy between the difficult student and another typical student. This method is called response discrepancy. The third tool is the TOAD system; it records what observational behaviors occur during a 15-second interval. This tool was used in the pre and post intervention phase.

Furthermore, the researcher acquired the school’s approval to access the student’s report card and diagnosis so that she can work on specific targets that will serve his benefit (see Appendix B). The researcher also asked the school therapists for their assessment of the child’s behavior during the school year (see Appendix F). By having access to these reports, the researcher was able to determine what behaviors to target.

3.4 Procedure

The researcher interviewed the teacher before starting the intervention with the student. The classroom teacher was interviewed in order to obtain information about the student’s behavior in the classroom setting. She is the homeroom teacher; who teaches English, Maths and science. Based on the fact that she spends at least five hours per day in class, her input played a crucial role in the study since classroom setting is a must for intervention to take place. The interview protocol is attached (See Appendix D).
The intervention took place at the school, and the researcher worked with the student for two hours per day for one month, which corresponds to 20 school days. As for the observations, the researcher observed the student for two consecutive school days. The observations were made before and after the intervention in order to collect baseline data. As for intervention data, it was collected during every session. In addition, the teacher was re-interviewed to assess and gather information about whether or not the intervention was beneficial for her student.

Before starting the intervention, the researcher explained to the student what the token board stands for, how it works, and the relationship between the tokens and the primary reinforcers. The student then saw the reinforcement menu (See Appendix H), and the researcher taught him how he can use it, by explaining that he can choose any of the reinforcements present in the menu every time he collects the six points on his token board. The student seemed eager and motivated to start the sessions.

However, the tokens earned served as an interim reinforcers; if they were not converted into rewards at the end of the sessions then they lose their effectiveness (Mather & Goldstein, 2008). The student was motivated when he received a point, or token, on his board. The reinforcements were changed on daily basis, so that they maintain their motivational influence (Mather & Goldstein, 2008). The student enjoyed this fact, and he used to ask the researcher what will be the reinforcement in the next session. On the other hand, the researcher was the one in control of the reinforcements; depending on the student’s behavior and the time that took the child to complete his token board, his reinforcers were chosen accordingly. For example, when the student stayed on task for more than 50% of the time, the researcher chose a reinforcer that is considered to be highly motivating for him, such as playing in the playground. On the other hand, when the student got all his points, but with
insufficient incidence, the researcher chose a reinforcer that is considered less motivating than the others for the student, such as playing with a puzzle.

3.5 Target Behaviors

Before implementing the program, the teacher was interviewed to pinpoint the strengths and weakness of her student. The following target behaviors were derived based on the teacher’s interview, the therapists’ assessment forms and then the researcher’s observations. The teacher stated that “he engages with his friends, but doesn’t know how to play without hurting others. He’s a bit aggressive when it comes to play” (see Appendix G). As for the therapists’ assessment they stated that the student “shows difficulties in demonstrating an appropriate behavior” (see Appendix F).

DeRosier (2010) stated that it is beneficial to include several behavioral skills within a social skills intervention. But only two target behaviors were chosen due to the limited time available for the researcher and the intervention was implemented to serve these targeted behaviors. The targeted behaviors that were chosen based on the teacher’s interview, the therapists’ assessment forms and the researcher’s observations were: (1) Walk in line during transitioning phases and (2) play without hitting peers. Those two behaviors were chosen as they were the most troubling as the student has a tendency to become aggressive at times.

3.6 Pre-Intervention Phase

In this phase, the researcher observed the student and collected baseline data. The researcher went to school and observed the student at school and classroom context, without interacting with him. Data were collected using the building blocks
questionnaires, provided by Mather and Goldstein (2008). This procedure lasted for two consecutive days. Data were collected by observing the student and recording on task behavior, by placing codes on the observation form (see Appendix J). After the data were collected, the researcher was ready to start the intervention phase. In addition, the researcher interviewed the classroom teacher to learn about the student’s behavior before the intervention starts, she stated that “he also has difficulty in transition periods. He doesn’t know how to move from one activity or lesson to the other without doing any disruptive behavior, such as running in the hallways, or jumping to class.”

### 3.7 Intervention Phase

The researcher introduced herself to the student and explained what they will be doing. She first introduced the classroom rules by using a visual organizer, so that it will be easier for the student to memorize it (Lerner & Johns, 2012). The researcher then explained to the student the rules of a token economy system and showed him how it works.

During this phase, a token economy was developed for each of the target behaviors. The student was reinforced every time he performed an adequate behavior, such as standing in line, walking in line, playing without hitting peers, and whenever an inadequate behavior, such as jumping in line, showing aggressive behavior, not complying to teacher’s instructions was made, a consequence occurred. It was expected that inadequate behaviors will decrease by time and appropriate behaviors will increase making it easier for the student to be part of the classroom and school environment.
3.7.1 Rules for earning and exchanging tokens

The student will earn tokens when he performs certain behaviors that are explained to him by the researcher. These behaviors are standing in line, walking in line, listening and complying to teacher’s instructions, and playing without aggressive behavior. Upon the performance of these desired behaviors, the researcher will place a check mark (√) on his token economy board. The token economy board comprised of six circles that the student should fill in order to be able to exchange his points with reinforcement.

During each session, the student should get all six points to be able to exchange his points with a reinforcement of his choice such as; eating popcorn, playing in the playground, getting extra 5 minutes during break time, and at the end of each session, the student gets reinforced if he collects all his points.

3.7.2 Methods within the token economy

Another method used within the token economy system was modeling. Students learn new behaviors through modeling, observation and imitation (Mather & Goldstein, 2008). Also, modeling occurs best at a school setting, since a student’s response to modeling is influenced by three different factors: the characteristics of the model, the characteristics of the observer and the consequences associated with the behavior.

Mather and Goldstein (2008) stated that a new behavior could be learned, inhibited and/or strengthened by watching a model perform a certain behavior. For the target behaviors, the researcher modeled the desired behavior over several sessions, and the student copied the researcher and got praised and reinforced for
doing so. For example, in the first target behavior, the behavior that was modeled was “putting your hands behind your back while you walk in line”; this behavior was required from all the students when transitioning from periods. Then, after one week of modeling the desired behavior, the researcher started fading away such behavior, and primed the student instead of modeling the behavior. For example, the researcher would say: “Remember the rules for standing in line” instead of prompting or standing next to the student and modeling the behavior while they walk in line.

On the other hand, whenever the student misbehaved or didn’t engage in the desired behavior, a retrial method was used. The student would go back to the initial point, where the line began, and walk all the way to the desired location again. This method was done over and over again until the student did the behavior without being off task. In such a case, the student would not receive a point on his token board, and the researcher would say something like this “it took you so much time to stand in line, and you know I cannot give you points for this, but I’m happy that you’re trying your best.” By saying so, the student knows that this is the acceptable behavior that he should be engaging in, but he can’t get rewarded because he repeated the action several times. However, the researcher would manipulate the environment so that an opportunity comes up that allows the child to perform such behavior again. In this case, the researcher primes the student and sees what behavior would he engage in, if the student performed the desired behavior, then he deserves two points on his board and not one point. This is because he just retried the behavior several times, and when he got the chance to perform it, he did it without prompting, only priming.

Alternatively, a punishment method was used in addition to the reward system. This method was response cost, in which the student loses what he already
earned. Every time the student engages in an inappropriate behavior, such as hitting a peer or jumping in line, a cost will be paid, which is the removal of a point or missing out on reinforcers. However, in order for this method to be effective, the student must earn more reinforcers than losing them (Mather & Goldstein, 2008).

