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**THE EFFECT OF SOCIAL STORIES ON THE SOCIALIZATION AND SELF-  
CONTROL OF PRESCHOOL CHILDREN WITH DISABILITIES**

by

Jessica German

A Thesis

Submitted to the  
Department of Interdisciplinary and Inclusive Education  
College of Education

In partial fulfillment of the requirement

For the degree of  
Master of Arts in Special Education

at

Rowan University

August 15, 2016

Thesis Chair: Amy Accardo, Ed.D.

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## **Dedications**

I would like to dedicate this thesis to my loving grandparents, Conrad and Bernadette, my caring mother, Julie, and my supportive boyfriend, Michael. Without their encouragement, patience, and inspiration, this educational journey would not have been possible.

## **Acknowledgments**

I would like to express my appreciation to Dr. Amy Accardo for her guidance and assistance in this research. Furthermore, I would like to thank my preschool students and parents for their willingness and enthusiasm during the school year.

## **Abstract**

Jessica German

### **THE EFFECT OF SOCIAL STORIES ON THE SOCIALIZATION AND SELF-CONTROL OF PRESCHOOL CHILDREN WITH DISABILITIES**

2015-2016

Amy Accardo, Ed.D.

Master of Arts in Special Education

This study investigated the effect of social stories on the number of social exchanges between children, the verbal requests for items during play centers, and the number of impulsive behaviors. A single subject design with three phases was used. This study also evaluated maintenance data to assess generalization of skills post intervention. Specifically, in the area of impulse control and verbal requests, results reveal that all three participants in the study were able to increase their ability to control their impulsive behaviors and verbal requests with the use of the social stories. In the area of social exchanges, research data reveals that two of the three participants in the study were able to increase the number of social exchanges with a peer with the use of social stories. Maintenance data reveals student skills continued post intervention. Results from this study suggest that social stories are an effective intervention for improving the social skills of preschool children with disabilities in an inclusive setting.

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## **Chapter 1**

### **Introduction**

The transition to the routines and requirements of elementary school can be a difficult and confusing time for some children of preschool age (Poulou, 2015). Some children may have been exposed to early childhood or daycare experiences; however, other children are coming to school for the first time, learning the rules of academics and socialization from peers they have just met and from a teacher that is new and unfamiliar to them. This transition to school brings with it social expectations that may be unfamiliar and stressful (Danby, Thompson, Theobald, & Thorpe, 2012). Children transitioning to elementary school often explore and test limits as they start their educational journey (Poulou, 2015). Beginning school is a demanding time for young children, as they must cope with and learn the new institutional rules and social practices of the classroom (Chapman, 2015). Expectations placed upon students become higher when they reach school age, with more demands placed on academic performance and on learning how to socialize with others (Danby et al., 2012).

Moreover, the skill of developing appropriate socialization and self-control is one that children often learn in school, in a setting in which they can discover their emotions and act freely (Greenberg, 2006). Major changes for young children include learning to interact in unfamiliar environments while engaging in various and new social experiences (Briody & McGarry, 2005). This stage of development is thought of as a critical milestone for preschool children as they develop awareness of classroom community norms (Greenberg, 2006). Socialization and self-control are life skills that children will carry with them throughout their education. Learning proper socialization at a young age

is also beneficial for children academically throughout their school years as they will be able to work in groups with ease and understand social cues of others they come into contact with at school (Degol & Bachman, 2015).

On occasion, children have a delay in their socialization skills and are placed in an early intervention classroom that allows for more peer interactions. This lack of socialization may limit a child from displaying developmentally appropriate acts of play with others, and may cause the child to become excluded from peer groups (Tillery, Cohen, Kitzmann, Sharp, & Parra, 2015). With an underdeveloped level of social skills, children may also continue to display difficulties throughout their future school years. For example, student academic grades, friendships, and emotional states may be negatively impacted resulting in unfavorable behaviors (Tillery, Cohen, Kitzmann, Sharp, & Parra, 2015).

The use of social stories as an intervention may facilitate a child in developing appropriate socialization and self-control skills (Gray & Garand, 1993). Social story interventions are tools that can help children understand social situations and respond appropriately with visual cues (Adams, Gouvousis, VanLue, & Waldron, 2004.) A social story includes pictures and words that children can read and reflect back on when introduced to various social settings and scenarios. This intervention defines appropriate responses to social situations which can ultimately impact a child's learning in academic and social areas (Adams et al., 2004). Social stories assist children in improving new social skills and improving already learned social behaviors (Adams et al., 2004).

This study implemented the use of social stories for children with disabilities in an inclusive preschool classroom to determine the impact on social skills and self-control

during instruction and play centers. The classroom teachers instructed students using social stories related to the skills of sharing appropriately with others, maintaining social exchanges with peers, and requesting items and toys when they want to play.

### **Significance of Study**

This study was conducted with the goal of increasing impulse control, social exchanges, and verbal requesting skills of children with disabilities through the utilization of social stories in an inclusion classroom. It was hypothesized that social stories would foster increased interactions between children with disabilities and their typically developing peers.

Moreover, this study has possible implications for both teachers and students. Through this study, the teachers gained skill in using social stories in inclusive classrooms. Findings may support other teachers in recognizing how social stories affect student behavior, and how to increase desired behaviors for students developing socialization skills with peers. The findings of this study may provide teachers with a new tool to use in conjunction with their existing behavior practices, leading to increased social skills and self-control in their students.

Students participating in the study developed improved social skills through the use of the social story intervention. This study provided students with the tools to successfully interact with peers, allowing for an increase in impulse control, social exchanges, and verbal requests. Involvement in the study offered students an opportunity to begin to develop social skills that may lead to lifelong learning and meaningful friendships.

## **Purpose of Study**

The purpose of this study was to evaluate the effectiveness of social stories on the socialization and self-control behaviors of preschool children with disabilities. This study investigated the effect of a social story intervention on student social behavior in the inclusive preschool classroom. Specifically, the study investigated whether social stories increased the number of social exchanges between children, the verbal requests for items during play centers, and the impulse control of children during play centers in the inclusive preschool classroom.

## **Research Questions**

The research questions for this study follow:

- 1) Does the use of social stories increase the impulse control of preschool children with disabilities while playing during centers?
- 2) Does the use of social stories increase the number of social exchanges between preschool children with disabilities and peers while playing during centers?
- 3) Does the use of social stories increase the verbal request for an object used by preschool children with disabilities while playing during centers?

## **Chapter 2**

### **Review of Literature**

Preschool children have several occasions during the school day to appropriately interact and socialize with their peers in the classroom (Chapman, 2015). Children increase their social knowledge as they build new friendships (Danby, Thompson, Theobald & Thorpe, 2012). Opportunities for beginning friendships in the classroom occur during various times throughout the school day to foster socialization and peer play with others (Chapman, 2015). According to Chapman, these peer interactions result in the development of children's socialization skills by providing them with opportunities to make friends, solve and manage problems during play, and learn to share and use language while taking on new roles within the classroom environment (Chapman, 2015). By allowing peer interactions to occur between children, positive and appropriate relationships and acceptance begin to develop amongst students in the classroom, creating a warm and welcoming environment (Chapman, 2015).

