

EFFECTS OF SOCIAL STORIES ON NON-COMPLIANT BEHAVIOR
IN PRESCHOOL GENERAL EDUCATION SETTING

by

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A Master's Project

Submitted in Partial Fulfillment

Of the Requirements for the Degree of

Masters of Science in Education

Curriculum and Instruction in Inclusive Education

Department of Curriculum and Instruction

State University of New York at Fredonia

Fredonia, New York

December 2013

State University of New York at Fredonia
Department of Curriculum and Instruction

CERTIFICATION OF PROJECT WORK

We, the undersigned, certify that this project entitled EFFECTS OF SOCIAL STORIES ON NON-COMPLIANT BEHAVIOR IN PRESCHOOL GENERAL EDUCATION SETTING by Sara Baker, candidate for the Degree of Master of Science in Education, Curriculum and Instruction in Inclusive Education, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.

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Abstract

Social stories have been widely used for children diagnosed with autism; however, little research has been conducted on the use of social stories with children in a general education setting who have no diagnosed disabilities. This study investigates the use of social stories with students with no disabilities in a general education preschool classroom at a university based group care center. In this study, social stories were developed and implemented to decrease non-compliant behaviors and increase prosocial behaviors of children during clean-up time. Participants included four 3 and 4 year old preschool students. A quantitative experimental design was used to analyze the effects of the social story on an experimental group of two students, compared to a control group of two students. Direct observation and a daily behavioral record were used to tally the number of targeted behaviors each participant demonstrated during clean-up. Results indicated an increase in prosocial behaviors and a decrease in non-compliant behaviors for one participant in the experimental group and a decrease in prosocial behaviors and an increase in non-compliant behaviors for the other participant in the experimental group. Limitations included a small sample size with a number of outside variables that could have affected the participant's behaviors.

Keywords: Preschool; social stories; non-compliant behavior; prosocial behavior

Table of Contents

Introduction.....	5
Literature Review.....	8
Behavior Guidelines.....	9
Anti-social Behaviors.....	12
Types of Stories Used with Preschool Age Children.....	16
The Practice of Using Social Stories.....	19
Methodology.....	22
Findings.....	30
Discussion.....	39
References.....	46
Appendices.....	52

Introduction

The following research focuses on the question, “Does the use of social stories decrease non-compliance and increase prosocial behaviors of preschool general education students’ ages 3 to 4 years during clean-up time?” The basis for this inquiry is to investigate if the use of these stories increases the positive behaviors of children who have demonstrated inappropriate, non-compliant behavior. Children ages 3 to 4 years old, are often still learning how to interact positively with their peers through the use of language and appropriate physical contact. According to Benish & Bramlett (2011), “Social stories have been widely used for children with autism and developmental delays; however, little research has been conducted that examines their effectiveness with pre-school children who have no developmental delays” (p. 1). By examining the use of social stories with the general education population, I had hoped to show if these stories would have a positive effect on altering the behaviors of these young children as a form of behavior management. For my study, I investigated if the use of these stories decreased non-compliant behaviors while increasing prosocial behaviors in an experimental group of two children. This study took place in a general education setting and used quantitative data to compare the number of these behaviors documented between an experimental group and a control group during clean-up time.

Whitehead (2007) further supports the use of social stories for addressing behavior issues stating, “The social story is a personal medium for learning and a concrete way of understanding the appropriate responses in social situations” (p. 36). With this in mind, exploring the effects of social stories is an important way to assess if the use of these stories has a significant impact on increasing the number of appropriate behavior in students. The use of social stories is relatively new having been introduced in 1994 by Gray (Whitehead, 2007), which is why research must be

conducted in order to view the effectiveness of this intervention. Whitehead (2007) describes social stories as being,

written for an individual to provide a script in particular situations. In giving information about other people's thoughts, actions and social meanings, Social Stories provide a "what, when, who and why of social situations" (Attwood, 1999). Thus, the Social Story is a personal medium for learning and a concrete way of understanding the appropriate responses in social situations (p. 36).

Personally, I have seen the positive effects of social stories in the intervention placed on my younger brother and sister who were both diagnosed with autism when they were each 1 year old. Social story interventions were one of the first interventions implemented for both of my siblings when they started developing language. The social stories developed for my siblings ranged from learning how to appropriately initiate play with peers, to how to trick-or-treat during Halloween. This made me question why this same intervention could not be used with young children still learning social norms in the general education population. By investigating the use of social stories on the general education population, I was able to explore whether these stories could be used to promote positive social interactions and decrease negative social interactions.

Research has been conducted in many different domains with social story interventions. These interventions range from easing transitions throughout the day (Briody & McGarry, 2005), to decreasing tantrum behavior in home settings (Lorimer, Simpson, Myles, & Ganz, 2002). The question must then be asked, why are social stories such a highly used intervention strategy in comparison to the many other genres of literature available and designed for young children? Social stories have some aspects that make them unique compared to other pieces of literature. The main unique component is that the stories are individualized for one particular child

(Whitehead, 2007). These stories are designed based on the individual needs, interests, and perspectives of the student subject to the intervention (Whitehead, 2007). Whitehead (2007) lists some examples of these unique characteristics such as using the child's name in the title and the plot, including people and places that are relevant to the child and his needs, establishing perspectives and emotions of other characters in the story, and focusing on the prosocial behaviors that the intervener wants to increase rather than negative behaviors.

In order to develop a comprehensive theory on the research question presented I will need to investigate some foundational research. In a study by Whitehead (2007), he references that social stories were originally developed in 1994 as an intervention for people with Autism Spectrum disorder (ASC). A study conducted by Lorimer et. al. (2002), used social stories as a way to decrease tantrum behaviors of a preschool age student diagnosed with autism. The study suggests that social stories not only assisted in decreasing tantrum behaviors of the child, but also increased the effectiveness of other interventions being implemented for the child (Lorimer et. al., 2002). This research supports the use of social stories interventions with children who are diagnosed with autism; however, research on the effectiveness of social story interventions on the general education population still needs to be investigated. Another study conducted by Benish & Bramlett (2011), explored if social stories had an effect on decreasing aggressive behaviors and increasing prosocial behaviors of normally developing preschool children. The results of this study determined a distinct decrease in aggressive behaviors, as well as an increase in prosocial behaviors of the preschool children in the study (Benish & Bramlett, 2011). Based on the positive effects that have been documented, further research should be conducted in order to extend the support of these previous studies. The following literature review, provides the basis for my research question, "Does the use of social stories decrease non-compliance and

increase prosocial behaviors of preschool general education students' ages 3 to 4 years during clean-up time?"

Literature Review

This literature review explores the behavioral expectations of preschool children, and investigates past use of social stories for children with and without autism. I first examine social and emotional expectations for preschool age children based on New York State learning standards, and how these goals align with the expectations of parents and teachers. Next, anti-social behaviors of aggression and non-compliance are analyzed and compared to the prosocial behavioral expectations for preschool age children. Social stories are then compared to traditional folktales that are commonly used in preschool general education classrooms. Finally, the use of social stories on children with autism and without disabilities is investigated.

The theoretical framework underpinning this thesis and the use of social stories to guide social skill development is based on *Theory of Mind* (ToM). Baird (2008), states "Theory of Mind, traditionally defined, is a casual, explanatory framework for understanding and predicting human behavior on the basis of internal mental states" (p. 143). To further explain this definition, Theory of Mind represents the ability to access one's own mental states and understand that others have these same mental states. Past research has been conducted, which provides support in connecting linguistic and social skills to the development of a child's Theory of Mind (Reynhout & Carter, 2006). Since social stories were originally developed in order to provide social guidance for children with autism, we must first view Theory of Mind in reference to children with autism. According to Baird (2008), "There is now a large body of evidence documenting Theory of Mind deficits in individuals with autism"(p. 146). Individuals with autism often show deficits in the realms of linguistics and social skills (Reynhout 2006).

Reynhout & Carter (2006) communicate further about deficits relating to ToM by stating, “Individuals with autism lacking ToM, are unable to appreciate other people’s intentions, beliefs, needs and desires” (p. 446). Although children with autism may often show more severe deficits within their social skill development, non-disabled preschool children often lack social skills as well. This link between children with autism and non-disabled preschool age children indicates a similar characteristic in reference to ToM. Therefore the following literature review will use ToM as a framework for the basis of the use of social stories.

Behavior Guidelines

Behavior management is a part of the preschool general education classroom with which teachers often struggle. New York State provides guidelines on social skills to assist in setting goals for children in preschool general education classrooms that teachers are expected to assess and develop. According to Gral, Sezer, Gven, & Azkeskin (2013) social skills are defined in their most general terms as,

the center of the necessary social communication to realize an individual’s behavioral elements to succeed in social interactions without psychologically or physically hurting other people, to understand the feelings, thoughts and behaviors of others including himself in interpersonal situations and to act according to this understanding, and to realize activities such as learning, working and sharing in various situations as an individual (p.53).

An increasing number of studies are being conducted analyzing which factors have potential to influence the social skills of preschool age children (Gral et.al., 2013). Some factors that have been researched include the “child’s age, gender, number of siblings, status of continuation to preschool, peer relations, parents’ ages and levels of education, family’s socioeconomic level,

academic status, etc.” (Güral et.al., 2013, p. 53). No matter the factors involved, it is important to teach these social skills during early childhood because of the effect social skill development can have for children in their future development (Güral et.al.).