3.7.3 Example of a session

The researcher comes in and follows the student in his class activity as if she is shadowing him. She starts by reminding him about the rules, and then the session commences. As sessions proceed, she stops and asks him to remind her about the rules, and when he recalls them correctly, she gives him a point on his token board. Then, whenever he engages in an appropriate behavior, the researcher reinforces the student, either verbally by saying “good job” or physically by saying “give me five” or by giving him a point on his board, depending on the behavior displayed. Throughout the session, the researcher always gave feedback on the student’s behavior so that he knows what is expected from him. In addition, the researcher would also ask the classroom teacher to give positive or negative feedback to the student, so that he knows that his teacher is the main authority in the classroom. This is a technique followed by the researcher so that the child doesn’t become dependent on her. In addition, whenever the student shows behaviors of non compliance, either towards the teacher or the researcher, a point was removed from his token board. If the student collects all his points before the end of the session, he would choose a reinforcement from the reinforcement menu and engages in it, and then start all over again with the token board and points until the session ends. By the end of the session, the researcher would give constructive feedback to the student regarding the behavior displayed throughout the session, and asks him to recall what happened during the session. By doing so, the student was aware of his behavior, acceptable or
not, and this would help him to use his memory and recall skills (Mather & Goldstein, 2008).

3.8 Post Intervention Phase

After the period of implementation was over, the researcher stopped the delivery of points and reinforcements. The researcher went on to observe the student for two consecutive days and recorded data for the two target behaviors. Data were collected by observing the student and recording on task behavior, by placing codes on the observation form (see Appendix J). A post-intervention interview was conducted with the classroom teacher to elicit her input on her student’s behavior after the intervention. The teacher stated that “After one month of intervention, my student has changed in many different ways. He became aware of the school and classroom rules and he’s abiding by them” (see Appendix G).

3.9 Data Analysis

Data were collected during three phases. The first phase was before the start of the intervention to constitute the baseline. Data were also collected during the second phase, which is the intervention phase. In the last phase, data were collected after the treatment, which is the post-intervention stage. A formula adopted from the Building Blocks intervention program by Mather and Goldstein (2008) was used to determine the percentage of time the student spent on task (see Appendix E). The interview was transcribed verbatim (see Appendix G).
3.10 Validity, Reliability and Triangulation

Since the instruments in the quantitative data were adopted from Mather & Goldstein (2008) as is; therefore, they are valid. In addition, they are measuring what they are supposed to measure, the behavior of the student. As for the qualitative data, the interview questions were derived from the literature review and research questions. Furthermore, they were approved by the advisor, which is considered as expert validity. As for reliability, it is established since cross checking and comparing data between quantitative and qualitative data showed that there is a consistency of scores and answers between the two methods (Fraenkel, Wallen, & Hyun, 2012). In other words, triangulation enhanced reliability.

3.11 Ethics

The Institutional Review Board (IRB) approved this study (see Appendix A), before the completion of this research and an informed consent was obtained from the principal of the participating school. The principal was provided with a preliminary description of the study and its purpose. In addition, the letter included how data will be collected and the role of the student and teacher in the study (see Appendix B). In addition, parental consent was obtained for the participating student (see Appendix C). Furthermore, the researcher read aloud the interview introduction, and handed to the teacher a copy (see Appendix D). All the instruments used to collect data were approved by the IRB (see Appendix E). The information and data achieved throughout the study was confidentially reserved and only analyzed by the researcher.
In conclusion, this chapter presented the framework of the study, from the sample to the instruments and ending with ethics, data analysis and validity and reliability. The program that was implemented in the study was highlighted in this chapter as well.
Chapter Four

Results

As stated earlier, the purpose of this study is to implement a behavioral based program on a child with behavioral problems and to evaluate the efficacy of social skills training (SST) with children with behavioral problems on two specific target behaviors. This chapter shows the results of the intervention provided. The target behaviors were selected based on the student’s needs based on the assessment, the observations of the researcher and the teacher’s input. The results were graphed, pre, during and post intervention.

4.1 Data for Pre-Intervention Phase

The baseline data (A) was derived at this phase. Based on the observation of the researcher, data was collected using the checklists from the building blocks program (Mather & Goldstein, 2008) (see Appendix J) and the results were as follows:
Target behavior 1: Walk in line during transitioning periods (Baseline):

The researcher observed the student for two hours each day. The observation period lasted for two days. The student was observed during center time, chapel time, playground time and P.E classes. These classes were chosen because they represent transitioning periods.
Target Behavior 2: Playing without hitting peers (Baseline):

The student was observed during playground time and P.E classes. These classes were chosen because they represent periods in which peer interaction occur. In addition, based on the interview with the teacher, the student's behavior during those periods was the most problematic.
4.2 Data for Intervention Phase

Target behavior 1: Walk in line during transitioning periods

At the beginning of the sessions, the student was interested and motivated to work to achieve his points. The data collected during the intervention phase corresponds to (B) and it increased throughout the sessions. At the end of every week, the researcher recorded the data. At first, the percentage of the frequency of the student staying on task, walking in line, was 45%, then after 5 sessions it increased to 53%, and then after another 5 sessions, the data increased to 63%, 69% and 80% at the end of the intervention. However, during session 12 and 13, the student was sick and therefore, his frequency of being on task decreased.
Target behavior 2: **Playing without hitting peers**

Similarly, the student was motivated to work in order to achieve his points. The data (B) increased throughout the sessions. At the end of every week, the researcher recorded the data. At first, the percentage of the frequency of the student staying on task, playing without hitting peers, was 35%, then after 5 sessions it increased to 42%, and then after another 5 sessions, the data increased to 48%, 56% and 66% at the end of the intervention. However, during session 12 and 13, the student was sick and therefore, his frequency of being on task decreased.
4.3 Data for Post Intervention Phase

After the intervention was made, the researcher observed the student for two school days in order to come up with a new baseline (A). This new baseline indicates whether the intervention was of a benefit to the student or not.

Target behavior 1: Walk in line during transitioning periods

The student was observed during the same periods as the pre-intervention phase. However, the student’s behavior has changed due to the intervention provided. A new baseline was created during this phase (A). Thus, the researcher can compare the two baselines to determine the effectiveness of the intervention.
Target behavior 2: Playing without hitting peers

The student was observed during the same periods as the pre-intervention phase. However, the student’s behavior has changed due to the intervention provided. A new baseline was created during this phase (A). Thus, the researcher can compare the two baselines to determine the effectiveness of the intervention.

4.4 Summary of Qualitative and Quantitative Data

Building Blocks Questionnaire. The results show that the child has behavioral problems since he had difficulties dealing with peers, lacks engagement in classroom instruction, distracts others, and refuses to comply when asked (See Appendix I). This tool was used during the pre-intervention phase only in order to gather information about the student’s behavior. These results were compatible
with the teacher’s input, for example, she stated “I think he needs more practice to know the rules of the school and the classroom” and “in my opinion, my student should display more age appropriate behaviors, such as walking to class instead of jumping and running, how to listen to the teacher’s instructions and how to play in a nice way, without being aggressive with his peers”.

**The TOAD System.** The results of this tool show that the student displayed disruptive behaviors such as talking out loud, being out of seat, interrupting others work and displaying attention problems such as being unable to attend to independent work or a group activity (See Appendix J). Data was taken based on a 15 second interval. This tool was used during the pre-intervention phase and post-intervention.

**Behavioral Observation Form.** The results of this tool show the progress of the student during the intervention phase. This tool records the frequency of him being on task. With the progress of sessions, the frequency of student’s on task behavior increases (See Appendix K). This tool was used during the intervention phase.