Some children, however, may display difficulties in understanding socialization and self-controlling behaviors when starting at a new school or interacting with new classmates (Degol & Bachman, 2015). Preschool is a significant adjustment for many children as they are entering school for the first time, and learning new rules can result in emotional or behavioral difficulties (Poulou, 2015). Although, most children are able to overcome these difficulties, others encounter ongoing social problems which can lead to a delay in social progression and development for future school years (Poulou, 2015).

To promote positive peer interactions and to decrease inappropriate social behaviors in children with disabilities, the intervention of social stories may be effective

(Crozier & Tincani 2007). Social stories may be used as an intervention to develop and foster appropriate social relationships in the classroom, and to increase specific social skill (Briody & McGarry, 2005).

According to Carol Gray and Joy Garand, uses of social stories include facilitating appropriate social experiences, establishing changes and routines for children in the classroom, and teaching new academic and social skills (1993). Social stories can be utilized in a school setting and are comprised of pictures and language that communicate to children how to act in academic and social situations that may occur during the school day (Gray & Garand, 1993). These descriptive stories provide a straightforward focus and target a particular behavior or area in which the child lacks social skills (Gray & Garand, 1993). Gray and Garand explain that techniques to implement social stories include selecting appropriate language and pictures to accommodate the individual child's needs, modeling the intervention, and prompting the child to engage in role play (1993). Social stories can be used in various elementary and secondary level classrooms for children that struggle with both academic and socialization skills, and can be used to practice scenarios of real life situations they may encounter (Gray & Garand, 1993).

This literature review will focus on the play skills of preschool children, and the impact of disabilities on their developing socialization and self-control. This review will also summarize the research related to using social stories to increase social skills in children with learning disabilities.

## **Play Skills and Preschool Children**

“The importance of play on a young child’s development cannot be understated. Play gives children opportunities to understand the world, interact with others, express and control emotions, develop symbolic capabilities, attempt novel or challenging tasks, solve problems, and practice skills. Play may contribute to the development of posture, movement, and self-sufficiency” (Hanline, 1999, p. 289).

Social awareness is a significant developmental milestone for children of preschool age. During play, children interact with peers, indicating social understanding and responsiveness to others in an appropriate manner (Gagnon, et al., 2014). The adjustment to preschool may be challenging for children as they learn social rules and adapt to new social relationships (Gagnon et al., 2014). In a study of preschool children, Gagnon and colleagues found that children who are capable of socially accepting others during play are able to successfully manage problems and solutions and display emotions with effective communication skills (Gagnon et al., 2014). Some of the play skills preschool children engage in include sharing and communicating with peers in classroom settings (Gagnon et al., 2014).

Mary Hanline (1999) found that there are several types of play that children engage in with peers. The three types of play include: construction play, symbolic play, and sensorimotor play, which children develop throughout their early lives (Hanline, 1999). Constructive play involves children utilizing media or manipulatives to build or create something; symbolic play embraces children’s ability to exercise their imaginations through role playing and sociodramatic play; and sensorimotor play engages children to use their senses and physical attributes to learn about the environment using

gross and fine motor skills (Hanline, 1999). Experiences in varying types of play are critical in the development of young children and exposure should be incorporated into early childhood learning programs as core content for children to learn (Hanline, 1999). Furthermore, play based curriculum allows for children's understanding and growth of emotional, social, academic, and physical development which is fundamental to developing maturity and making progress in future grade levels (Hanline, 1999).

Pellegrini (1982), observed children engaging in various types of play in a preschool setting and found that typically developing preschool boys and girls played with different kinds of toys and manipulatives within the classroom. Both male and female students were observed interacting during center play, and their verbalized interactions were studied. The conversations between children focused on the play toys and creative ideas of how to play with the toys. Through play, social communication skills grow (Pellegrini, 1982).

Similarly, in a study conducted by Wright (1990), exploring the free play of children in a preschool classroom, children spontaneously initiated conversations with peers while using imagination to create scenarios. As a result of this finding, Wright suggested that play be a part of regular preschool curriculum to provide opportunities for children to socially interact and to meet emotional and cognitive needs (1990).

Research conducted by Dunn and Herwig (1992), suggests that preschool children, at times, do exhibit non-social play (e.g. enjoy playing in a block area or manipulatives area without other children around). However, the researchers explain that high levels of non-social play could indicate the need for intervention to facilitate social skill development and cognitive growth. Play is also reported by the researchers to be

extremely beneficial for cognitive development in children and for revealing how children can react in various social settings. Lastly, the researchers conclude that play directly correlates to a child's creativity and level of intelligence (Dunn & Herwig, 1992).

### **Impact of Disabilities on Play Skills of Preschool Children**

“The development of socially appropriate behaviors and learning skills is the primary educational goal of programs for handicapped children” (Poresky & Hooper, 1984, p. 391).

Childress (2011), explains that children with disabilities have a difficult time exploring, communicating, and interacting with others at an early age. Children with disabilities often have problems in areas of physical and social development which impede their abilities to communicate and play appropriately with others (Childress, 2011). Play behaviors of children with physical and cognitive disabilities often manifest themselves as inability to engage in free play with others, or to communicate and respond appropriately in play situations (Childress, 2011). Children diagnosed with autism spectrum disorder often display difficulties in purposeful engagements with others, and turn to lessened social interactions and more isolated and repetitive play (Childress, 2011). However, Childress reports that through parental involvement and early intervention practices, children can develop the appropriate strategies to effectively engage in play settings (2011).

A study conducted by Poresky and Hooper (1984), found that preschool children with disabilities engaged predominately in solitary play when placed in a class of children without disabilities. However, the researchers discovered an increased level of social play when teachers stimulated group interactions to encourage peer socialization.

Also, it was found that social toys did not maintain cooperative play between peers (Poresky & Hooper, 1984).

Furthermore, in a study of preschool children with pervasive developmental disorder (PDD), Pierce-Jordan and Lifter found that children were less likely to engage in social interactions if the play was developmentally difficult for them (2005). The researchers deduced that children with PDD displayed social behaviors and play when involved in object-focused activities, rather than peer social interactions (Pierce-Jordan & Lifter, 2005). It was suggested by Pierce-Jordan and Lifter that teachers provide students with play goals and integrate children slowly into play situations (2005).

An observational study conducted by Bobzien and colleagues explained that children with hearing loss verbalized fewer initiation comments during active play than those children without hearing loss (2013). However, the researchers found that during play, the children with hearing loss participated in more verbal turn-taking and play turn-taking than those children without hearing loss. Moreover, the study and researchers concluded that hearing loss and social communication between peers affected play and exchanges of comments to other peers (Bobzien, et al., 2013).

Malone and Langone (1999) report that direct interventions are critical in aiding a child with a disability in the classroom. Without intervention, children with disabilities are more likely to fall behind in other areas of development which can result in lack of understanding in the classroom (Malone & Langone, 1999). However, intervention strategies for children can increase independence, self-discovery, and social engagements with peers, allowing for social skills and friendships with other children to develop (Malone & Langone, 1999).