Beyond the importance behind social skill development it is also important to note the areas in which preschool age children have the opportunity to learn appropriate social skills. Often preschool age children have opportunities to learn social skills at school that they do not have in a home setting, such as interacting with peers and cooperating with others (Yuksel, Kucukoglu, & Ünsal. 2013). Thus, it is the responsibility of the teacher to provide the highest quality learning experiences for the development their students’ social skills within the classroom environment. By developing the students’ social skills to their highest potential the teacher is not only strengthening the children’s development, but also strengthening their learning process, which can assist them with their future academics (Yuksel, Kucukoglu, & Ünsal. 2013). The following section will analyze the guidelines presented to teachers by New York State’s Foundation for the Common Core and how these guidelines align with the concerns of teachers and parents.

New York State’s Foundation for the Common Core social development goals.

Social interaction is defined by the New York State Education Department (2011) within domain number three of social and emotional development in the *Foundation for the Common Core*. Within this domain there are five main categories emphasized as a standard of development for the prekindergarten setting (New York State Education Department [NYSED], 2011). The first category is to develop self-concept and self-awareness as the child “recognizes himself/herself as a unique individual having his/her own abilities, characteristics, feelings and interests” (NYSED 2011, p. 15). This includes not only identification of one’s own unique characteristics, but the

identification of one's own feelings and the awareness that these feeling can change due to peers and environment (NYSED, 2011). The next category addressed is the child's ability to self-regulate "his/her responses to needs, feelings and events" (NYSED, 2011, p. 15). This definition includes identifying emotions and expressing these emotions appropriately (NYSED, 2011). Another category focused on is the child's ability to interact appropriately with others (NYSED, 2011). The child should engage in this standard by demonstrating positive social interactions with peers and caregivers such as approaching children already playing and demonstrating problem solving skills (NYSED, 2011). The following category is accountability in that the child "understands and follows routines and rules" (NYSED, 2011, p. 16). The characteristics of accountability include following rules and displaying the ability to apply rules to similar situations (NYSED, 2011). Finally, children should be able to demonstrate the ability to adapt to change in routine and settings (NYSED, 2011). The social objectives previously listed indicate the expectations presented by New York State Foundation for the Common Core; the following paragraph will explore the expectations both teachers and parents have for children in group care and home settings.

Behavioral expectations in school and at home. The Foundation for the Common Core provides standards that should be met within the preschool; however, the question remains as to whether these standards are aligned with the concerns and expectations of the parents and teachers who interact with the children most frequently. Graves, Blake & Kim's (2012) study explores these expectations and suggests that "the two most common behavior problems for preschool children identified by both parents and teachers were attention problems and social skill deficits, and the least common behavior problem identified by teachers was hyperactivity" (p. 156). The study used a parent and teacher rating system called, the Behavior Assessment

System for Children- Second Edition, to assess the prevalence of children at risk for behavior problems for 320 preschool aged students (Graves, et.al., 2012). Within this study, social skill deficits contributed to the prevalence of 24% of the at risk behaviors of female students within the study and 41% of male students within the study (Graves et al., 2012). The social skill deficits include the failure to demonstrate: prosocial interactions such as giving compliments to one's peers, offering assistance, and demonstrating skills necessary for integration into a multitude of community settings (Graves et al., 2012). Although teachers rated different behaviors as more concerning than the behaviors indicated by the parents, both teachers and parents rated social deficits as the most problematic behavior for the preschool children with whom they interacted (Graves et al. 2012). Another study conducted by Colker (2013), emphasizes the importance of building social and behavioral skills not only as an important factor in the development of young children, but also as a positive predictor of future success in school. Along with the increasing social skills among preschool age children, studies have also focused on decreasing negative social behaviors. The following section explores aggression among young children and how aggressive behavior can affect a young child's learning and development.

Anti-social Behaviors

Anti-social behavior occurs when children continuously violate prescribed patterns of social behaviors (Beard & Sugai, 2004). Anti-social patterns of behavior such as “whining, non-compliance with parents and teachers (e.g. disobedience, talk-outs, touching others, being out of seat), and fighting” (Beard & Sugai, 2004, p. 396) can often escalate to more serious patterns of anti-social behavior such as, “lying, minor theft, and cheating” (Beard & Sugai, 2004, p. 396). Beard & Sugai (2004) also suggest that if these behaviors are not intervened upon they can

escalate to “stealing, assault, homicide, vandalism, and other acts of delinquency” (p. 396). Anti-social behaviors may not only effect child development, but may also correlate with academic struggles including, “rejection by teachers and peers, alternative placement (e.g. special education), school failure, delinquency, and dropping out of school” (Beard & Sugai, 2004, p.396). These more severe behaviors more often occur when anti-social behaviors are demonstrated in multiple settings interacting with varied individuals (Beard & Sugai, 2004). Although these more severe antisocial behaviors occur under extreme circumstances, it is important to understand the value of converting these negative behaviors into a prosocial outlet as a preventative approach. The following section will investigate two anti-social behaviors that occur among preschool aged children, as well as the prosocial behaviors that teachers and parents would like children to demonstrate in place of these anti-social behaviors.

Types of aggression. Aggression has been studied in many different forms including: physical aggression (Benish & Bramlett, 2011; Chen, McComas, Hartman, & Symons. 2011; Ostrov Ries, Stauffacher, Godleski, & Mullins. 2008), relational aggression (Ostrov et. al. 2008; Swit & McMaugh, 2012), and verbal aggression (Benish & Bramlett, 2011). Physical aggression is defined by Ostrov et. al. (2008) as “hitting, pushing, kicking, forcefully taking objects, or the intent to hurt another individual using physical force or the threat of physical harm” (p. 664). Studies have also been conducted based on relational aggression, which is defined by Swit & McMaugh (2012) as “a subtle form of aggressive behaviour that uses dyadic relationships and manipulation as a vehicle of harm” (p. 30). Examples of relational aggression include acts such as excluding a peer from play, social alienation, one peer taking control of another peer’s behavior, and rejecting a peer (Swit & McMaugh, 2012). This form of aggression uses relationships, friendships, and social status as a method of harm to peers (Fanger, Frankel, &

Hazen, 2012). Another form of aggression that has been studied is verbal aggression, which has been defined by Benish & Bramlett (2011) as acts including screaming, tantruming, verbally threatening peers, and calling peers inappropriate names. A study conducted by Chen, McComas, Hartman, & Symons (2011) found “early aggression has myriad consequences, with poor social outcomes (e.g., peer rejection) influencing long-term well-being” (p. 575). Given this long-term effect, researchers must conduct further studies on the causes of aggressive behaviors and strategies to decrease negative outcomes of this behavior in the future. Although aggression can be a dangerous behavior to manage in the classroom, a more prevalent inappropriate behavior found in the classroom is non-compliance. The following paragraph will investigate non-compliance in the classroom, what it is, and how this behavior can have a negative effect on the student’s future if not intervened upon effectively.

Non-compliance in the classroom. Another prevalent area of problem behavior in the classroom is non-compliance (Reynolds, Stephenson & Beaman, 2011; Wilder & Atwell, 2006; Wilder, Saulnier, Beavers, & Zonneveld, 2008). Reynolds et. al. (2011) defines non-compliance as,

...direct defiance, simple refusal, passive non-compliance (ignoring an adult's request), attempting to negotiate an alternative to the requested behaviour, failure to start a task within a given time, e.g. 5-10 seconds and performing at a level that is below the set standard when the student is capable of that standard (p. 106).

In more serious offenses, longitudinal studies have been conducted that link non-compliance to delinquency, criminality, poor relationships, and substance abuse (Drabick, Strassberg, & Kees, 2001). Non-compliance can have negative effects in a multitude of areas including academics, which is noted by Reynolds (2011), “Frequent non-compliance, amounting to 40% or more of

teacher requests for assistance, has been shown to have serious effects on student academic progress” (p.105). Studies have also been conducted that show a direct correlation between non-compliance and social skill struggles (Reynolds et al., 2011). Wilder & Atwell (2006) also note that “many of the interventions that have been developed to treat noncompliance have emphasized antecedent-based procedures and may be of limited effectiveness” (p. 265). An example includes an intervention that received mixed empirical support in which the use of one or more high probability request is followed by a low probability request (Wilder & Atwell, 2006). Since many antecedent-based procedures have been researched with little effectiveness researchers must explore new ways of intervening with non-compliance in the classroom as a way to prevent future social and academic struggles for the child. Defining areas of struggle such as non-compliance and aggression is an important aspect in creating an appropriate intervention for the student’s needs; however along with the decrease of a negative social behavior, a prosocial behavior should also be defined as a replacement. The next section will investigate prosocial behaviors and what they look like in a classroom setting.

Prosocial behaviors. In preschool settings, teachers are expected to do more than decrease negative behavior; they are also expected to increase prosocial behaviors. These prosocial behaviors should be observed between the interactions of children and their peers, as well as interactions between children and the adults in the classroom. Derili-iman (2013) asserts that prosocial behavior can be obtained by demonstrating problem-solving skills and states, it becomes important that children are able to obtain communication skills and corporative working; to express their own ideas and beliefs; comprehend and understand perspectives of others who have different characteristics, needs and experiences; use

effective problem-solving methods when their own interests, needs, beliefs and thoughts conflict with each other (p. 491).