**Teacher’s interview.** The results of the interview were compatible with the results of the observation forms. The teacher stated that her student displayed behavioral problems and had some difficulties when it comes to peer relationships. In addition, she stated that he benefited from the intervention and he showed calmer behavior after the intervention (See Appendix G).
4.5 Summary for Results

Target behavior 1: Walk in line during transitioning periods (A-B-A Design):
Target behavior 2: Playing without hitting peers (A-B-A Design):

These graphs summarize the whole intervention period, for each target behavior, from the start until the end. The results show that the frequency of staying on task increased by time and then when the intervention stopped, data decreased gradually. The summary graph of each target behavior gives an overview about the change in behavior that occurred.
The data in the pre-intervention and post-intervention phases (A) were converted from number of hours to sessions, in order to plot the data in an A-B-A design. The x-axis in the initial graphs corresponded to number of observation hours however, the x-axis in this graph is the number of sessions recorded. The scale of conversion from the initial graph to the latter is: one session is equal to two hours. The exact frequencies were calculated by taking the mean of each two points in the A phases and presented in the later graphs.

In conclusion, the results obtained from this study were summarized in the above chapter. Furthermore, this chapter highlighted the compatibility of the data from both research methods; the qualitative and quantitative data.
Chapter Five

Discussion

5.1 Effect of the intervention on the student: an increase in frequency of being on behavioral tasks

The results obtained from the intervention show that the student benefited from the intervention because his behavior changed from the baseline period to the treatment period. Therefore, there is strong evidence for the effectiveness of the intervention program (Fraenkel & Hyun, 2012). However, the data in the post intervention phase decreased because the intervention was stopped suddenly, but the new baseline data is still better than the old baseline data, which indicates that the student benefited from the intervention provided.

At first, during the baseline period, the student displayed behaviors that are considered unacceptable. He used to shout during class time, run and jump in class, displayed aggressive behaviors towards his peers and had compliance issues. Before the intervention started, the researcher explained to him that such behaviors are not acceptable in school, and showed him acceptable behaviors that should be displayed in a classroom and school setting. In addition, a visual board was made with all the school rules in pictures, so that it will be easier for the student to understand and remember the rules of the school.

According to Mather and Goldstein (2008), children who display disruptive behaviors often show disobedience or noncompliance towards their teachers or authority figures and may struggle academically and have deficits in attention. These
behaviors are linked to a long-term risk for school failure and maladjustment. In addition, they stated that such behaviors require a behavioral plan, a token economy in this case study, which should be applied in a systematic way and over a period of time, in order to observe improvement. Based on the results, it can be inferred that the student showed improvement during the therapy sessions, and when the researcher stopped giving consequence for the behavior displayed, during the post intervention phase, the frequency of him being on task decreased. Students function more efficiently when given the right set of consequences, whether it’s reinforcement or a punishment (Mather & Goldstein, 2008).

There were several types of consequences that the student was exposed to as a result of a certain behavior. In this case study, the behavioral outcomes included: positive reinforcement and punishment. These types of reinforcements varied throughout the sessions from social reinforcers, possessional reinforcers, consumable reinforcers, activity reinforcers and manipulative reinforcers. This made it easier for the student, since there was always something new to expect, it kept him motivated to work and do his best. As for the punishment consequence; the student missed on few minutes of certain activities that he enjoyed, lost points on his token board, and the absence of a reinforcer, which is an example of response cost technique, made him frustrated. The frustration in this case encouraged him during the next sessions and boosted his intensity to work harder to achieve the desired behavior (Mather & Goldstein, 2008).
5.2 Effect of social skills training: decrease in the disruptive behavior of the student

There were several behavioral systems that were used in this program. One of them was a token economy system, and it served as the foundation of the intervention system. It was used to increase the frequency of the desired behaviors, which were the two target behaviors stated above. As mentioned by Mather and Goldstein (2008), the behaviors should be specified by researcher’s observations, teacher interviews and rating scales, and therefore baseline data were generated.

The baseline data (A) showed that there is a behavioral problem that is displayed by this student. He had difficulty joining in and being part of a group. During the intervention, the data (B) showed that the student was benefiting from the sessions given, as the frequency of him being on task was increasing and not decreasing. It can be implied that the student’s behavior was improving, and thus, the intervention process was effective. However, the new baseline data (A) showed that the student had a drawback in his behavior, and this is due to the fact that the delivery of reinforcement was extinguished. This was expected since reinforcements should not be extinguished suddenly. There is a reinforcement plan that should be followed in order to maintain stability in a certain behavior. However, in this case, the mastery of the two target behaviors haven’t occurred yet, therefore the researcher cannot implement the reinforcement plan in order to fade away reinforcers. Fading away occurs at a later stage, and it was too early for the student in this study to cope with it. This is the reason why the data in the new baseline diminished, compared to the intervention phase. On the other hand, the researcher compared the data of the baseline before the intervention and the new baseline after the intervention, and the
results show that an improvement has occurred, and the student benefited from the intervention made. This is an indication, that the intervention should be implemented on a daily basis and for a longer period of time, in order to achieve mastery of the behavior and then move on to fading away reinforcers and then generalization.

The results of this study show that there was a correlation between sickness and behavior. When the student was sick, the frequency of him being on task decreased. During his sickness period, that lasted for two days; day 12 and day 13 of the intervention, the results show that the frequency of being on task has decreased for the two target behaviors. After these two days, the frequency of the student being on task for the two target behaviors, increased again. Therefore, it can be implied that sickness affects the behavior of the student. In addition, through the researcher’s observations, the student was trying to stay on task during these two days, but he was physically tired and sick and he requested to have some rest. Unfortunately, such correlation wasn’t found in the literature.

The findings show that pre- to post-treatment improvements were established based on the teacher’s input and researcher’s observations and data. In addition, based on the classroom teacher’s observation and interview, the student became even calmer during free play and exhibited less aggressive behavior. As stated by Walker, Barry & Bader (2010), children learn to apply their recently developed behaviors to all acceptable situations. In this current study, the student learned appropriate social skills, and he applied them into a non-training environment, in where he is not getting any reinforcement for the current behavior. This shows that the student is putting an effort to maintain what he already learned. Ultimately, the researcher strives to reach generalization phase, in which the student tends to generalize the behaviors learned in the treatment period into similar social environments. However,
there are several stages that the student needs to pass through before reaching generalization phase (Leblanc & Matson, 1995).

The results of this study support previous findings in which the efficacy of social skills training programs is highlighted, and social learning theory proved to be effective with students (Leblanc & Matson, 1995; Walker, Barry & Bader 2010).

5.3 Effect of School based interventions

Wilson and Lipsey (2007) and many others, such as Young, Caldarella, Richardson and Young, (2012) highlighted the effectiveness of using the school setting as a treatment based environment for students who display disruptive behaviors; they stated that the school is a setting in which there is a universal access to children. The findings in this current study are compatible with the findings of Wilson and Lipsey (2007). School-based program have shown a positive impact on the student and helped him to reduce his disruptive behavior, as shown by the data represented in the previous chapter.