## **Socialization and Self-Control of Preschool Children**

“Children thrive in inclusive settings where each child is an important part of the community. When differences are celebrated and similarities discovered, children learn to value themselves, appreciate their peers, and develop meaningful and significant relationships with others” (Manaster & Jobe, 2012, p. 12).

Socialization and peer interactions are essential to the well-being of a child in many areas leading to feelings of self-esteem, security, confidence, and a sense of connection and happiness with others (Manaster & Jobe, 2012). Friendships begin to blossom between classmates, and peers learn through social communication, and social rules such as using manners, sharing items, and speaking with others in an appropriate way (Manaster & Jobe, 2012). It is important that social interactions are maintained in the classroom and practice of appropriate social exchanges is monitored as children will use these experiences throughout their lives to maintain friendships and understand social rules in various settings (Manaster & Jobe, 2012).

Research by Danby, Thompson, Theobald, and Thorpe (2012), indicates that children must require an understanding of social knowledge to initiate friendships with others and to build and maintain relationships. Danby and colleagues discovered through surveys and recorded conversations, that children build peer relationships by making requests from others, by collaborating during play, and by observing scenarios around them including how other children play (Danby, et al., 2012).

Furthermore, Rosenthal-Malek (1997), explains that children can utilize strategies to target and develop social skills such as sharing, taking turns, playing, communicating with peers, and eliminating aggressive behavior. Through daily formal social skills

instruction, children can be taught to self-check and ask themselves questions about how they are playing (Rosenthal-Malek, 1997). Children can engage in questions about how they are feeling, thinking, and how others may be feeling based on their actions and words used during play time (Rosenthal-Malek, 1997). Social skills instruction teaches children to use self-monitoring, and to develop their socialization and self-management skills (Rosenthal-Malek, 1997).

In a report by Cheri Miller (1984), it is stated that children often display disciplinary problems when they are faced with boredom, anxiousness, and over stimulation. These characteristics of a child may manifest in a loss of self-control, and disruptive behaviors which may include acting out in class, and lack of cooperation during activities (Miller, 1984). However, through strategies such as changing the environment of the classroom, creating substantial schedules to follow, providing expectations and consequences, redirection, and ignoring undesired behaviors, children will increase focus and willingness to engage in appropriate classroom activities (Miller, 1984).

In a study conducted by Duckworth, Gendler, & Gross (2014), the researchers focused on how children can exercise self-control across varying domains of behaviors. They discovered that there are self-control strategies that can be utilized and that those strategies can be applicable to children struggling to maintain self-control. The strategies include: situation selection, situation modification, attention deployment, cognitive change, and response modulation (Duckworth et al., 2014). Each of the strategies emphasizes natural consequences and considering results of social actions (Duckworth et

al., 2014). The researchers conclude that utilization of these strategies in the classroom can increase self-control in children (Duckworth et al., 2014).

Humphrey (1982), reports that children can be taught to set goals effectively for themselves with teacher and parental guidance and shape a plan for self-monitoring and self-evaluation within the classroom. Such goals should build a child's awareness of self-control, and Humphrey recommends using a rating scale system in which the children and teachers both rate the behaviors of the child (1982). Through the ratings, children increase self-awareness of the behaviors they are displaying in the classroom, and work to achieve related goals (Humphrey, 1982). The goals should be worked on at home and at school to ensure that consistency and connection between teachers, parents, and children occur (Humphrey, 1982).

In a research study by Logue & Chavarro (1992) using a sticker reward system, it was discovered that children of a preschool age are naturally impulsive if not properly taught to control their emotions and actions. The researchers found that this was more prevalent in preschool aged boys than girls, and reported that children at this age acted impulsively when seeing something they wanted (Logue & Chavarro, 1992). This finding may be evident in preschool classrooms when children take things that they want without asking or using appropriate communication and self-control.

### **Benefits of Social Stories**

Although teachers provide opportunities for children to socialize and transition at school, many children have difficulties with peer interactions and with joining classroom social settings appropriately (Briody & McGarry, 2005). Social stories can provide assistance to children by using scenarios that children can relate to, and by establishing

understanding and comfort in the classroom (Briody & McGarry, 2005). Social stories can be used for many social problems in the classroom from sharing, to using appropriate words, and to explaining to children how to collaborate within a group setting (Briody & McGarry, 2005). Many special education researchers support the intervention of social stories for children with disabilities as it increases social skills and developmental language in students (Briody & McGarry, 2005).

Crozier and Tincani report that social stories are a popular intervention tool for children with disabilities, especially autism spectrum disorder (2007). The social stories used in their research provided students with opportunities to practice social skills and social interactions using pictures and sentences (Crozier & Tincani 2007). According to the researchers, social stories used on preschool children have profound results including increased desired social behavior and decreased negative behaviors in the classroom (Crozier & Tincani 2007). The participants in the study were able to show a significant increase in positive behaviors with the use of social stories interventions (Crozier & Tincani 2007).

In a research study conducted by Karayazi and colleagues, a young woman with autism spectrum disorder utilized social stories leading to an increase in social exchanges and language with others (Karayazi, et al., 2014). The researchers had a goal of expanding her functional independence and pro-social greeting behaviors (Karayazi, et al., 2014). It was found that through the use of social stories, the rate of appropriate social behaviors increased and the young woman enhanced her pro-social skills (Karayazi, et al., 2014). The young woman generalized the skill to greeting others when encountering

new people after the intervention of social stories was implemented (Karayazi, et al., 2014).

Similarly, Ning, Hammond, and Ingalls (2012), studied behaviors of Hispanic children with developmental delays within a preschool classroom. During the observation, the researchers determined that language barriers were a challenge for the children, and that they struggled to display appropriate play skills with others. After the use of culturally familiar social stories interventions and pictures within the social stories, however, the children's desired behaviors increased. The researchers found that it was not only the pictures that increased the desired behaviors, but also the culturally diverse social stories that benefitted the children's understanding of social skills (Ning, et al., 2012).

In contrast, in a study conducted by Hochdorfer and colleagues, the researchers' goals were to increase verbal initiation and peer responses in children with autism and Asperger's syndrome utilizing social stories. The children had difficulty achieving the goals that were intended for them during the intervention. The researchers concluded that social stories may only be effective for students if the population in the stories closely resembles those taking part in the actual intervention. The use of social stories, however, was seen to be effective once they were modified for the children (Hochdorfer, et al., 2010).

According to Reynhout and Carter (2007), social stories have become widely accepted as an intervention that decreases negative behaviors displayed in a child with autism spectrum disorder. Reynhout and Carter found that through social stories, physical behaviors in children with ASD, such as repetitive movements, could be decreased.

Moreover, the researchers discovered that aside from decreased levels of physical movements, learning of classroom subject matter increased after the use of the social story intervention (Reynhout & Carter, 2007).