Many studies also specify that cooperation and appropriate social interaction with peers is necessary in order to qualify as a prosocial behavior (Benish & Bramlett, 2011; Crozier & Tincani, 2007; Lane, Stanton-Chapman, Jamison, & Phillips, 2007). A study by Lane et. al. (2007) notes that, “teachers expect children to follow directions, attend to instructions, control their temper with adults and peers, and manage conflict” (p. 87). According to Girard, Girolametto, Weitzman, & Greenberg (2011), “Children’s use of prosocial behaviors with their peers serves to enhance their social status within the group, and this may in turn operate as a protective factor against future peer rejection” (p. 306). In addition, “The long-term use of prosocial behaviors may facilitate positive peer interactions, greater peer acceptance, and higher social status in the peer group” (Girard et. al., 2011, p. 307). Learning prosocial behavior approaches allows positive behavior options for students, while learning to decrease their negative behaviors in the classroom. One type of intervention that promotes the decrease of an anti-social behavior such as aggression or non-compliance paired with the increase of prosocial behaviors is a social story intervention. By highlighting the positive behaviors the teacher or parent would like the child to demonstrate, a social story is a tool that is used to teach children what they can do rather than focusing on what they cannot do.

Types of Stories Used with Preschool Aged Children

Early childhood teachers teach a multitude of content areas within their daily routine. Two of these content areas include literacy skills and social skill development which should be provided regularly within the classroom environment. Flippo (2008) communicates that young children tend to have a high interest in expository texts, and due to this interest it is the teacher’s

responsibility to provide numerous books and content related materials that have to do with the content being discussed. Flippo (2008) further states that, “[he] would treat the reading about various situations that involve social skills with the pre-schoolers and kindergarteners as [he] would the reading about community workers, or the reading about animal life at the sea shore, etc.” (p. 7). Social skill development is an important curriculum goal necessary for long-term success in any child’s life. As a professional in the field of education Flippo (2008) states,

If the content concerns *use of appropriate social skills*, I would select both narrative and expository books written for little ones with stories and pictures that show appropriate social skills. In all these situations I would use literacy tools such as books, follow-up discussion, and writing about or drawing pictures of the memorable content from the books (p. 7).

With this in mind, the use of texts to develop knowledge on social skill development has potential to be extraordinarily beneficial for preschool aged children. The following section reviews how texts and narratives can be implemented within a preschool classroom in order to develop a better understanding of socially appropriate behaviors.

Social stories. A social story is defined by Benish & Bramlett (2011) as “a short, simple story, written from the perspective of the child that delivers instruction on appropriate social behaviours” (p. 1). Styles (2011) furthers this definition by stating that “a social story is a short yet highly personalized narrative which shares information with an individual child about what to expect and what constitutes appropriate behaviour in a specific social situation which may previously have been experienced as problematic” (p. 416). Social stories have been used minimally with non-disabled children; however, researchers have explored this intervention on children in a general education setting. Studies have been conducted within the general education

population in order to assess if social stories can increase prosocial behaviors (Benish & Bramlett, 2011; More, Sileo, Higgins, Tandy, & Tannock, 2013), decrease physical aggression (Benish & Bramlett, 2011), and assist in bedtime routines in the home setting (Burke, Kuhn, & Peterson, 2004). Whitehead (2007) gives a thorough description of what makes a social story in table 1 of *Telling It Like It Is: Developing Social Stories™ for Children in Mainstream Primary Schools*, which is also referenced in appendix (C). A summary of the characteristics includes providing: a clearly defined topic in reference to the specific child being intervened upon, a focus on the positive behaviors, responses that the teacher wants the child to demonstrate, and illustrations that enhance the story being presented that are relevant to the child and their own interests (Whitehead, table 1, 2007 p. 36). There are also specific formats that need to be followed in the development of a social story including: the use of a first or third person narrative, sentences that describe the thoughts or feelings of others, sentences that describe the support the child will receive, sentences that identify the possible responses the child will have in a given situation, sentences that enhance the meaning of the social story, and control sentences, which can assist the child in recalling the information (Whitehead, 2007, p. 36, table 1). More, Sileo, Higgins, Tandy, & Tannock (2013) also indicates that social stories are short in nature and can include photographs or symbols in terms of the illustrations paired with the words. Videos have also been used as a way to enhance social stories (Toplis & Hadwin, 2006). The simplistic writing style of social stories provides a method to deliver social information that is tangible and practical (Kokina & Kern, 2010). Social stories have a unique format and style compared to the traditional forms of literature that are read in a typical general education preschool setting. The following information will distinguish the characteristics of traditional folktales that are often read in preschool settings for the more proscriptive social stories.

Folktales. The preceding paragraph illustrates social stories as an intricate and uniquely formatted piece of literature. Comparatively, folktales also have specific characteristics as well. Based on the article by Krapp (2005), “True folktales have no known authors; their oral renditions are retold in written form, with variations from country to country” (p. 38). There are many different forms of folktales, but a general theme is the use of fictional characters and settings in order to promote a moral lesson (Krapp, 2005). Folktales also commonly involve repetition and rhythmic narrations (Krapp, 2005). According to Virtue & Vogler (2008), “Children can often identify with characters in folktales, thus providing them with opportunities to feel and express emotions deeply and openly”(p. 28). However, the question remains as to whether this identification with the characters generalizes to every child in the classroom. Like social stories, folktales have a lesson to be learned by the reader; however the message is not as clear and straight forward as would be found in a social story. A social story is also more individualized to one specific child and her needs, whereas folktales tend to have a universal lesson meant for many readers (Krapp, 2005). Lastly, folktales use representational characters and social stories use the child being intervened upon as their main character (Krapp, 2005). Folktales are often used in general education settings as a way to bring awareness to behavior choices that children make, however social stories are designed to alter extreme behaviors of individual children.

The Practice of Using Social Stories

Social stories are intended to give the child a way to manage their behavior, and establish rules and routines that can be applied to specific social situations (Scattonne, Wilczynski, Edwards, & Rabian, 2002). According to Scattonne, Wilczynski, Edwards, & Rabian (2002), “Social stories are convenient, are unobtrusive, and may draw on a strength many children with

autism demonstrate (i.e., adherence to rules/routines)” (p. 540). Many studies have been conducted on the use of social stories and evidence suggests that if social stories target a certain behavior, positive results may be achieved in modifying these behaviors immediately and in a short amount of time (Hudock, Kashima-Ellingson, & Bellini, 2011). The following section investigates research that has been conducted on the use of social stories on children with autism, as well as non-disabled children. This section also overviews specific social circumstances which have been the topic of social stories in past studies.

Using social stories on children with autism. Carol Gray created social stories to teach children with autism appropriate social behaviors; therefore, research has been conducted much more thoroughly on social stories based on their effects on children with autism, rather than children without disabilities in a general education setting (Lorimer, Simpson, Myles, & Ganz, 2002). Some of these studies include research on decreasing the amount of tantrums the child has throughout the day (Lorimer et al., 2002), decreasing the amount of talk-outs the child has throughout the day (Crozier & Tincani, 2005), and increasing the amount of time the child remains seated during circle time (Crozier & Tincani, 2007). Each of these studies not only provides evidence of the effectiveness in decreasing undesired behaviors in students, but also indicates an increase in positive prosocial behaviors (Crozier & Tincani, 2005; Crozier & Tincani, 2007; Lorimer et al., 2002). A study by Lorimer, Simpson, Myles, & Ganz (2002) indicates “The use of social stories also appeared to increase the effectiveness of the interventions that had already been tried” (p. 59). The results indicated suggest positive responses in autistic children’s behavior from the social story interventions provided to them. According to Quirnbach, Lincoln, Feinberg-Gizzo, Ingersoll, & Andrews (2009), “Social skills are complex, and even individuals diagnosed with autism who are high functioning often

experience considerable difficulty with social situations” (p. 299). With the complex nature of social skill, it can be inferred that young children without disabilities may struggle in learning appropriate prosocial behaviors in addition to children diagnosed with autism. The next section investigates if the use of social stories has the same effect on non-disabled preschool children in the general education population.

Using social stories on children in general education preschool settings. Social stories have been widely used with children diagnosed with ASD, and research has presented support for their effects on increasing prosocial behaviors while decreasing negative behaviors. However, little research has been conducted on the use of social stories in the general education population. The research that has been explored includes using social stories to decrease aggressive behavior in preschool (Benish & Bramlett, 2011) and rating the effects social stories have on anti-social behaviors and prosocial behaviors (More,Sileo, Higgins, Tandy, & Tannock, 2013). Research has also been conducted on using social stories to increase prosocial behaviors, as well as on teachers’ and students’ responses to the development and use of social stories in the classroom (Whitehead, 2007). Benish & Bramlett’s (2011) single-subject study, used an ABC multiple baseline design to investigate if the use of social stories could decrease aggressive behavior, and increase prosocial behavior of three four-year old participants. The researchers used direct observation and pre- and post- Assessment System for Children 2, followed by the examination of a Teacher Rating Scale (Benish & Bramlett, 2011). The results indicated an overall decrease in the aggression of each child, as well as an increase in the prosocial interactions of each child (Benish & Bramlett, 2011). Research has also supported positive outcomes for the use of social stories, such as building self-esteem and understanding one’s own feelings (Whitehead, 2007). These positive outcomes indicate a need for more research in using

social stories in general education preschool settings. By further investigating the use of social stories with the general education population, researchers can indicate greater support in the use of this intervention in a general education setting. This can in turn promote the use of social stories as a behavior management system for children in a preschool general education classroom.

This literature review examined social and emotional expectations for preschool age children based on New York State learning standards, and how these goals align with the expectations of parents and teachers. Next, anti-social behaviors of aggression and non-compliance were analyzed and compared to the prosocial behavioral expectations for preschool age children. Social stories were then compared to traditional folktales that are commonly used in preschool general education classrooms. Finally, the use of social stories on children with autism and without disabilities was investigated.