In addition, the study of DeRosier (2010) showed that multiple problems or deficits can be targeted through the application of one single intervention. Similarly, in this case study, the results illustrated that the student showed improvement in both target behaviors, knowing that both were addressed in parallel. Furthermore, school setting interventions enhanced the student’s behavior and positive outcomes were displayed in terms of reduction of aggressive behaviors in the classroom and playground. These findings were compatible with the findings of Webster-Stratton and Reid (2010), who also stated that such interventions will lead to positive outcomes in various school related social traits such as peer relationship improvements and school readiness outcomes.
The school setting served as a platform for learning new behaviors and practicing them until they become mastered. As Mather and Goldstein (2008) stated, children model behaviors better when they perceive the model as an interesting, fun, and supportive person. Usually, the students model their teachers and peers, since they are vital persons in the school community. In this case study, the student modeled the researcher, his peers and teacher at different stages of the intervention. At the beginning of the intervention, during the first week, the student modeled the researcher for the two target behaviors. As the intervention proceeded, the researcher transferred the modeling from her to the student’s peers and teacher. Based on the results provided, the student benefited from the modeling process, since the data for the frequency of him being on task increased instead of decreasing for both tasks.

In addition, based on the teacher’s interview post intervention (see Appendix G) the student benefited from the intervention and his behavior changed noticeably. She added that he became aware of the school rules and regulations and he is abiding by them. Moreover, she indicated that even when the researcher was not around, the student was engaging in an adaptive manner, when it comes to social play and interaction with this peers. This shows that the student started to generalize the behaviors he learned into other similar situations.
Chapter Six

Conclusion and Recommendations

6.1 Conclusion

Based on this study, we can infer that social skills training may be effective with children who display behavioral problems, not only with students with Autism and other related disorders. The present study highlighted the effect of social skills training on students with behavioral problems in a school setting and it was shown that when implementing a treatment plan in the most suitable environment, positive results were displayed.

The school environment played a crucial role in this study, since it served as a natural setting in which the majority of behaviors and interaction took place. Implementing a treatment plan in such setting helps the student learn the desired behaviors given that the student can engage in different social learning methods such as observational learning and modeling. In addition, the student will be able to generalize behaviors learnt and practice them.

6.2 Limitations

There were several limitations to this study that may constrict the results obtained. One of the limitations is an issue of external validity in a single-subject research, which is generalizability. It is difficult to establish that a treatment is effective based on one subject only, even if the study supports the effectiveness of the treatment. Therefore, there must be a replication of the study with different
individuals in order to be able to generalize the results. Another limitation is the
duration in the intervention phase. One month only is not enough to determine the
effectiveness of a school program, therefore more time is required in future research.
In addition, since the observations and interventions were conducted by the
researcher herself, it is inevitable that a certain degree of subjectivity may be
established.

6.3 Further Research

More research is needed in this field of study, especially in Lebanon, since
studies that focus on social skills training with students that display behavioral
problems are scarce. Research on the effectiveness of social skills training with
students with behavioral problems is of high importance since social skills deficits
are present in students with different backgrounds. Unfortunately, the majority of the
Western studies highlight the importance of social skills in autism spectrum
disorders and dismiss its significance in other disorders. On the other hand, research
on the effectiveness of school based interventions should be conducted more
frequently to pinpoint the level of importance of such interventions.

6.4 Recommendations

Based on the findings of this study, it was concluded that social skills
intervention is crucial and of a benefit to the student. Therefore, schools should
consider adopting intervention programs that target students with behavioral
problems. By doing so, the schools are helping the students to become not only a
member of a group, but the whole community as well. Each student has his/her own
needs and the modification of treatment plans or interventions plays a vital role in the
effectiveness of such interventions.
References


Appendices
Appendix A: IRB Approval

NOTICE OF IRB APPROVAL

To: Ms. Hadeel Mahmoud
Advisor: Dr. Ahmad Dueini
School of Arts & Sciences

Date: May 12, 2015
RE: IRB #: LAU.505.A02.12/May/2015
Protocol Title: Achieving a systematic service integration program for children with challenging behaviors in school setting in Lebanon: a case study

The above referenced research project has been approved by the Lebanese American University, Institutional Review Board (LAU IRB). This approval is limited to the activities described in the Approved Research Protocol and all submitted documents listed on page 2 of this letter. Endorsed with this letter are the stamped approved documents that must be used. Kindly forward the signed letter from the school for our files.

APPROVAL CONDITIONS FOR ALL LAU APPROVED HUMAN RESEARCH PROTOCOLS

LAU RESEARCH POLICY: All individuals engaged in the research project must adhere to the approved protocol and all applicable LAU IRB Research Policies. PARTICIPANTS must NOT be involved in any research related activity prior to IRB approval date or after the expiration date.

PROTOCOL EXPIRATION: The LAU IRB approval expiry date is listed above. The IRB Office will send an email at least 45 days prior to protocol approval expiry - Request for Continuing Review - in order to avoid any temporary hold on the initial protocol approval. It is your responsibility to apply for continuing review and receive continuing approval for the duration of the research project. Failure to send Request for Continuation before the expiry date will result in suspension of the approval of this research project on the expiration date.

MODIFICATIONS AND AMENDMENTS: All protocol modifications must be approved by the IRB prior to implementation.

NOTIFICATION OF PROJECT COMPLETION: A notification of research project closure and a summary of findings must be sent to the IRB office upon completion.

IN THE EVENT OF NON-COMPLIANCE WITH ABOVE CONDITIONS, THE PRINCIPAL INVESTIGATOR SHOULD MEET WITH THE IRB ADMINISTRATORS IN ORDER TO RESOLVE SUCH CONDITIONS. IRB APPROVAL CANNOT BE GRANTED UNTIL NON-COMPLIANT ISSUES HAVE BEEN RESOLVED.

if you have any questions concerning this information, please contact the IRB office by email at christine.chalhoub@au.edu.lb

Dr. Costantin Daher
Chair, Institutional Review Board

Lebanese American University FW/00014723
IRB Registration #: IRB00006554 LAURIIB01

12 MAY 2015
APPROVED
Appendix B: Principal’s Consent Form

To:
[Beirut, Lebanon]

[15th of May 2015]

Object: Consent to collect data for an LAU research study entitled “Achieving a systematic service integration program for children with challenging behaviors in school setting in Lebanon: A Case Study”.

To whom it may concern,

I am writing to request permission for myself to be able to collect data from your students. I am a Special Education Masters’ student at the Lebanese American University (Department of Education) and would be visiting your facility only in order to complete a research project related to implement a program on a child with behavioral problem.

The data collected, which is based on a one month intervention, will be kept anonymous and will not be used for any other purpose. I will be interviewing one teacher and will be working with one child that requires special education. Parental consent will be secured before initiating the project (attached is the interview documents and the parental consent).

Please do not hesitate to contact me should you need any additional information.

Sincerely yours,

Hadeel Mahmoud, Principal Investigator

School of Arts and Sciences
Department of Education
Tel. 70916014
P.O.Box: 36-Byblos, Lebanon

Acknowledgement
Name: __________________________
Signature: _______________________
Date: 15 May 2015

Institutional Review Board
Lebanese American University

12 May 2015
APPROVED
Appendix C: Parental Consent Form

Parental Consent Form

Dear parents,

My name is Hadeel Mahmoud and I am a graduate student at the Lebanese American University (LAU) currently enrolled in the Master’s Program. I am studying Special Education.

The study: The purpose of this study is to implement a partial version of Mather and Goldstein (2008) program that incorporates principles of social skills training on a child with behavioral problems and to evaluate the efficacy of the stated program on a child with a behavioral problem.

I’ll be working with your child on a one-to-one basis for one hour per day for duration of four weeks. I’ll be working on principles of Applied Behavioral Analysis (ABA) and social skills. Your child will be asked to perform certain behaviors that are school appropriate such as sharing, waiting in turn for answering, raising his/her hand to answer or to ask for something, and similar behaviors.