Finally, Scattone and colleagues (2006), conducted a study to determine if children with ASD could respond to peers appropriately through social interactions using a social stories intervention. The children had difficulty initiating social interactions and responding to peers during free time activities in the classroom. The researchers found that the children increased social interactions, including verbal, physical, and gestural responses, as a result of the social stories intervention (Scattone, et al., 2006).

### **Conclusion**

In conclusion, this literature review focused on research in the areas of play skills, socialization, and the self-control of preschool children with and without disabilities. This review also identified the importance and utilization of the intervention of social stories and its impact on children's behaviors in social settings. The research found within this review provides support for social stories decreasing negative behaviors and increasing positive behaviors to foster positive peer relationships in the classroom. Social stories can help facilitate developmentally appropriate social behaviors for preschool children, and may lead to increased self-control. This study aims to investigate the effect of a social stories intervention on the socialization and self-control behaviors of children in an inclusive pre-school setting.

## **Chapter 3**

### **Methodology**

#### **Setting and Participants**

**School.** This study was conducted in an elementary school in a suburban southern New Jersey school district. The small school district is comprised of two schools, one elementary school and one middle school, and an administration office. The elementary school includes grade levels of preschool through third grade and the middle school includes grade levels of fourth through eighth. There are roughly 700 students enrolled in the school district. All participating students in this study are enrolled in the full-time day preschool program which includes two regular education preschool classrooms and two preschool disabled classrooms. This school year, one preschool disabled classroom is included full time with one regular education classroom.

**Classroom.** The classroom contains one regular education teacher, one special education teacher, and two teacher assistants. There are 18 students in total in the classroom. Participants in the study included three preschool aged school students with Individualized Education Plans (IEP), classified as preschool child with a disability, and ten preschool aged students of typical development. The classroom is designed for smaller children with lowered sinks, a classroom bathroom with smaller toilet, short round tables and small chairs, and cubbies with hooks. Most of the equipment and furniture in the classroom is intended for early childhood use and the play centers in the classroom consist of: Art Center, Sensory Table, Block Center, Library Center, Manipulatives Center, and “Let’s Pretend” Center. The children also participate daily in gross motor activities in the morning with the other preschool classes. Children play

together throughout the centers using a system in which they have the option to choose where they want to play, who they can play with, and when they can move to another center, as they wish. The children also participate in small group and large group activities together, which focus on literacy and mathematics skill building. Children also have access to technology through the use of a Smart Board and IPAD applications which are used for educational purposes. Students in the classroom also have a daily “rest” time followed by “specials” which include Physical Education, Spanish, Art, Music, and Computer classes. The length of a typical school day is six hours and twenty minutes.

**Participant 1.** HH is a four and a half year old female child that has recently been moved into another preschool disabled classroom due to over population in the program. HH is Caucasian and also has an IEP, allowing for speech therapy to be a part of her daily school day. HH is classified as a preschool child with a disability and has difficulty staying focused and using self-control in the classroom. She is very friendly and kind to others, yet she lacks self-discipline in body awareness and in voice control utilization in the classroom. HH is often caught playing in the bathroom with the water from the sink and has a difficult time controlling her behaviors which leads to loud outbursts and yelling in the classroom. She also has trouble requesting items when she wants something and will often grab what she wants from a friend without asking for permission first.

**Participant 2.** HS is a five year old male child that has also been moved to another preschool disabled classroom due to over population in the program. HS is Asian American and has an IEP. HS receives speech, occupational, and physical therapy and is included in integrated lessons with the other preschool disabled children for these various therapies. HS is classified as a preschool child with a disability and displays difficulties

in receptive and expressive language skills as well as speaking to others about thoughts or feelings. HS also has difficulties with asking for items he may need or want and does not explain to the teacher when he needs to use the bathroom. HS will often play by himself and has trouble joining in group settings and playing appropriately with peers. He does enjoy playing with toy cars and having them crash into one another.

**Participant 3.** AC is a five year old Asian American male that is included in the regular preschool classroom since the beginning of the school year. AC has an IEP and is classified as a preschool child with a disability. AC has made significant progress this school year, however, he still lacks the skill of requesting for items that he wants and does not share well with his classmates. AC receives speech and occupational therapy which helps him focus on speaking to others in appropriate ways using full sentences. AC often has a difficult time controlling his temper when he does not get what he wants and has to take a couple of minutes to calm down. He is, however, a very kind boy and enjoys playing with his peers and learning new things, especially about automobiles and superheroes.

Each of the three children participate in the inclusive preschool classroom with typically developing peers. The children participate in circle time and center time for academic and social emotional encouragement and to learn from like peers. In the upcoming school year, two of the three children will advance to Kindergarten and one child will remain in preschool in the regular education class for an additional year prior to Kindergarten.

The table below represents general information regarding the three preschool children that are included in the study:

Table 1

*General Information on Participating Students*

<b>Student</b>	<b>Age</b>	<b>Grade</b>	<b>Classification</b>	<b>Baseline Mean Number of Social Exchanges</b>	<b>Baseline Mean Number of Verbal Requests</b>	<b>Baseline Mean Number of Impulsive Behaviors</b>
A - HH	4.5	Preschool	Preschool Child with a Disability	2.40	0.20	5.00
B - HS	5	Preschool	Preschool Child with a Disability	0.40	0.60	3.40
C - AC	5	Preschool	Preschool Child with a Disability	3.60	1.40	5.00

**Materials**

The intervention model of social stories was used in this study to observe student’s behaviors in social exchanges, verbal requests, and impulsive behavior. The intervention included the use of three social stories titled: “Using My Words”, “Taking Turns”, and “Sharing My Things”. These stories were found in a collection of specialized social skill miniature stories created for preschool to second grade learners from the reference book *Social Skills Matter!* Within this book, the social stories are illustrated with pictures and words that present scenarios of children learning various social skills. The pictures in the stories are of young children, and study participants were asked to give them names to relate to them during the reading. The stories vary in topic from communication skills, learning to play appropriately, manners, and routines within the

classroom. The stories were chosen for this study to assist the participants in focusing on specific social skills that they struggle with in the classroom. The participants were provided the opportunity to use the skills they learned during center based play with other children in the classroom.

### **Research Design**

This study utilized a single subject design with ABC phases. Throughout Phase A, data was collected at a baseline level for the three participant's behavior within the classroom during center time. The baseline data was collected by both the teacher and teacher assistants in the classroom. The baseline data was taken for an hour each day, at fifteen minute intervals, over the span of one week. The behaviors that were observed included: number of social exchanges, verbal requests, and impulse control.

Data was collected on social exchanges and included: saying hello and goodbye, saying how you feel, using appropriate language during play, conversing about play items, and initiating turn taking and sharing of toys.

Data was collected on verbal request behaviors and included: asking to use the bathroom, asking a friend to play, asking for a toy, asking the teacher a question, asking to change a center, and asking for a snack.

Data was collected on impulsive behaviors which included: taking a toy from a friend, changing centers without asking, using the bathroom without telling a teacher, hitting a friend, shouting and running in the classroom, and calling out when another student was asked a question.