Methodology

The following quantitative experimental study examined the effects of social stories on preschool age children's non-compliant and prosocial behaviors during clean-up time in a group care setting. Experimental designs have been used in a multitude of various studies investigating the use of social stories (Hanley-Hochdorfer, Bray, Kehle, & Elinoff, 2010; Hudock, Kashima-Ellingson, & Bellini, 2011; Özkaya, & Tekin, 2011). Hanley-Hochdorfer, Bray, Kehle, & Elinoff (2010) also used a frequency based measure within their experimental design, much like the study presented within this thesis. Flatley (1994) suggests that "the tight, well-designed experiments are the ones reviewers praise, ones they often recommend publishing" (p. 62).

This study took place in a childcare center located in a middle class town in Western New York. Data was collected using a Daily Behavioral Record tally mark system (Appendix A) to

document the number of non-compliant and prosocial behaviors the participants demonstrated during clean-up time. Baseline data was collected on all of the participants. The social story intervention was implemented with the experimental group and data was continually collected for the remaining four Thursdays and three Tuesdays. Data was collected on the control group who received no intervention on the remaining four Wednesdays and three Mondays. The number of non-compliant and prosocial behaviors observed during clean-up time was then compared between the experimental group that received the intervention and the control group that received no intervention. The data was converted into a linear graph as a visual representation of the data collected throughout the study. Limitations include a small participant sample, the potential for other variables to affect the participant's behaviors, and the small amount of data points collected only two times per week for each group.

Setting

The ethnic make-up of the Western New York area where the center is located includes 93.8% Caucasian, 3.9% Hispanic, 1.8% African American, and 1.6% Asian (U.S. Department of Commerce, 2013). The childcare center the study took place in serves children of lower, middle and upper class community members and is located on a university campus. The parents of children enrolled in the center's program are college professors and employees, college students who attend the university or working community members who have children between the ages of 8 weeks and 5 years of age.

The center provides an early care and education program year round. The nationally accredited early childhood program follows curriculum guidelines that address the children's physical development, social/emotional development, creativity, cognitive development, and language growth. The center contains five separate classrooms including; one infant room of

children ages 8 weeks to 1 year of age, one “waddler” room of children 1 to 2 years of age, one toddler room of children 2 to 3 years of age, and two preschool rooms of children 3 to 5 years of age. The following study was conducted in one of the preschool classrooms for one month with 9 overall observations. The study began on October 22, 2013 and was executed on Mondays, Tuesdays, Wednesdays, and Thursdays during morning clean-up through November 19, 2013.

Participants

Child participants were selected from one preschool general education classroom of 15 children ages three to four years. The ethnic makeup of the room includes 10 Caucasian students including: 4 four year old males, 2 three year old males, 2 four year old females, and 2 three year old females; 2 Hispanic students including: 1 four year old female and 1 three year old female; 1 three year old Italian-American student; 1 four year old male Middle Eastern student; and 1 three year old female Indian-American student. All of the students in the classroom speak English as their native language with the exception of the male Middle Eastern student who speaks Arabic as his native language. The Italian-American student speaks English as her first language and Italian as her second language. Consent forms (Appendix B) were distributed to the parents/guardians of those children who assented to participate in the study. All families who received a consent form to have their child participate in the study speak and read in English as their native language.

I collected data on four students. Besides the exclusion of the non-native English speaking student, the four students participating in this study were chosen at random. Students who were the first to hand in both consent forms were placed in the experimental group and the following two students to hand in the two consent forms were placed in the control group. All of

the participants involved in this study speak English as their native language and none were identified as having any disabilities.

Design

The goal of this study was to determine if the use of social stories would lead to an increase in appropriate social behaviors during clean-up in a preschool setting; and conversely to determine if social stories would decrease non-compliant behavior during clean-up time. Prior to the implementation of the study, I obtained assent from the children and consent from the parents of the children participating within the experimental and control groups. Assent was obtained by showing each child a picture of me reading a social story and the observation room, and then asking each child to draw a smiley face if they agreed to participate and a frowning face if they refused to participate. Consent was obtained by delivering the consent forms (Appendix B) through the parent's mailboxes in the center. The implementation of this study occurred on Monday, Tuesday, Wednesday, and Thursday of every week. I collected two baseline data points using the Daily Behavioral Record (Appendix A) in order to track non-compliant and prosocial behaviors during morning clean-up time for the experimental group and the control group prior to the intervention stage of the study. The non-compliant behaviors tallied included: continuing play after clean-up song, ignoring teacher requests, defying the teacher verbally, stopping the clean-up process, and declining to sit on their sit-upons when clean-up was over. The prosocial behaviors tallied included: initiating clean-up when the clean-up song started, following teacher requests, asking peers if they needed assistance, cleaning-up a new toy when they were finished cleaning a previous toy, and sitting down on their sit-upons when clean-up was over. I collected this data in an observation room unseen by the participants. The observations lasted approximately ten minutes, depending on the length of time clean-up took each day. Data was

collected on the experimental group on Tuesdays and Thursdays and was collected on the control group on Mondays and Wednesdays. There were nine data points for each participant in the experimental group and the control group.

After two days of baseline data collection, I pulled the experimental group out of the classroom into a designated area for small group activities called “the green room” in order to guide preparation of the social story. I guided preparation of the social story with the experimental group, by having them think about and verbally state procedures for clean-up and areas of the classroom that needed to be picked up during clean-up time. During this mini-lesson I stated, “We are going to talk about some of the important parts about cleaning up our classroom. How do we know when it is clean-up time?” (Hearing the clean-up song) “What do we do if we are still working on creating something in the art center or the block center when it is clean-up time?” (Save the art with name tags/ put in mail box/ drying rack) “What do we do during clean-up every day?” (Place blocks on shelf/ place table toys into containers/ pick up books/ pick up clothes in the house center/ put away writing utensils) “What do we do when we are done cleaning up?” (Ask friends if they need help/ sit on sit-upons) As the students responded to these questions, I provided them with a picture of the task or area they were referring to, and wrote down the key words of their responses on a large sheet of chart paper as a way to promote a literacy rich environment. The words written down on the chart paper were based on labels that the children see in their classroom environment. For example, when a student talked about cleaning the block center, I wrote *block center* on the chart, the same way it is written as a label in the classroom. I used a different color marker in order to differentiate the children’s responses from my own additions. The list of information that was overviewed during this process includes:

Table 1

Mini-Lesson Question and Response Guideline

Questions asked to the participants in the experimental group during the mini-lesson.	Appropriate responses expected by participants in the experimental group.
How do we know it is clean-up time?	<ul style="list-style-type: none"> • When the teacher tells a child to play they will ring the chimes, everyone will freeze, we count to three, and we sing the clean-up song.
What do we need to do during clean-up every day?	<ul style="list-style-type: none"> • Put the blocks on the shelf in the block center. • Place the table toys (puzzles, playdough, playdough toys, clay, manipulatives) into their proper containers and put them back onto the shelf. • Pick up the books and place them back onto the bookshelf. • Locate the toy foods, toy utensils, babies, and dress-up items and setting them into their appropriate place in the house-center. • Place writing utensils and paper back in the appropriate drawers in the writing center.
What do we do if we are still working on creating something in the art center or the block center when it is clean-up time?	<ul style="list-style-type: none"> • We can put our nametags on the item to save it. • We can put the artwork in our mailbox. • We can put the artwork on the drying rack.
What do we do when we are done cleaning up?	<ul style="list-style-type: none"> • First, we see if any of our friends need help cleaning in another area of the classroom. • If none of our friends needs help we find our name on our sit-upons at circle and sit and wait for the teachers' directions.

Table 1 Mini-Lesson Question and Response Table

After completing this overview of clean-up time with the experimental group I led the children back to the classroom in order to follow their regular daily routine. This session lasted approximately 10 minutes.

I collected data on the Daily Behavioral Record following this session in order to continue to document the experimental group's non-compliant and prosocial behaviors during clean-up time, after completing the mini-lesson. During this session I had one of the teachers use a small digital camera to take pictures of the students in the experimental group, completing the procedures overviewed in the mini-lesson. The social story was then developed based on guidelines provided in a study conducted by Whitehead (2007), *Telling It Like It Is: Developing Social Stories™ for Children in Mainstream Primary Schools*. (table 1, p. 36) (Appendix C). I wrote the story in first person narrative based on the two children in the experimental group. The story was 10 pages in length and included the children's names and pictures from the experimental group. The pictures of the children in the story were of them cleaning-up different areas of the classroom. The story also focused on the positive consequences of participating in clean-up rather than the negative consequences of not following the clean-up routine.

I then implemented the intervention over the next three Tuesdays and the next three Thursdays. On each of these days, I pulled the experimental group out of the classroom, into the "green room" and read to them the social story approximately 15 to 20 minutes before clean-up time each day. The story and student discussion lasted between 5 to 8 minutes each day. When I finished reading the social story, I guided the participants back into the classroom and observed their behavior during clean-up time from the observation room. I continued collecting data using the Daily Behavioral Record, based on the targeted behaviors and observed both the experimental group and the control group.

Data Collection

The study was quantitative; therefore frequency-based assessments were used in order to gain insight on the effectiveness of the social story intervention. I used a Daily Behavior Record, based on a similar behavioral checklist developed by the Achievement Center, Inc. of Erie, PA, which had been used within the center previously for individual students (Appendix A). I tallied the targeted behaviors on a daily basis, four days per week in order to give a visual representation of the frequency with which the behavior was happening during clean-up time. I then converted the data into a linear graph after all the data was collected. All data collected within these observations were used in order for the researcher to develop a thesis based on the effects of social stories during clean-up time.