I require access to your child’s assessment report and to the reports of the therapists at school, in order to serve him/her better. These reports will help me to identify the target behaviors that I will be working on.

Confidentiality: All the data and the results that will be obtained during this research will be remain anonymous and will not affect your child’s school records. Your child’s name will not be written on any document or be kept in any other records. All responses he/she provides for this study will remain confidential and only the researcher will have access to it. All data will be discarded once the study is done.

I kindly ask that you read this form before agreeing to have your child participate in this study. Thank you in advance for your cooperation; your child’s participation is highly appreciated.

Printed Name of Child

Signature of Parent(s) or Legal Guardian

Date

For further inquiries about the study, please do not hesitate to contact me at 70916014 or via email: Hadeel.mahmoud91@gmail.com

If you have any questions about your child’s rights as a participant in this study, or you want to talk to someone outside the research, please contact the:

IRB Office,
Lebanese American University
3rd Floor, Dorm A, Byblos Campus; Tel: 00 961 1 786456 ext. (2332)

[Institutional Review Board Logo]

12 MARCH 2015
APPROVED
Appendix D: Interview Introduction

Interview Introduction

This is a research project and for this project you will be asked to complete a short interview. This interview aims to evaluate your student behavior before and after intervention. You will be interviewed before the intervention starts, in order to highlight problematic behaviors your student is displaying, and after the intervention has occurred, in order to evaluate the efficacy of the program. The interview will take around 5-10 minutes.

The information you provide will be used as a part of the evaluation process of the implemented program, and they will be of a high importance to my research.

Your answers will not be released to anyone and your identity will remain anonymous. Your name will not be written on the questionnaire or be kept in any other records. All responses you provide for this study will remain confidential. When the results of the study are reported, you will not be identified by name or any other information that could be used to infer your identity. Only researchers will have access to view any data collected during this research. Your participation is voluntary and you may withdraw from this research any time you wish or skip any question you don’t feel like answering. Your refusal to participate will not result in any penalty or loss of benefits to which you are otherwise entitled to.

The research intends to abide by all commonly acknowledged ethical codes. You agree to participate in this research project by answering the interview questions. If you have any questions, please ask me.

Thank you for your time.

If you have any questions about your rights as a participant in this study, or you want to talk to someone outside the research, please contact the:

IRB Office,
Lebanese American University
3rd Floor, Dorm A, Byblos Campus
Tel: 00 961 1 786456 ext. (2332)
Appendix E: Instruments

Building Blocks Questionnaire

<table>
<thead>
<tr>
<th>Student's name</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher's name</td>
<td>Date</td>
</tr>
</tbody>
</table>

PART 1

The 10 questions composing Part 1 are general and provide an overview of the student's school-related skills and behavior. For each of the Building Blocks described with questions in the left-hand column, indicate with a check mark whether the student or child exhibits the behavior Rarely, Sometimes, or Frequently. Once you have completed Part 1, for each of the questions you have answered Frequently or Sometimes, proceed to Part 2 of the questionnaire and complete the additional 10 items corresponding to that Building Block. For example, if you answer Frequently to "Does the student appear inattentive or impulsive?" under the Foundational/Attention and Self-Regulation item, then proceed to the first section of Part 2 and answer the additional 10 items under the category of Attention and Self-Regulation.

<table>
<thead>
<tr>
<th>FOUNDATIONAL</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attention and Self-Regulation: Does the student appear inattentive or impulsive?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Emotions: Does the student appear to be sad or anxious more often than not during the day?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Behavior: Does the student have trouble following school rules?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Self-Esteem: Does the student appear to have a low opinion of him- or herself?</td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>SYMBOLIC</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>5. Phonological Processing: Does the student have difficulty hearing or applying letter sounds when speaking, reading, or spelling?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Orthographic Processing: Does the student have trouble reading or spelling words with irregular elements (e.g., once)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Motor Processing: Does the student have difficulty forming letters or writing legibly?</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>CONCEPTUAL</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>8. Thinking with Language: Does the student have trouble using or understanding oral language?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Thinking with Images: Does the student have difficulty creating mental pictures?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Thinking with Strategies: Does the student have trouble forming or following a plan?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
Building Blocks Questionnaire

PART 2

In Part 2, the Building Blocks described using the 10 questions in Part 1 are grouped according to the three tiers of the pyramid. In order to get more in-depth information about a student's strengths and weaknesses in these various areas, complete the 10 items for each corresponding block for the items for which you answered Frequently or Sometimes in Part 1.

<table>
<thead>
<tr>
<th>FOUNDATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTENTION AND SELF-REGULATION</td>
</tr>
<tr>
<td>Appears restless and fidgety</td>
</tr>
<tr>
<td>Shows inconsistencies in behavior depending on the type of task</td>
</tr>
<tr>
<td>Has trouble staying seated</td>
</tr>
<tr>
<td>Seems to act before thinking</td>
</tr>
<tr>
<td>Fails to finish tasks</td>
</tr>
<tr>
<td>Has trouble making transitions</td>
</tr>
<tr>
<td>Has difficulty working independently</td>
</tr>
<tr>
<td>Has trouble persisting on routine tasks for extended periods of time</td>
</tr>
<tr>
<td>Has difficulty listening to and following directions</td>
</tr>
<tr>
<td>Has trouble finding and organizing tasks and materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMOTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appears to be sad</td>
</tr>
<tr>
<td>Changes mood quickly</td>
</tr>
<tr>
<td>Worries excessively about school</td>
</tr>
<tr>
<td>Complains about school tasks</td>
</tr>
<tr>
<td>Cries</td>
</tr>
<tr>
<td>Seems anxious</td>
</tr>
<tr>
<td>Becomes angry quickly</td>
</tr>
<tr>
<td>Isolates self from peers</td>
</tr>
<tr>
<td>Seems bored or disinterested</td>
</tr>
<tr>
<td>Puts forth little effort</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Foundational</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavior</strong></td>
</tr>
<tr>
<td>Has difficulty getting along with peers</td>
</tr>
<tr>
<td>Is frequently in trouble at school</td>
</tr>
<tr>
<td>Lacks engagement in classroom instruction</td>
</tr>
<tr>
<td>Does not respond to discipline as expected</td>
</tr>
<tr>
<td>Disturbs or distracts others</td>
</tr>
<tr>
<td>Makes inappropriate physical contacts with peers (e.g., shoving, pinching)</td>
</tr>
<tr>
<td>Insults others verbally</td>
</tr>
<tr>
<td>Refuses to comply when asked</td>
</tr>
<tr>
<td>Seems argumentative</td>
</tr>
<tr>
<td>Hurts self or others</td>
</tr>
<tr>
<td><strong>Self-Esteem</strong></td>
</tr>
<tr>
<td>Seems disinterested in academic tasks</td>
</tr>
<tr>
<td>Complains about not being smart</td>
</tr>
<tr>
<td>Complains that academic tasks are too difficult</td>
</tr>
<tr>
<td>Has limited interactions with classmates</td>
</tr>
<tr>
<td>Complains about not being liked</td>
</tr>
<tr>
<td>Makes negative comments about self</td>
</tr>
<tr>
<td>Gives up easily on tasks and assignments</td>
</tr>
<tr>
<td>Seeks overly sensitive to criticism</td>
</tr>
<tr>
<td>Criticizes others</td>
</tr>
<tr>
<td>Seems to lack self-confidence</td>
</tr>
</tbody>
</table>

### Operational Definitions of Behaviors in the TOAD System

1. **Talking Out**: Spoken words, either friendly, neutral, or negative in content, are directed at either the teacher without first obtaining permission to speak or uncharacteristic of classmates during inappropriate times or during work periods.