Phase B included a three week intervention stage in which students were read to using social stories by the teacher. The social stories included titles such as: *Taking*

*Turns, Using My Words, and Sharing My Things*. Each week of the intervention phase incorporated a new social story, and included the one from the previous week. The social stories were read to the participants prior to the starting of center time in the classroom. During center time, participants were observed using a checklist taken for an hour each day, at fifteen minute intervals, over the span of the three weeks.

Phase C included a one week post intervention maintenance stage. Participants were observed again after not being read social stories for a whole week after the social stories intervention. This phase was included to determine how well the social stories intervention generalized to the social skills by the participants and to determine how well the participants utilized the strategies found within the social stories in their play time with others. This phase demonstrated how the participants also were able to retain the information after not reading the social stories for a week.

### **Variables**

The independent variable in this study was the social stories intervention. This intervention targeted participant's behavior by determining if the amount of social exchanges, verbal requests, and impulse control would increase during play center time utilizing the social stories. The dependent variable in the study was the social skills and self-control behaviors of the preschool children.

### **Procedure**

The intervention was implemented over a six week period during the months of April and May in the year 2016. The children in the preschool classroom were observed for one hour a day for the span of a week for baseline data, one hour a day for three weeks for intervention data, and one hour a day for a week for maintenance data. The

varying data was collected during center time, in which students are able to move around the room to various play centers that include: Art Center, Sensory Table, Block Center, Library Center, Manipulatives Center, and “Let’s Pretend” Center.

During week one, baseline data was collected using a checklist to determine how many times children used social exchanges, verbal requests, and impulse control during center time. Participants played in centers with other children and were seen to have difficulties in these three areas. A review of baseline data led to the hypothesis that participant one would have most difficulty in the area of impulse control, participant two would have the most difficulty in social exchanges and verbal requests, and participant three would have the most difficulty in social exchanges.

During the intervention stages of three weeks, the participants were read aloud the social stories outside of the classroom prior to the start of centers. The three participants were read one book each week and continued to read the books during the entire intervention stage. Once the participants were read to using the social stories, they were then asked to pick a center to play in while being observed on the three types of behaviors.

The social stories used in this intervention stage consisted of teaching the participants how to appropriately take turns, share toys, and to use appropriate words during play. These social stories also delivered messages and questions to students about how they can utilize what they learned in the classroom. After reading the social stories, the participants and teacher had a discussion about what they can do in the classroom to improve their social skills and self-control behaviors.

Maintenance data was added to this study to enhance understanding of intervention effectiveness, and to collect further data of participant’s generalized behavior during center time. This data was taken after a week of no intervention. This data required observations completed by the teacher while watching the children play in the various centers. During this maintenance data taking, however, there was verbalization and prompting to remind the participants of what they learned during the intervention stage using the social stories.

**Measurement Procedures**

**Observations.** To complete data collection for baseline, intervention, and maintenance phases, observational skill checklists were utilized in this study (see Table 2). Observations were recorded based on fifteen minute intervals for an hour each day. The participants were observed during center time and two teacher assistants and the teacher observed the children. If during the fifteen minute intervals there was no activity from the participant in any category, they would have a zero tally for that social skill.

Table 2

*Example Observational Skill Collection Chart*

Participant X	9:45	10:00	10:15	10:30	10:45
# Of social Exchanges					
Verbal Requests					
Impulse Control					

## **Data Analysis**

The baseline, intervention, and maintenance data that was collected was recorded after each day for an hour a day. The intervals were fifteen minutes for each hour and the tallies were totaled at the end of each day. The average and standard deviations were calculated based on weekly results of the data and a separate table prepared. The data was then transcribed into visual graphs which displayed baseline, intervention, and maintenance data depending on which social story was being read that week. There are nine graphs in total that display the three social stories used in the intervention phase, as presented in Chapter 4.

## Chapter 4

### Results

In this single subject design study, the use of a social stories intervention was investigated in relation to the social skills and self-control behaviors of preschool children with disabilities. The following research questions were examined:

- 1) Does the use of social stories increase the impulse control of preschool children with disabilities while playing during centers?
- 2) Does the use of social stories increase the number of social exchanges between preschool children with disabilities and peers while playing during centers?
- 3) Does the use of social stories increase the verbal request for an object used by preschool children with disabilities while playing during centers?

Data for this study was collected utilizing observational skill checklists. Observations were recorded, based on fifteen minute intervals for an hour each day, for the three behaviors of (1) number of impulsive behaviors, (2) number of social exchanges, and (3) number of verbal requests. The three participants were observed in an inclusive preschool setting with typical peers during center time.

### Individual Participant Results

#### Participant 1 - HH

**Impulse control.** In the area of impulsivity, at baseline Phase A (week 1) HH displayed impulsive behaviors a mean of 5 times per hour. Following baseline, the intervention phase began and lasted three weeks (B1-B3), with a new social story added each week. During intervention Phase B1 (week 2) HH worked with the social story *Taking Turns*. Her impulsive behavior decreased to a mean of 3.8 times per hour. During

intervention Phase B2 (week 3), HH worked with the social stories *Taking Turns* and *Using My Words*. Her impulsive behavior increased to a mean of 5.2 times per hour. During intervention Phase B3 (week 4), HH worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. Her impulsive behavior again decreased to a mean of 2.8 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HH engaged in impulsive behaviors in the classroom a mean of 3.8 times per hour during center time, post-intervention.

**Social exchanges.** At baseline Phase A (week 1) HH participated in social exchanges with a peer a mean of 2.4 times per hour. During intervention Phase B1 (week 2) HH worked with the social story *Taking Turns*. She again participated in social exchange with a classmate a mean of 2.4 times per hour. During intervention Phase B2 (week 3), HH worked with the social stories *Taking Turns* and *Using My Words*. The participant used social exchanges with peers a mean of 2.6 times per hour, a slight increase. During intervention Phase B3 (week 4), HH worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. Her social exchanges decreased to a mean of 2.2 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HH again participated in a social exchange with a peer a mean of 2.2 times per hour during center time, post-intervention.

**Verbal requests.** In the area of verbal requests, at baseline Phase A (week 1) HH used a verbal request a mean of 0.2 times per hour. During intervention Phase B1 (week 2) HH worked with the social story *Taking Turns*. Her use of verbal request increased to a mean of 0.8 times per hour. During intervention Phase B2 (week 3), HH worked with the social stories *Taking Turns* and *Using My Words*. Her use of verbal requests increased

to a mean of 1 time per hour. During intervention Phase B3 (week 4), HH worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. Her use of verbal requests again increased to a mean of 1.6 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HH engaged in verbal request in the classroom a mean of 1.2 times per hour during center time, post-intervention. See Figure 1.