The behaviors measured in this study included: continuing play after clean-up song, ignoring teacher requests, defying the teacher verbally, stopping the clean-up process, declining to sit on their sit-upons when clean-up is over, initiating clean-up when the clean-up song starts, following teacher requests, asking peers if they needed assistance, cleaning-up a new toy when they were finished cleaning a previous toy, and sitting down on their sit-upon when clean-up was over. I documented this behavior on the Daily Behavior Record by putting a tally mark next to the corresponding behavior occurring for each child. I then collected the data from the observation room, and was not seen or heard by the participants or any other student in the classroom. When complete, I de-identified the participants and compared the frequency of behaviors between the control group and the experimental group and created a linear graph of the data points collected.

Data Analysis

After collecting the frequency of non-compliant and prosocial behaviors observed in the classroom and noted on the daily behavioral record I compared the numbers collected. This was done by creating a linear graph that demonstrated a visual representation of the patterns and changes that occurred in the students' behaviors from when baseline data was collected to after the social story intervention was implemented. I also compared the level of prosocial behaviors to the level of non-compliant behaviors by creating a daily percentage of each category and developing a ratio comparing the two.

Findings

The findings of this research were based on the number of non-compliant behaviors and prosocial behaviors tallied within clean-up time in a preschool classroom for a control group and an experimental group that received a social story intervention. The purpose of this study was to determine if the use of social stories in a preschool general education classroom could assist in behavior modification for preschool students within their daily routine. The findings of this study indicate positive impacts on the increase of prosocial behaviors for one participant in the experimental group and minimal impact for the other participant in the experimental group.

The data collection process was based on an experimental design. The first two data points represent baseline measures of each participant's non-compliant behaviors and prosocial behaviors. After the first two baseline data points were tallied for the experimental group and the control group, the mini-lesson reviewing the clean-up process on a piece of chart paper was initiated for the experimental group. The mini-lesson observation is represented by the third data point. The remaining six data points in the experimental group are based on observations made

after reading the participants the social story and briefly discussing the reading. The control group was receiving no intervention throughout the entire study.

Individual Results

Participant A. The graph below gives a visual representation of the number of non-compliant behaviors and prosocial behaviors demonstrated by participant A in this study. Participant A, who was in the experimental group, is a four year old Caucasian male. The data collected on this participant is as follows:

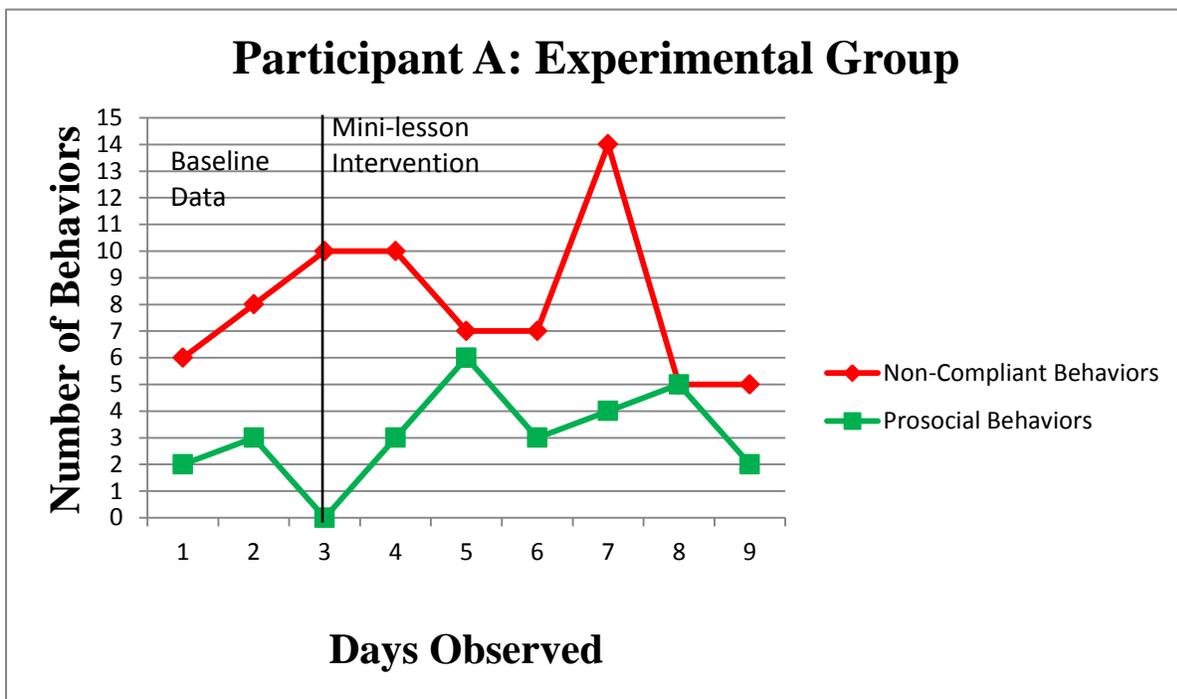


Figure 1. Participant A: Experimental Group. This figure represents the numbers of non-compliant and prosocial behaviors demonstrated by Participant A throughout the study.

Table 2

Mean, Median and Mode of Non-Compliant and Prosocial Behaviors of Participant A

Participant A	Non-Compliant Behavior	Prosocial Behavior
Mean	8	3

Median	7	3
Mode(s)	5, 7 and 10	3

Table 2 Mean, Median and Mode Table

Participant A demonstrated a considerably higher rate of non-compliant behaviors compared to prosocial behaviors throughout this study, with the exception of day eight. The participant had two prosocial behaviors and six non-compliant behaviors during the first baseline observation. During the second baseline observation prosocial behaviors increased to three and non-compliant behaviors increased to eight. On day three the mini-lesson was initiated and prosocial behaviors plummeted to zero, while non-compliant behaviors increased to ten. Following the mini-lesson, prosocial behaviors steadily increased and then decreased back to two behaviors by the end of the intervention, which matches the number of prosocial behaviors demonstrated during the first baseline data collection. Conversely, non-compliant behaviors steadily decreased after the mini-lesson followed by a steep spike in non-compliant behaviors on day seven. At one point during the social story intervention Participant A was observed having the same number of prosocial and non-compliant behaviors throughout his clean-up routine on day eight with five for each category.

Overall, the average number of non-compliant behaviors following the baseline was eight and the average number of prosocial behaviors following the baseline for Participant A was three. While comparing these averages to the initial baseline data we can see little variation. Baseline measures for non-compliant behavior are six and eight with an average of eight non-compliant behaviors throughout the entire study. Baseline measures for prosocial behaviors are two and three with an average of three prosocial behaviors throughout the entire study.

Participant B. The next graphic representation indicates the number of non-compliant behaviors and prosocial behaviors demonstrated by Participant B in this study. Participant B, also in the experimental group, is a three year old Indian-American female. The data collected on this participant is as follows:

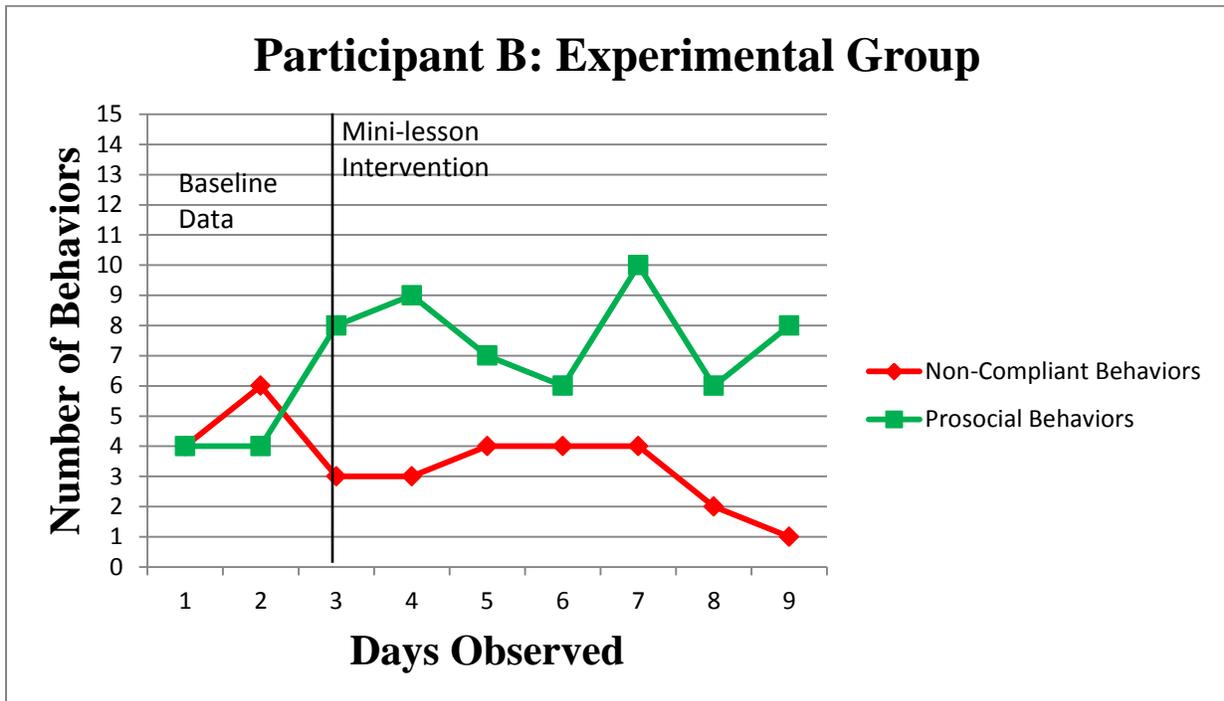


Figure 2. Participant B: Experimental Group. This figure represents the numbers of non-compliant and prosocial behaviors demonstrated by Participant B throughout the study.