2. **Out of Seat**: The child is not supporting his or her weight with the chair. Up on knees does not count as out-of-seat behavior.

3. **Attention Problem**: The child is not attending either to independent work or to a group activity. The child is therefore engaged in an activity other than that which has been directed and is clearly different from what the other children are doing. This includes the child's not following teacher directions.

4. **Disruption**: The child's actions result in consequences that appear to be interrupting other children's work. These behaviors might include noises or physical contact. They may be intentional or unintentional.

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Figure 6.2: The Talking Out/Out of Seat/Attention Problem/Disruption (TOAD) system (from Goldstein, S., & Goldstein, M. [1996]. Managing attention problems in children: A guide for practitioners [pp. 97-98]. New York: John Wiley & Sons. This material is used by permission of John Wiley & Sons, Inc.)

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12 MAY 2015
APPROVED
<table>
<thead>
<tr>
<th>Student</th>
<th>M</th>
<th>F</th>
<th>Grade</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observer</td>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Class activity
- Teacher-directed whole class
- Teacher-directed small group
- Independent work session

Directions: Observe each student once at 10-second intervals, then record data. This is a partial interval recording. If possible, collect data for a full 15 minutes under teacher-directed or independent conditions. If not, put a slash when classroom conditions change. Classmates observed must be the same sex as the student tested. To observe class, begin with the first same-sex student in row 1. Record each subsequent same-sex student in following intervals. Data reflect an average of classroom behavior. Skip unobservable students.

On-Task Code: E = Eye contact with teacher or task and performing the requested task.

Off-Task Codes:
- T = Talking out of turn, inappropriate verbalization or making sounds with object, mouth, or body.
- O = Out of seat. Student is fully or partially out of assigned seat without teacher permission.
- I = Inactive. Student not engaged with assigned task and is passively sitting.
- N = Noncompliance, Breaking a classroom rule or not following teacher directions within 15 seconds.
- P = Positive teacher interaction, One-to-one positive comment, smiling, touching, or gesture.
- = Negative teacher interaction, One-to-one reprimand, implementing negative consequences, or negative gesture.

<table>
<thead>
<tr>
<th>Student</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Classmate</td>
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<table>
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<tr>
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<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
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<th>25</th>
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<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classmate</td>
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</tbody>
</table>

The observation period lasts 15 minutes, and behavior is recorded at 15-second intervals (for a total of 90 intervals). The top of the box is used for the target student and the bottom is used for the classroom peer. At the end of each 15-second interval, record a + for on-task activities or a − for off-task activities for each student. Ignore all behaviors between the recording points. At the end of the 15-minute observation period, compute the percentage of on-task behavior for both students. This may be accomplished using the formula provided in Figure 6.4 (Rhode et al., 1992).

When Jeremy was in third grade, a volunteer completed this type of observation for Jeremy and his classmate Roger while they were engaged in a small-group activity. Jeremy had been on task for 34 of the 90 intervals. He had been off task for 56 of the 90 intervals. His total time on task was 34/90 x 100, or approximately 38% of the time.

In contrast, Roger had been on task for 78 of the 90 intervals and had been off task for 12 of the intervals. His total time on task was 78/90 x 100, or approximately 87% of the time. As a general guideline, if a student is on task less than 60% of the time and the peer’s average is 65% or more, the target student’s attention to the task is problematic. If both students’ on-task behavior is below 60%, the problem may be more related to classroom management (Rhode et al., 1992). When compared with his peer, Jeremy appears to be much more distractible and off task.

As a general rule, a student should be observed in two different settings or two different types of activities. Some students are only off task and distractible when presented with tasks they find uninteresting. Other students are distractible only during specific subjects, such as in a math class. Students’ abilities to pay attention vary depending on the type of task, the difficulty of the material, the type of activity, the setting, and the teacher’s classroom management skills.

Positive reinforcement should follow immediately after the good behavior. The reinforcement should be specific and initially continuous, slowly moving to an intermittent schedule. There are different types of reinforcers. Material reinforcers provide the child with something tangible; even if material reinforcers are used, however, a kind word from the teacher should always accompany them. Social reinforcers are more versatile. As a general principle, it is easier to increase behavior than decrease it. Thus, when choosing a target behavior, it is preferable to focus on behaviors to be increased rather than on those to be decreased. Shon and Bauer (1987) described the following process to apply positive reinforcements effectively:

1. Select a target behavior to increase, define the behavior, and choose a reinforcer.
2. Observe the child and watch for the behavior.
3. Reinforce the target behavior every time it is exhibited.
4. Comment in a positive way about the behavior when providing reinforcement.
Appendix F: Student’s Assessment Forms

Psychological Assessment

Robert RIZQ-HSSD-AEDS-CHTD-PAD-SPTPD-MED-IPD
Clinical and Pathological Psychology
Psychological Assessment Specialist
Cognitive and Behavioural Therapy
Couple and Family Systemic Therapy
Instructor at St. Joseph University
LACFT Certified
Tel: 01-386748 / 01-56073 / 76-709536
psyris@gmail.com

Statement of confidentiality
This Psychological Assessment Report contains confidential information and is limited to the mother. Further disclosure, any reproduction or share of this document should not be possible without her permission and must require the total consent from her.

Name: 
DOB: July 15, 2008
Gender: Male
Age at time of assessment: 6 years
Education: Grande Section de Maternelle
Institution: Lycee Frampais - Verdun
Request to: Psychological Assessment
Reason for referral: Learning Difficulties
Dates of evaluation: July and August 2014
Reference: CAB-MK 14

Psychological Assessment Report

Referral question
A 4 year 6 month boy, has been referred by his Speech and Language Therapist, Miss , for a comprehensive psychological assessment due to his Oral Language Specific Disorder affecting his learning abilities and his behavior regulation.

The comments reported by his mother indicate that he became to have considerable difficulties to talk and to communicate rightly with others. He also has insufficient lexical repertoire and cannot repeat correctly all the words for his age. Nevertheless, he also suffers from attention-concentration problems combined, occasionally, to overactive behavior and impulsive reactions.

On the other hand, he had suffered this year from important problems in his school. It seems that he was incapable to cope and to respond adequately to the academic requirements. We also know from the mother that he was accompanied by a shadow teacher in order to help him in the classroom to be more regulated.

Background information
The mother’s pregnancy has been unfolded with no complications and the delivery was done by cephalic procedure at time with no problem.

Nevertheless, the neo-developmental parameters (Condition at Birth) globally were good. However, “a post-developmental milestones were not to be typical. A speech and language delay was shown (1st words produced at 1.3 year and 1st sentences not totally produced until now) hindering his abilities to talk, communicate and to understand with, occasionally, verbal perseverations used. Otherwise, his psychomotor skills were to be within the clinical norms : Walking activity at around 14 months and Sphincter Hygiene at 2-2.6 years.

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Finally, he is the youngest of 3 siblings (Lana and Atef, aged respectively: 17 and 12.6 years). He is currently in a good health and he doesn’t have any eating or sleeping disorder. He also doesn’t have any visual or hearing deficiency and he is right handed.

Medical Investigations

At age of 3, when he had suffered from language delay and had adaptive problems at school, a neuropsychiatrist advice was done. The main objective was eventually to find if there are such of features that could explain his speech and language delay and his behavioral agitation. He was tested for genetic disorder and neurological disturbances, and an MRI has been administered for him. The results were to be normal, but some liquid in the inner ear was detected and was treated by tubes installation in order to have more auditory efficiency.