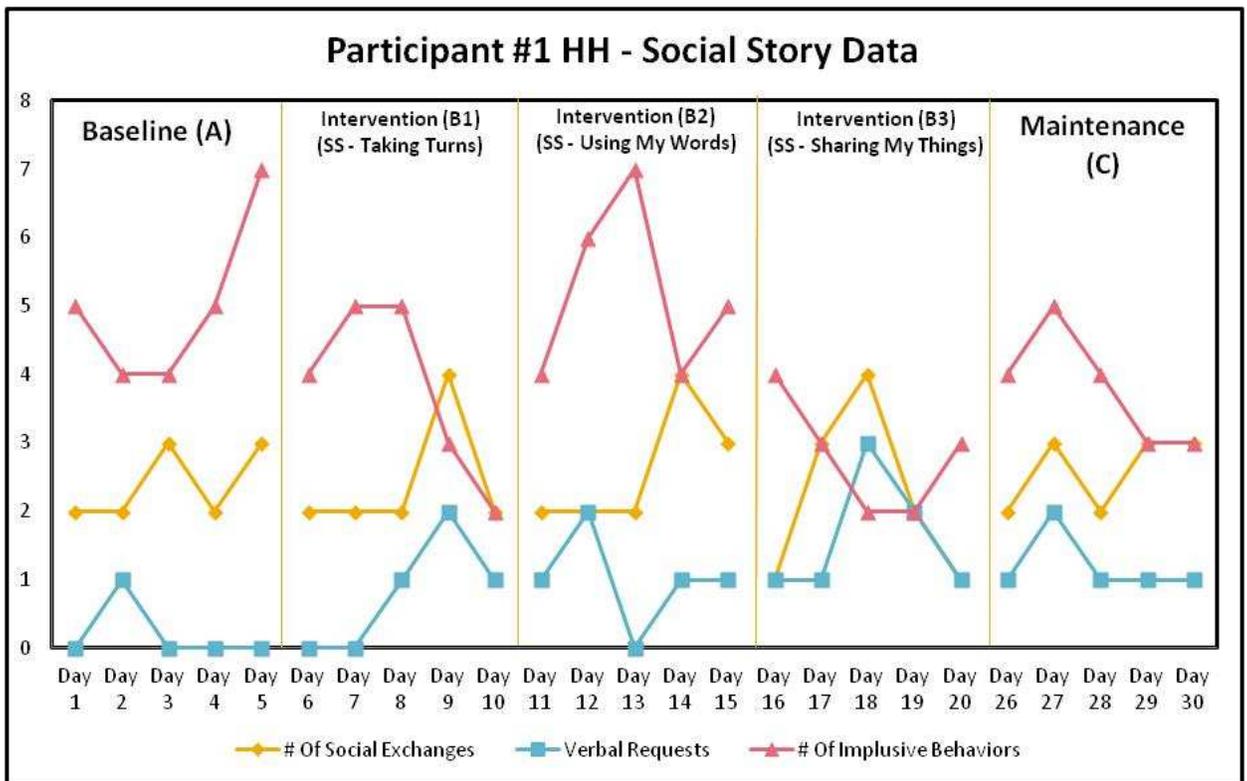


Figure 1. Participant #1 social story intervention across phases

## **Participant 2 – HS**

**Impulse control.** In the area of impulsivity, at baseline Phase A (week 1) HS displayed impulsive behaviors a mean of 3.4 times per hour. Following baseline, the intervention phase began and lasted three weeks (B1-B3), with a new social story added each week. During intervention Phase B1 (week 2) HS worked with the social story *Taking Turns*. His impulsive behavior decreased to a mean of 2.2 times per hour. During intervention Phase B2 (week 3), HS worked with the social stories *Taking Turns* and *Using My Words*. His impulsive behavior increased to a mean of 2.4 times per hour. During intervention Phase B3 (week 4), HS worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. His impulsive behavior increased to a mean of 3 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HS decreased impulsive behaviors in the classroom to a mean of 2.4 times per hour during center time, post-intervention.

**Social exchanges.** At baseline Phase A (week 1) HS participated in social exchanges with a peer a mean of 0.4 times per hour. During intervention Phase B1 (week 2) HS worked with the social story *Taking Turns*. He again participated in social exchange with a classmate a mean of 0.4 times per hour. During intervention Phase B2 (week 3), HS worked with the social stories *Taking Turns* and *Using My Words*. The participant used social exchanges with peers a mean of 2 times per hour, an increase from previous intervention phase. During intervention Phase B3 (week 4), HS worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. His social exchanges decreased to a mean of 0.6 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HS again participated in

a social exchange with a peer a mean of 0.6 times per hour during center time, post-intervention.

**Verbal requests.** In the area of verbal requests, at baseline Phase A (week 1) HS used a verbal request a mean of 0.6 times per hour. During intervention Phase B1 (week 2) HS worked with the social story *Taking Turns*. His use of verbal request increased to a mean of 0.8 times per hour. During intervention Phase B2 (week 3), HS worked with the social stories *Taking Turns* and *Using My Words*. His use of verbal requests increased to a mean of 1.2 times per hour. During intervention Phase B3 (week 4), HS worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. His use of verbal requests decreased to a mean of 0.6 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). HS engaged in verbal request in the classroom a mean of 0.8 times per hour during center time, post-intervention. See Figure 2.