Table 3

Mean, Median and Mode of Non-Compliant and Prosocial Behaviors of Participant B

Participant B	Non-Compliant Behaviors	Prosocial Behaviors
Mean	3	8
Median	3	8
Mode(s)	4	6 and 8

Table 3 Mean, Median and Mode Table

The baseline data for Participant B was consistent within the number of prosocial behaviors, with four prosocial behaviors represented both days. Non-compliant behaviors increased from four to six during baseline measurements. During day three, on the day of the mini-lesson there was a significant increase in prosocial behaviors and a significant drop in non-compliant behaviors. Following the mini-lesson, prosocial behaviors were consistently higher than the baseline measurements throughout the study, spiking on day seven at ten prosocial behaviors. The non-compliant behaviors showed a slight increase for three days followed by an immediate drop to one non-compliant behavior on day nine. Following the baseline data, the participant demonstrated more prosocial behaviors each day than non-compliant behaviors for the remainder of the study.

The average number of non-compliant behaviors following the baseline data for Participant B is three and the average number of prosocial behaviors following the baseline data is eight. Participant B demonstrated some significant increases in prosocial behaviors with a corresponding drop in the number of non-compliant behaviors. This can also be seen through the participant's average number of behaviors throughout the study. Prosocial behaviors were constantly higher throughout the implementation of the intervention than initial baseline data.

Control group: participant C and participant D. The next set of graphics represent the control group with Participants C and D. Their results are as follows:

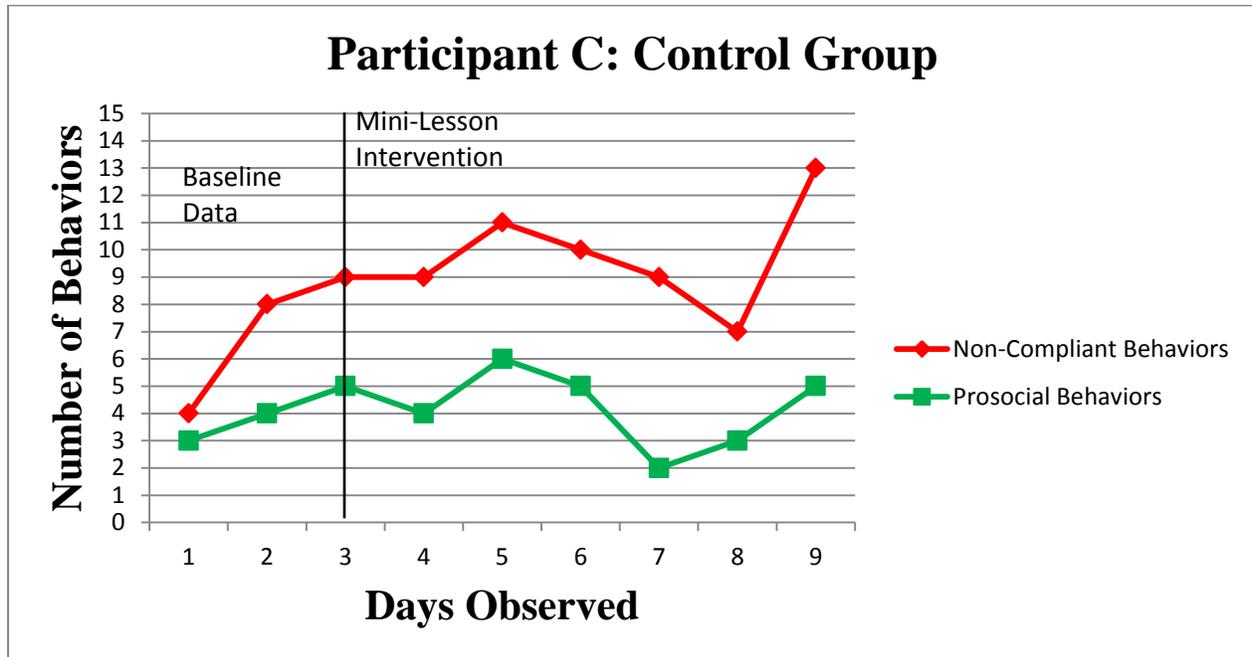


Figure 3. Participant C: Control Group. This figure represents the numbers of non-compliant and prosocial behaviors demonstrated by Participant C throughout the study.

Table 4

Mean, Median and Mode of Non-Compliant and Prosocial Behaviors of Participant C

Participant C	Non-compliant Behaviors	Prosocial Behaviors
Mean	10	4
Median	9	5
Mode(s)	9	5

Table 4 Mean, Median and Mode Table

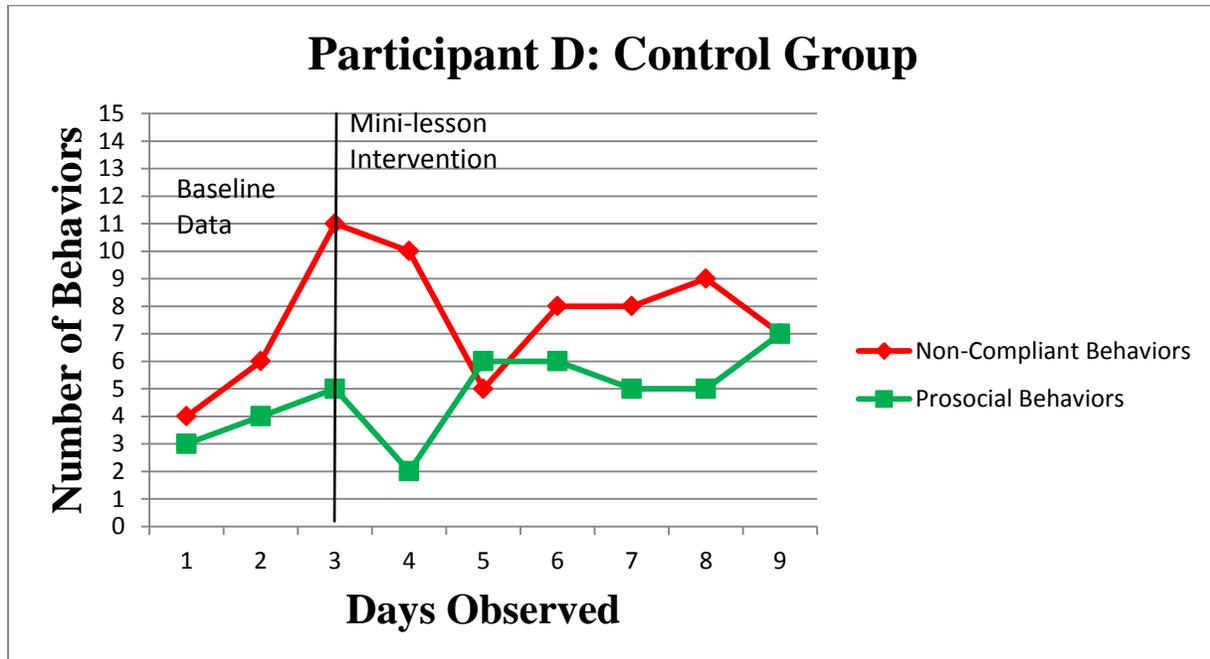


Figure 4. Participant D: Control Group. This figure represents the numbers of non-compliant and prosocial behaviors demonstrated by Participant D throughout the study.

Table 5

Mean, Median and Mode of Non-Compliant and Prosocial Behaviors of Participant D

Participant D	Non-compliant Behaviors	Prosocial Behaviors
Mean	8	5
Median	8	5
Mode(s)	8	5

Table 5 Mean, Median and Mode Table

The graphics show some differences in the consistency of the data. While Participant C shows a relatively parallel pattern between non-compliant behaviors and prosocial behaviors, Participant D has more inconsistent data. When Participant C has an increase in prosocial behaviors, there seems to be an equal increase in the number of non-compliant behaviors for that day. Although there are some slight increases in prosocial behavior for Participant C, the

increases are minimal and decrease towards the end of the data collection. Non-compliance seems to take a more steep increase for Participant C during the study. However, Participant D seems to have a steep increase in non-compliance towards the beginning of the study, with an increase in prosocial behaviors and a drastic drop in non-compliant behaviors on day five of the intervention. Although there were some inconsistencies within the data collected on Participant D, the increases noted throughout this data is still minimal with some steep increases in non-compliant behavior.