Mother’s concern

The actual concern of his mother is about the proper academic and/or parent accompanying targeting eventually a congruent development of his cognitive-intellectual functions and his behavioral regulation to reach more adaptive abilities and to become more efficient in his daily life experiences.

Behavioral and Clinical Observations

Throughout the sessions, he manifested the following:

- Good eye contact and sufficient emotional reciprocity when needed.
- Insufficient speech and verbal communication.
- Sufficient interaction with the examiner.
- No mood fluctuations were observed.
- Absence of motor mannerisms such as movements or other rituals.
- No stereotyped behaviors were noted.

In addition:

- Had difficulties sustaining attention in tasks or written activities, and he did not pay attention to details.
- Did not often listen when spoken to directly.
- Did not always follow through on instruction. Important difficulties were noted especially when it comes to understand double or combined information. He also has a tendency to do things as he wants.
- Often avoided or disliked to engage in tasks that require long mental effort.
- Often easily distracted by extraneous stimuli.
- Did have some impulsive reactions combined to overactive behavior.

Purpose and targets of the assessment

The purpose of this evaluation is to detect and to find solutions to:

- The speech and language delay that could affect his learning academic process.
- The behavioral disturbances that could interfere with his learning skills.
- Other difficulties (functions and/or abilities) that globally could affect his psychological development.

The other scientific targets is to:

- Assess his cognitive-intellectual abilities.
- Investigate about a co-morbid disorder that eventually could exist with his speech-language delay.
- Find the right solutions (academic or therapeutic) to his difficulties.

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6 – On the R-CMAS, _______ does not show enough symptoms to have Anxiety [Raw score = 13, Average for his age = 11.59 with a T-score = 53].

7 – On the CAT, _______ suffers from dependent-immature attitude combined to anxious-impulsive reactions and overactive behavior which could affect his developmental process and his learning abilities.

Clinical Diagnosis

According to the multi-axial classification of the DSM-IV, the most probable diagnosis is:

Axis I: Learning Difficulties.

Axis II: Low Intellectual Efficiency (PSIQ = 58).
- Speech and Language Delay.
  - ADHD (Mixed Type: inattention, Agitation and Impulsivity).

Axis III: No medical affections co-morbidity.

Axis IV: No Adaptive and Interaction problems.

Axis V: Low Intellectual Efficiency affected by his Speech and Language delay and combined to ADHD.

Recommendations

In the next academic year, _______ needs to be placed in a special educational setting that has a learning support department.

Otherwise, in order to gain more abilities and to obtain more stability and regulation in his behavior, it will be recommended that _______ profits from the presence of a shadow teacher targeting more adapted conduct in a regular classroom. He also can benefit from individualized instruction in areas of weakness (showed up through the WPPSI-R and the VABS) to compensate his gaps and to be more attentive and less impulsive.

On the other hand, this special support program must be associated to a professional assistance from:

✓ A speech-language therapist to get more abilities in the verbal-communication potentialities and to be ready to attend reading and writing skills.
✓ An occupational therapist to develop his spatial abilities and to ameliorate his fine motor skills.
✓ A psychotherapist to help him in his behavior's regulation.

Finally, a psychological assessment must be done in one year from this date to evaluate the benefits of the different professional interventions and their effects on _______’s learning process and his behavioral regulation.

Beirut, August 26th 2014.

Robert RIZK, HSSD, AED, CBTD, MAP, EFFED, MED, IPD
Clinical Psychologist
Psychotherapist

[Signature]

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**School’s Assessment**

The Initial Report is a summary of your child’s strengths and weaknesses. It also shares with you the therapy goals and objectives that will help him/her improve his/her performance in the related domain.

<table>
<thead>
<tr>
<th>Number of sessions per week:</th>
<th>2 Individual sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of each session:</td>
<td>Individual sessions: 35 minutes</td>
</tr>
<tr>
<td>DOB:</td>
<td>15/07/2008</td>
</tr>
</tbody>
</table>

**Strengths:**
- Shows enthusiasm during his therapy sessions.
- Interacts positively with his therapist.
- Participates in any suggested activity.

**Difficulties:**
- Shows difficulties in communication and social skills.
- Shows difficulties in demonstrating an appropriate behavior.
- Needs guidance to improve his play skills.

**Therapy Goals/Objectives:**
1. Demonstrate appropriate communication and social skills.
   - Greet others and respond to greetings.
   - Make and maintain eye contact with the speaker during a conversation.
   - Follow directions.
   - Respond to questions by using Yes or No appropriately.
   - Use appropriate tone and facial expressions.
   - Gain attention in a socially appropriate manner.
   - Use polite phrases, e.g., Please, Thank you.
<table>
<thead>
<tr>
<th></th>
<th>2. Demonstrate and improve appropriate school behavior.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Respond to his name when called.</td>
</tr>
<tr>
<td></td>
<td>- Sit in assigned seat.</td>
</tr>
<tr>
<td></td>
<td>- Remain in seat unless given permission to get out of seat.</td>
</tr>
<tr>
<td></td>
<td>- Identify and respect turn taking.</td>
</tr>
<tr>
<td></td>
<td>- Accept redirection appropriately.</td>
</tr>
<tr>
<td></td>
<td>- Ignore distractions in environment by continuing to focus on his own work.</td>
</tr>
<tr>
<td></td>
<td>- Work steadily with attention focused on task.</td>
</tr>
<tr>
<td></td>
<td>- Ask permission to use others' property.</td>
</tr>
<tr>
<td></td>
<td>3. Demonstrate appropriate play skills and peer relations.</td>
</tr>
<tr>
<td></td>
<td>- Learn and follow the rules when playing an organized game.</td>
</tr>
<tr>
<td></td>
<td>- Wait for turn when playing in a game.</td>
</tr>
<tr>
<td></td>
<td>- Use appropriate movements, touching and gestures.</td>
</tr>
<tr>
<td></td>
<td>- Respect others physical space.</td>
</tr>
<tr>
<td></td>
<td>- Ask for help when needed, in a positive manner.</td>
</tr>
</tbody>
</table>
Appendix G: Teacher’s Interview

An interview was conducted with the classroom teacher, after the student was selected. The teacher was asked to describe the student’s behavior pre and post intervention. The questions were as follows:

1. In few sentences, please can you describe the behavior of your student in the classroom and the playground?

2. In your opinion, what behaviors are challenging to your student, and you think I should target?

3. After the intervention has been made, did you notice any change in your student’s behavior?

4. Do you think we should proceed with our intervention for the coming years with your student?

The first two questions were addressed to the teacher in the pre-intervention phase and the last two questions were addressed to her at the post-intervention phase. The teacher was cooperative and supportive.

The answers were reported verbatim.

1. “My student is a very sensitive boy. He gets frustrated easily and gets emotional. However, he's teachable; he is willing to learn and I believe he will respond to the intervention that will be given to him. On the other hand, I can see that he has difficulties in knowing how to communicate with me, my fellow teachers and his peers. And when it comes to play, he engages with his friends, but doesn’t know how to play without
hurting others. He’s a bit aggressive when it comes to play. Umm...to add to this, he also has difficulty in transition periods. He doesn’t know how to move from one activity or lesson to the other without doing any disruptive behavior, such as running in the hallways, or jumping to class.”

2. “In my opinion, my student should display more age appropriate behaviors, such as walking to class instead of jumping and running, how to listen to the teacher’s instructions and how to play in a nice way, without being aggressive with his peers. He should also differentiate between a good behavior and a bad behavior. I think he needs more practice to know the rules of the school and the classroom.”