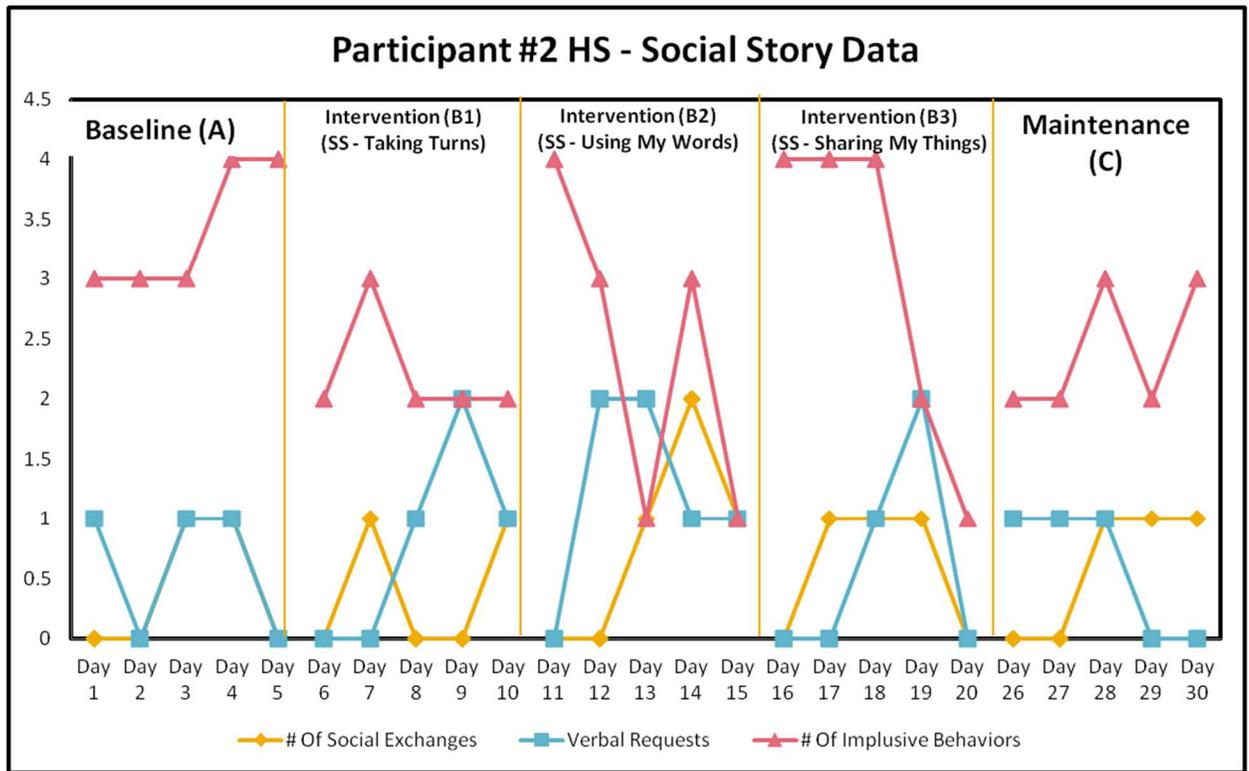


Figure 2. Participant #2 social story intervention across phases

### Participant 3 – AC

**Impulse control.** In the area of impulsivity, at baseline Phase A (week 1) AC displayed impulsive behaviors a mean of 5 times per hour. Following baseline, the intervention phase began and lasted three weeks (B1-B3), with a new social story added each week. During intervention Phase B1 (week 2) AC worked with the social story *Taking Turns*. His impulsive behavior decreased to a mean of 4 times per hour. During intervention Phase B2 (week 3), AC worked with the social stories *Taking Turns* and *Using My Words*. His impulsive behavior decreased to a mean of 3.4 times per hour. During intervention Phase B3 (week 4), AC worked with the social stories *Taking Turns*,

*Using My Words*, and *Sharing My Things*. His impulsive behavior decreased again to a mean of 2.8 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). AC, however, increased impulsive behaviors in the classroom to a mean of 3.6 times per hour during center time, post-intervention.

**Social exchanges.** At baseline Phase A (week 1) AC participated in social exchanges with a peer a mean of 3.6 times per hour. During intervention Phase B1 (week 2) AC worked with the social story *Taking Turns*. He participated in social exchange with a classmate a mean of 3 times per hour. During intervention Phase B2 (week 3), AC worked with the social stories *Taking Turns* and *Using My Words*. The participant used social exchanges with peers a mean of 3.2 times per hour, an increase from previous intervention phase. During intervention Phase B3 (week 4), AC worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. His social exchanges increased to a mean of 3.6 times per hour. Following one week of no intervention (week 5), maintenance data was collected (week 6). AC participated in a social exchange with a peer a mean of 3.4 times per hour during center time, post-intervention.

**Verbal requests.** In the area of verbal requests, at baseline Phase A (week 1) AC used a verbal request a mean of 1.4 times per hour. During intervention Phase B1 (week 2) AC worked with the social story *Taking Turns*. His use of verbal request decreased to a mean of 1.2 times per hour. During intervention Phase B2 (week 3), AC worked with the social stories *Taking Turns* and *Using My Words*. His use of verbal requests increased to a mean of 1.4 times per hour. During intervention Phase B3 (week 4), AC worked with the social stories *Taking Turns*, *Using My Words*, and *Sharing My Things*. His use of verbal requests increased to a mean of 2 times per hour. Following one week of no

intervention (week 5), maintenance data was collected (week 6). AC engaged in verbal request in the classroom a mean of 2 times per hour during center time, post-intervention.

See Figure 3.

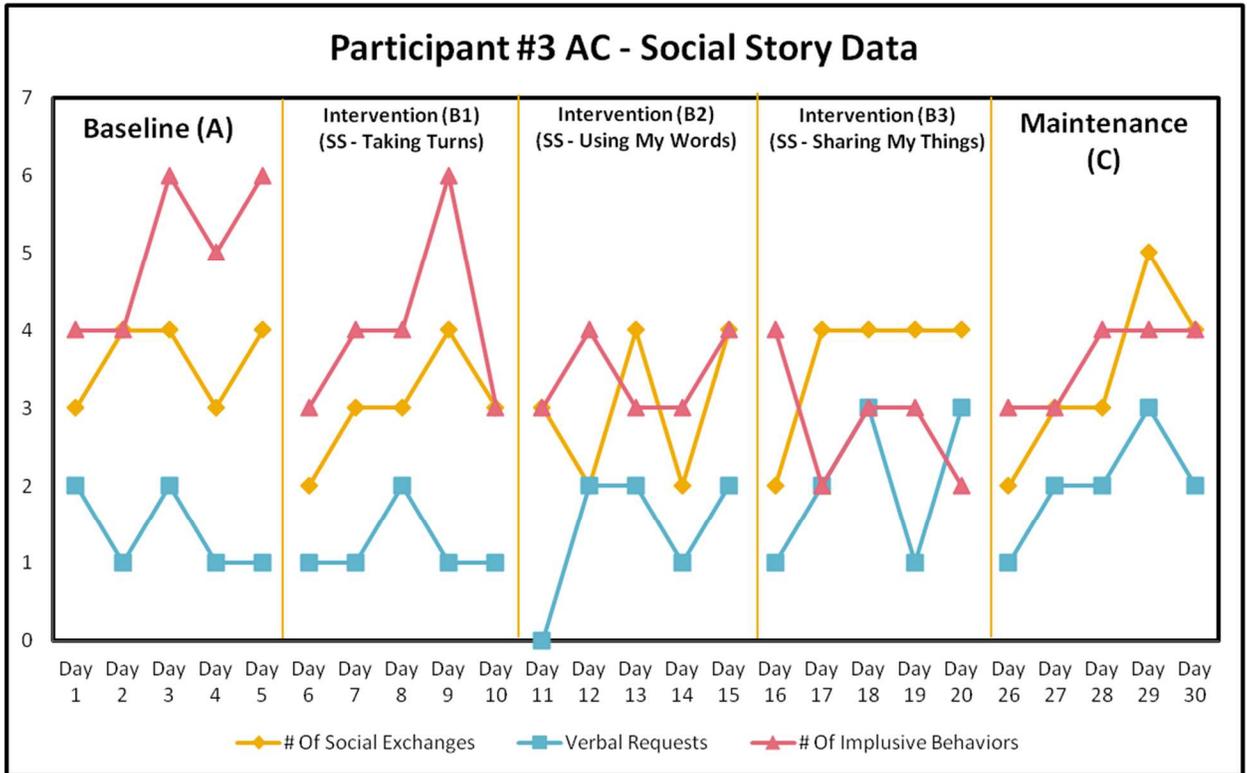


Figure 3. Participant #3 social story intervention across phases

### Group Means

The performance of all participants at baseline, intervention, and post-intervention was averaged according to skill areas to determine means and standard deviations at each phase. See Table 3.