Aggregate Results

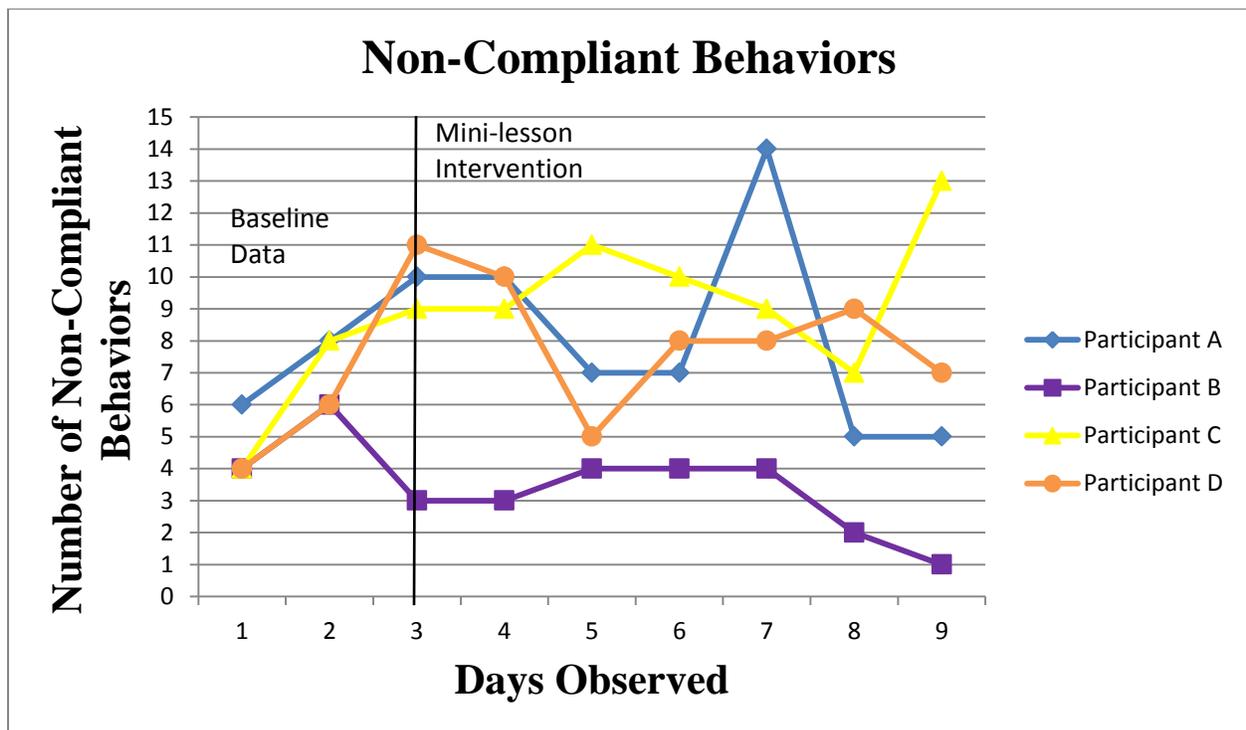


Figure 5. Non-Compliant Behaviors. This figure represents the number of non-compliant behaviors demonstrated by each participant throughout the entire study.

The graphic above represents each participant's non-compliant behaviors during the entire study. Baseline data clusters between four to eight non-compliant behaviors between all of the participants represented. Participants within the experimental group represent the highest

number of non-compliant behavior, as well as the lowest number of non-compliant behaviors within this study. Participant A demonstrated 14 non-compliant behaviors on day seven. Participant B demonstrated one non-compliant behavior on day nine. The control group, consisting of Participant C and Participant D remained within the median range of non-compliant behaviors for a majority of the study. Participant B showed the least amount of non-compliant behaviors within this study with an average of three non-compliant behaviors overall.

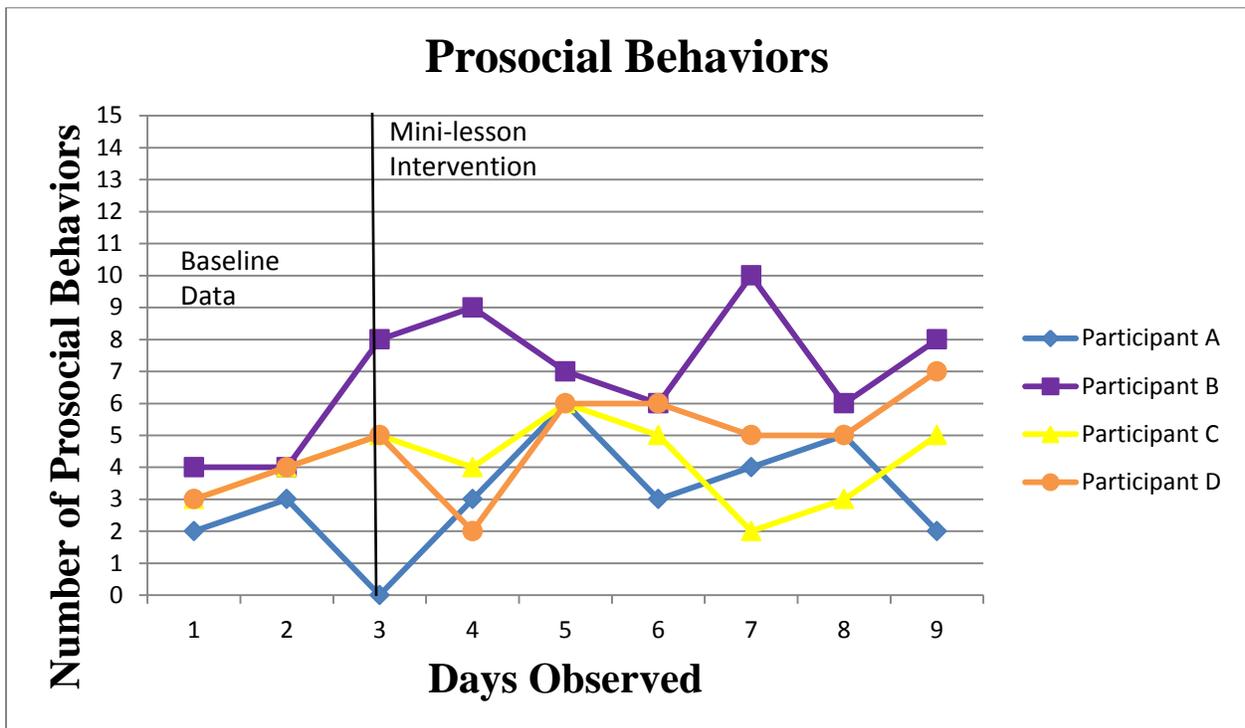


Figure 6. Prosocial Behaviors. This figure represents the number of prosocial behaviors demonstrated by each participant throughout the entire study.

The graphic above represents the number of prosocial behaviors each participant demonstrated throughout this study. Baseline measurements range from two to four prosocial behaviors during the first two days of data collection. Similarly to the non-compliant behaviors, the participants within the experimental groups represent the highest number of prosocial behaviors within the study, as well as the lowest number of prosocial behaviors within the study,

while the control group remains within the median range. Participant B shows ten prosocial behaviors on day seven. Participant A shows zero prosocial behaviors on day three. Participant B also shows the most prosocial behaviors through the study with an average of seven prosocial behaviors overall. On day five three out of the four participants have the same number of prosocial behaviors represented for clean-up. The following section will review these findings and analyze any possible variables affecting the results of this study.

Discussion

The purpose of this study was to determine if social stories promote positive social behaviors while decreasing negative social behaviors during clean-up time in a preschool care setting. This discussion overviews the significance of the findings, the limitations of this study, implications for future practice, and recommendations for future research for the assessment of social stories. The previous study found a significant increase in prosocial behaviors pairs with a decrease in in non-compliant behaviors for Participant B of the experimental group. Conversely, Participant A of the experimental group demonstrated an immediate decrease in prosocial behaviors and a significant increase in non-compliant behaviors. The control group demonstrated some minor variability; however minimal change occurred with the behaviors of Participant C and Participant D.

Discussion of Findings

Experimental group. The ratio of prosocial behaviors compared to non-compliant behaviors varied between participant A and participant B during the implementation of the intervention. Prosocial behaviors did not increase as significantly for participant A as for participant B. Children's interests could have been a factor on the results of this study.

Participant A is a four year old Caucasian male student who often played with hands on materials

such as blocks and manipulatives, while participant B is a three year old Indian-American female student who often plays in the dramatic play center and the literacy center. It is possible that participant B's interest in the dramatic play center and the literacy center could influence her overall interest in the social story developed for this study. While implementing the social story intervention I noticed that Participant B was more actively engaged in the reading of the story, as well as the follow up discussion. Participant B demonstrated an active engagement in the story by making verbal comments about the images in the story and predicting what came next in the story. Participant B's interest was noted throughout the entire study, while Participant A lacked interest, with the exception of day one of the reading and discussion. Participant A often had to be redirected and refocused to the social story during the reading.

Participant A. Participant A showed a significant drop in prosocial behaviors with a significant increase in non-compliant behaviors. These results indicate not only that this intervention was deemed insignificant for Participant A, but additionally had a negative effect on his overall behavior during the study. Participant A often disregarded teacher requests and openly sought out opposition to the requests made by his teachers. A factor that could have affected Participant A's progress includes that this participant may have oppositional defiance disorder. If a child demonstrates oppositional defiance there is a strong possibility that the strict rules and guidelines written within a social story narrative have the opposite effect originally intended by the text. This might determine why Participant A demonstrated such negative results. Another potential factor that could have influenced Participant A's results are the participant's interests in the block center and the manipulatives. Participant A showed interest in hands-on materials that he could knock down and rebuild. He often built a structure, knocked down the structure and then moved on to another manipulative without cleaning-up or organizing

the manipulatives he knocked down. Participant A rarely played in a center that didn't involve using a manipulative with which he could build. Due to Participant A's interest in hands-on materials, a behavior management plan involving language rich social stories may not have grasped his interest. This lack of interest in reading social stories could explain why the intervention was unsuccessful for Participant A.

Participant B. Participant B showed a significant increase in prosocial behaviors and an immediate drop in non-compliant behaviors. These positive results following the intervention potentially stem from the child's interests within the classroom environment. Participant B often played in the dramatic play center and the literacy center. She was often social with her peers and invited them to play with her while in the dramatic play center. She often demonstrated prosocial behaviors within her play, which could have carried over to clean-up time as well. Participant B's social nature in the dramatic play center and interest in the literacy center could have made the social story intervention far more successful than it would be with child without these interests.