3. “After one month of intervention, my student has changed in many different ways. He became aware of the school and classroom rules and he’s abiding by them. Regarding transition periods, he is much more disciplined now; he walks to class instead of running or jumping. When it comes to play during recess time, he’s playing in a much age appropriate manner.”

4. “My student was missing this kind of therapy. He’s doing three different types of therapy here at school, but what is special about this intervention that it was made in a classroom setting and not as a pull out session. The therapist was with the student in his environment, and not vice versa. I believe this helped my student to generalize the behaviors are being taught to other similar circumstances.”
Appendix H: Reinforcement Menu

A. Consumable Reinforcers:
   - Chocolate
   - Popcorn
   - Juice Box
   - Milkshake

B. Activity Reinforcers:
   - Read a book
   - Picnic in the school’s garden
   - Play in the computer lab
   - Play with a puzzle

C. Manipulative Reinforcers:
   - Write on the whiteboard
   - Leave the class 2 minutes earlier to recess
   - Get 5 extra minutes in the playground
   - Watch 5 minutes from a superhero DVD

D. Possessional Reinforcers:
   - Get animal toys
   - Get stamps
   - Take a story home
   - Get crayons

E. Social Reinforcers:
   - High five
   - Good Job
   - Tap on the shoulder
   - Proud of you
Appendix I: Building Blocks Questionnaire

### Building Blocks Questionnaire

**PART 2**

In Part 2, the Building Blocks described using the 10 questions in Part 1 are grouped according to the three tiers of the pyramid. In order to get more in-depth information about a student’s strengths and weaknesses in these various areas, complete the 10 items for each corresponding block for the items for which you answered frequently or sometimes in Part 1.

<table>
<thead>
<tr>
<th>FOUNDATIONAL</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATTENTION AND SELF-REGULATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appears restless and fidgety</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Shows inconsistencies in behavior depending on the type of task</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has trouble staying seated</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seems to act before thinking</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fails to finish tasks</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has trouble making transitions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has difficulty working independently</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has trouble persisting on routine tasks for extended periods of time</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has difficulty listening to and following directions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Has trouble finding and organizing tasks and materials</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>EMOTIONS</strong></td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Frequently</td>
</tr>
<tr>
<td>Appears to be sad</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Changes mood quickly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worries excessively about school</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Complains about school tasks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cries</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seems anxious</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Becomes angry quickly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Isolates self from peers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seems bored or disinterested</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Puts forth little effort</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(continued)
# Building Blocks Questionnaire

(continued)

<table>
<thead>
<tr>
<th>FOUNDATIONAL</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has difficulty getting along with peers</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Is frequently in trouble at school</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Lacks engagement in classroom instruction</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not respond to discipline as expected</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disturbs or distracts others</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes inappropriate physical contacts with peers (e.g., shoving, pinching)</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insults others verbally</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Refuses to comply when asked</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seems argumentative</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Hurts self or others</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SELF-ESTEEM</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seems disinterested in academic tasks</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complains about not being smart</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complains that academic tasks are too difficult</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has limited interactions with classmates</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complains about not being liked</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes negative comments about self</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives up easily on tasks and assignments</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seems overly sensitive to criticism</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criticizes others</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Seems to lack self-confidence</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Building Blocks Questionnaire

Student's name_________________________Grade_________________________
Teacher's name_________________________Date___________________________

PART 1

The 10 questions composing Part 1 are general and provide an overview of the student's school-related skills and behavior. For each of the Building Blocks described with questions in the left-hand column, indicate with a check mark whether the student or child exhibits the behavior: Rarely, Sometimes, or Frequently. Once you have completed Part 1, for each of the questions you have answered Frequently or Sometimes, proceed to Part 2 of the questionnaire and complete the additional 10 items corresponding to that Building Block. For example, if you answer Frequently to "Does the student appear inattentive or impulsive?" under the Foundational/Attention and Self-Regulation item, then proceed to the first section of Part 2 and answer the additional 10 items under the category of Attention and Self-Regulation.

<table>
<thead>
<tr>
<th>Foundational</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attention and Self-Regulation: Does the student appear inattentive or impulsive?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>2. Emotions: Does the student appear to be sad or anxious more often than not during the day?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Behavior: Does the student have trouble following school rules?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Self-Esteem: Does the student appear to have a low opinion of him-/ herself?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symbolic</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Phonological Processing: Does the student have difficulty hearing or applying letter sounds when speaking, reading, or spelling?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Orthographic Processing: Does the student have trouble reading or spelling words with irregular elements (e.g., once)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Motor Processing: Does the student have difficulty forming letters or writing legibly?</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conceptual</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Thinking with Language: Does the student have trouble using or understanding oral language?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9. Thinking with Images: Does the student have difficulty creating mental pictures?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Thinking with Strategies: Does the student have trouble forming or following a plan?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
### Appendix J: TOAD System

#### Operational Definitions of Behaviors in the TOAD System

1. **Talking Out**: Spoken words, either friendly, neutral, or negative in content, are directed at either the teacher without first obtaining permission to speak or unsolicited at classmates during inappropriate times or during work periods.

2. **Out of Seat**: The child is not supporting his or her weight with the chair. Up on knees does not count as out-of-seat behavior.

3. **Attention Problem**: The child is not attending either to independent work or to a group activity. The child is therefore engaged in an activity other than that which has been directed and is clearly different from what the other children are doing. This includes the child's not following teacher directions.

4. **Disruption**: The child's actions result in consequences that appear to be interrupting other children's work. These behaviors might include noises or physical contact. They may be intentional or unintentional.

---

![TOAD System Table](image-url)
Appendix K: Behavioral Observation Form

<table>
<thead>
<tr>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Position: □ Teacher-directed whole class □ Teacher-directed small group □ Independent work session</td>
</tr>
<tr>
<td>Directions: Observe each student once at 10-second intervals, then record data. This is a partial interval recording. If possible, collect data for a full 15 minutes under teacher-directed or independent condition. If not, put a slash when classroom conditions change. Classmates observed must be the same sex as the student tested. To observe class, begin with the first same-sex student in row 1. Record each subsequent same-sex student in following intervals. Data reflect an average of classroom behavior. Skip unobservable students.</td>
</tr>
<tr>
<td>On-Task Code: E = Eye contact with teacher or task and performing the requested task.</td>
</tr>
<tr>
<td>Off-Task Codes:</td>
</tr>
<tr>
<td>T = Talking out/noise, inappropriate verbalization or making sounds with object, mouth, or body.</td>
</tr>
<tr>
<td>O = Out of seat. Student is fully or partially out of assigned seat without teacher permission.</td>
</tr>
<tr>
<td>I = Inactive. Student not engaged with assigned task and is passively sitting.</td>
</tr>
<tr>
<td>N = Noncompliance, breaking a classroom rule or not following teacher directions within 15 seconds.</td>
</tr>
<tr>
<td>+ = Positive teacher interaction. One-to-one positive comment, smiling, touching, or gesture.</td>
</tr>
<tr>
<td>− = Negative teacher interaction. One-to-one reprimand, implementing negative consequences, or negative gesture.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student</th>
<th>Classmate</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student</th>
<th>Classmate</th>
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<th>Classmate</th>
</tr>
</thead>
</table>

Figure 6.2: Behavioral observation form. (From Rhode, C., Jensen, W. J., & Renz, H. L. (1993). The tough kid book: Practical classroom management strategies. p. 27). Longmont, CO: Sopris West, Inc. (adapted with permission of Sopris West, Inc.)