Control group. In general the number of non-compliant behaviors were higher for both participant C and participant D than the number of prosocial behaviors. Participant D's ratio of non-compliant behaviors compared to prosocial behaviors was slightly more inconsistent compared to participant C who always had a higher number of non-compliant behavior. A factor that could have influenced the variance in prosocial and non-compliant behaviors for participant D includes his inconsistent drop-off times. Since these observations were conducted during morning clean-up, the drop-off time could have been influential because of the amount of time the participant had to settle into the classroom routine. While participant C was consistently dropped off an hour before clean-up each day, participant D's drop of time varied between 20

minutes to an hour before clean-up time. Another factor that could have significantly impacted the results of this study includes the fact that participant C broke her arm for the last three observation days. Participant C's increase in non-compliant behavior at the end of this study could have been influenced by this variable.

Limitations

The limitations of this study include the small sample size of participants. A more accurate representation about the use of social stories in the general education population would be demonstrated if there were more participants involved in a varied number of general education settings. Along with this, other variables could affect the participant's non-compliant and prosocial behavior. During the day the students are often redirected based on their non-compliance and this variable could affect the results of this study. For example, participant A was often redirected for choosing to play with the toy in his hand rather than putting it in its proper place during clean-up. It is likely that if teacher redirection did not occur, participant A would have continued to play with the toy. Another variable influencing the results of this study was the amount of clean-up children need to complete each day, which varied based on the activities presented within the room and the number of children attending class on any given day. Finally, the intervention for the experimental group were only implemented on Tuesday and Thursday of each week, as some of the students only attend the center on these days. The study might have been more effective if implemented daily, rather than two times per week. Collecting data on the participants only two days per week also only provided a small number of data points to compare and analyze.

Implications for Future Practice

The implications for future practice in this study can be verified based on the supportive results for Participant B in the experimental group. Although support cannot be verified based on both participants in the experimental group, use of social stories may have a positive impact on certain preschool general education students based on their interests. Social stories may have a positive impact on managing behavior for certain children within general education preschool settings and teachers might find social stories to be a positive behavior management tool for their classroom. Social stories might also have a positive impact during a clean-up time transition within the preschool setting.

Implications for Future Research

This study indicated inconsistent findings in reference to the efficacy of social stories positively impacting child behavior. In the future I would suggest expanding the number of participants in the study to include different types of preschool settings and children with varying interests within the classroom activities. For example, implementing a social story on a child who is mainly interested in the art center compared to a child who is mainly interested in the clock center. By investigating the use of social stories on children with different interests we will be able to determine if child interests are a potential variable the effectiveness of social stories for children. I would also suggest implementing studies on the use of social stories on children with oppositional defiance disorder comparatively to those in the preschool general education setting and those diagnosed with autism. Finally, I suggest implementing the social story intervention every day of the week rather than two times per week in order to verify whether a more consistent implementation of social stories has a greater effect on increasing prosocial behaviors and decreasing non-compliant behaviors.

The future research of social stories on child behavior is important to the educational field based on its potential impact on the process of classroom management. If more research is conducted that can support the use of social stories in a general education classroom, this practice can be carried on to different educational settings as a form of classroom management and a guide to learning appropriate social skills as required by the New York State foundation for the common core (NYSED 2011). Future research can also be conducted on different social situations and transitions within the preschool general education setting such as dressing up to go outside, or developing positive social exchanges with peers.

Based on this study I conclude that social stories may have a positive impact on certain children within the preschool general education setting. Further research must be conducted with various participants in order to establish more support for the use of social stories within the preschool general education setting as a behavior management system. Research should also be conducted within different social and transitional periods during the classroom routine in order to verify if social stories have a positive impact during times other than clean-up. Social stories have potential to assist in the classroom routine and meet state curriculum standards for teaching social guidelines.

This study indicated that there is a need to focus upon individual variables that could affect whether a social story intervention can be a successful intervention. Based on my study I would like to conduct further research on the use of social stories with oppositional defiance disorder. I would also like to research if social stories have a positive effect for preschool age children with different play interests within their classroom environment. By studying these variables researchers can determine if these individual variables can have an effect on the success of a social story intervention for an individual child.

The preceding study was extremely successful for one participant in the experimental group. However, this same social story intervention had the opposite effect on the other participant in the experimental group, with his prosocial behaviors plummeting and his non-compliant behaviors increasing significantly. Therefore, I would conclude that social story interventions can have a positive effect on child behavior based on the individual child's needs and interests. In the same instance I can infer that social story interventions can also have a negative effect on child behavior based on the individual needs and interests of the child. Further research is necessary in order to determine what variables can affect the success of a social story intervention. This study supports the use of social stories as a behavior management system within a preschool general education setting for certain children based on their individual needs.

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Appendices

Appendix A

Daily Behavioral Record

Student: _____

Target Behavior(s) <i>Operational Definition</i>	Date: _____	Target Behavior(s) <i>Operational Definition</i>	Date: _____
Non-Compliant Behaviors		Prosocial Behaviors	
<i>Continuing play after chimes ring</i>	Daily total: _____	<i>Initiating clean-up when the clean-up song starts</i>	Daily total: _____
<i>Off-task behavior: Ignoring teacher requests, verbally defying the teacher, stopping the clean-up process</i>	Daily total: _____	<i>On-task behavior: Following teacher requests, asking peers if they need assistance, cleaning-up a new toy when they are finished cleaning a previous toy</i>	Daily total: _____
<i>Declining to sit on their sit-upons when clean-up is over</i>	Daily total: _____	<i>Sitting on their sit-upon when clean-up is over</i>	Daily total: _____

Appendix B

Parent Consent Form (Experimental Group and Control Group)

Effects of Using Social Stories in Preschool General Education on Non-compliant Behavior

Introduction

Hello, my name is Sara Baker and I am a graduate student at [REDACTED]. I would like to include your child in a research study to observe the effects of social stories on non-compliant behavior during clean-up time in the preschool classroom. Your child's participation is completely voluntary. Please take some time to discuss the study with whomever you want before making a decision. In addition you may withdraw your child from the study at any time. This study will look into whether social stories have a positive effect on the compliance of young children in the classroom.

What is involved in the study?

If you allow your child to participate, your child will be placed in either an experimental group or a control group. The children in each group will be determined after permission slips have been returned in order to develop similar groups. If placed in the experimental group your child will be asked to help develop a story about the steps, responsibilities, and procedures of clean-up time by answering questions I pose. Following this input, I will develop a short story with photographs of each child completing the steps and responsibilities we talked about. I will then pull a small group out of the classroom 20 minutes before clean-up to read them this story. The reading should take approximately 5 to 8 minutes. When finished reading the story I will observe the group's behavior from the observation room and tally the incidences of your child exhibiting appropriate clean-up behavior such as, starting to clean when the clean-up song starts, helping other children, sitting down at the end of clean-up time as well as non-compliant behavior such as ignoring teacher requests and failing to initiate clean-up when the chimes ring. If in the control group your child will carry out their regular day while I tally the same behaviors being evaluated in the experimental group. I will observe the experimental group on Tuesdays and Thursdays and I will observe the control group on Mondays and Wednesdays for seven weeks.

Risks

There are no specific risks associated with this study beyond what is seen in a normal day in the classroom.

Benefits to the Study

There is potential that benefits may occur within your child's compliance level as part of his/her daily routine. I expect that there will be a decrease of non-compliant behavior and an increase in prosocial behavior occurring during our clean-up time. Although benefits linked to this study are not guaranteed, others may benefit from the knowledge gained by this study.

Confidentiality

Your child's identity will be kept anonymous throughout the entire study. Your child's name will not be used at all at any point of this study including data collection.

The following steps have been taken to protect your child's confidentiality:

- All data collection forms are de-identified
- All data and informed consent forms used in this study will be stored in a locked file cabinet
- All data and pictures of the children will be destroyed three years after completion of the research
- Observations will take place behind one way glass

Your Rights as a Research Participant

Participation in this study is completely voluntary. You have the right to have your child not participate in this study at any time. If your child does not participate in the study it will not affect his/her standing in the class. Any data that has been collected on your child throughout this study will be removed immediately if you choose for them to leave.

Questions or Concerns

If you have any questions concerning the research study please contact any of the following people.

Sara Baker





Permission for Child Participation in the Research Study

Please return this permission slip by September 20th 2013

I give permission as legal parent/guardian for my child _____ to participate in the research study described on this form.

Parent/Legal Guardian's Signature

Date

Appendix C

Table 1 What makes a Social Story?

- The story shares social information with an overall patient and reassuring quality
 - The story clearly has an identified topic, adds detail and reinforces and summarises the information
 - The story answers where, when, who, what and why, describing the context, time-related information, relevant people, important cues, basic activities and behaviours and the reason behind them
 - The story is written in first- or third-person perspective
 - The story is positive and omits descriptions of challenging behaviour; instead, it identifies positive responses
 - The story is comprised of descriptive sentences –objective statements of fact with the addition of one or more of the following:
 - Perspective sentence – describing the thoughts and feelings of others
 - Cooperative sentences – to explain what others might do in support of the pupil
 - Directive sentence – identifies possible response of the child in a situation
 - Affirmative sentence – to enhance meaning
 - Control sentence – developed by the pupil to help them recall and apply information (this sentence type is used in more advanced stories)
 - The story has two to five descriptive/perspective sentences for every directive sentence
 - The story matches the ability and interest of the pupil and is literally accurate
 - The story uses illustrations where appropriate that are relevant to the pupil and enhance the meaning of the text
 - The title of the story should indicate what it is about and whom it is for
- (Whitehead, 2007, p. 36, table 1)