Table 3

*Means and Standard Deviations Across Intervention Phases*

	<b>Baseline</b>		<b>Social Story: <i>Taking Turns</i></b>		<b>Social Stories: <i>Taking Turns and Using My Words</i></b>		<b>Social Stories: <i>Taking Turns, Using My Words, and Sharing My Things</i></b>		<b>Maintenance</b>	
	M	SD	M	SD	M	SD	M	SD	M	SD
<b># of Social Exchanges</b>										
HH	2.40	.55	2.40	.89	2.60	.89	2.20	1.30	2.60	.55
HS	0.40	.55	0.40	.55	2.00	.84	0.60	.55	0.60	.55
AC	3.60	.55	3.00	.71	3.20	1.00	3.60	.89	3.40	1.14
<b># of Verbal Requests</b>										
HH	0.20	.45	0.80	.84	1.00	.71	1.60	.90	1.20	.45
HS	0.60	.55	0.80	.84	1.20	.84	0.60	.90	0.80	.45
AC	1.40	.55	1.20	.45	1.40	.90	2.00	1.00	2.00	.71
<b># of Impulsive Behaviors</b>										
HH	5.00	1.22	3.80	1.30	5.20	1.30	2.80	.84	3.80	.84
HS	3.40	.55	2.20	.450	2.40	1.34	3.00	1.41	2.40	.55
AC	5.00	1.00	4.00	1.22	3.40	.55	2.80	.84	3.60	.55

In the skill area of social exchanges, the groups mean at baseline (A) was 2.13. The groups mean at intervention (B1) was 1.93. The groups mean at intervention (B2) was 2.6. The groups mean at intervention (B3) was 2.13. Lastly, the groups mean at maintenance (C) was 2.2.

In the skill area of verbal requests, the groups mean at baseline was (A) was 0.73. The groups mean at intervention (B1) was 0.93. The groups mean at intervention (B2) was 1.2. The groups mean at intervention (B3) was 1.4. Lastly, the groups mean at maintenance (C) was 1.3.

In the skill area of number of impulsive behaviors, the groups mean was (A) was 4.46. The groups mean at intervention (B1) was 3.26. The groups mean at intervention (B2) was 3.6. The groups mean at intervention (B3) was 2.8. Lastly, the groups mean at maintenance (C) was 3.26.

### **Overall Trends**

The trend in performance of all participants from baseline to post-intervention phase was considered according to the three skill areas. A review of participant data reveals a trend in which all three participants decreased impulsive behavior from the baseline to the maintenance, post-intervention phase. The group mean decreased from 4.46 at baseline phase to 3.26 at post-intervention phase. Moreover, a review of participant data reveals a trend in which all three participants increased social exchanges from the baseline to the maintenance, post-intervention phase. The group mean increased from 2.13 at baseline phase to 2.2 at post-intervention phase. Finally, a review of participant data reveals a trend in which all three participants increased verbal requests from the baseline to the maintenance, post-intervention phase. The group mean increased from .73 at baseline phase to 1.3 at post-intervention phase.

## **Chapter 5**

### **Discussion**

The purpose of this study was to evaluate the effectiveness of social stories on the socialization and self-control behaviors of preschool children with disabilities. This study utilized an ABC design to investigate the effect of social stories on three preschool children with disabilities in an inclusive preschool classroom and to collect maintenance data to assess generalization of skills post intervention. Specifically, the study investigated whether social stories would affect the number of social exchanges between children, the verbal requests for items during play centers, and the number of impulsive behaviors. The following research questions were examined:

- 1) Does the use of social stories increase the impulse control of preschool children with disabilities while playing during centers?
- 2) Does the use of social stories increase the number of social exchanges between preschool children with disabilities and peers while playing during centers?
- 3) Does the use of social stories increase the verbal request for an object used by preschool children with disabilities while playing during centers?

### **Summary of Findings**

The research questions asked if the intervention of social stories can be used to increase impulse control, social exchanges, and verbal requests in preschool children with disabilities. In the area of impulse control, research data, from baseline to maintenance phases, revealed that all three participants in the study were able to increase their ability to control their impulsive behaviors with the use of the social stories. In the area of social exchanges, research data, from baseline to maintenance phases, revealed that two of the

three participants in the study were able to increase their ability to utilize social exchanges with a peer with the use of the social stories. In the area of verbal requests, research data, from baseline to maintenance phases, revealed that all three participants in the study were able to increase their ability to utilize verbal requests with the use of social stories.

Upon review of individual data in the area of impulse control, participant 2 exhibited the greatest amount of change over the intervention stages using the social stories. Participant 2 displayed a mean of 3.40 impulsive behaviors per hour at baseline, and ended with a mean of 2.40 per hour during maintenance data collection, a decrease of 29%. Participant 3 began the study with a mean of 5 impulsive behaviors per hour at baseline and ended with a mean of 3.60 per hour, a decrease of 28%. Participant 1 also displayed gains in the area of impulse control as she displayed mean of 5 impulsive behaviors per hour at baseline and ended with a mean of 3.80 per hour, a decrease of 24%.

In an analysis of individual data in the area of social exchanges, participant 1 and 2 displayed the greatest amount of change over the intervention stages using the social stories. Participant 1 displayed a mean of 2.40 social exchanges per hour at baseline and ended with a mean of 2.60 per hour during maintenance data collection, an increase of 8%. Participant 2 also displayed a change in the area of social exchanges as he began the study with a mean of 0.40 social exchanges per hour at baseline and ended with a mean of 0.60 per hour, an increase of 50%. Participant 3, however, remained consistent in the area of social exchanges as he displayed a mean of 3.60 social exchanges per hour at

baseline, and a mean of 3.60 after the third week of social stories interventions. This mean decreased slightly to 3.40 at maintenance data collection.

Lastly, after examining the individual data in the area of verbal requests, participant 1 exhibited the greatest amount of change over the intervention stages using the social stories. Participant 1 displayed a mean of 0.20 verbal requests per hour at baseline increasing to a mean of 1.20 per hour during maintenance data collection, an increase of 500%. Participant 3 began the study with a mean of 1.40 verbal requests per hour at baseline and ended with a mean of 2.00 per hour, an increase of 43%. Participant 2 also displayed a change in the area of verbal requests as he began the study with a mean of 0.60 verbal requests per hour and ended with a mean of 0.80 per hour, an increase of 33%.

Results from this study suggest that the intervention of social stories resulted in an increase in participants' abilities to use social exchanges, verbal requests, and impulse control when playing with peers. These results align with the findings of prior studies by Karayazi and colleagues (2014), Scattone and colleagues (2006), Gray and Garand (1993), and Briody and McGarry (2005).

Karayazi, Evans, and Filer conducted a social stories study utilizing an AB research design, and found that appropriate and desirable social behaviors such as greetings and conversations were increased with the use of the intervention for all participants (2014). The researchers reported that social stories are responsible for the improvement of appropriate social behaviors and are a useful intervention for teachers (Karayazi, et al., 2014). The findings of the present study support the findings of

Karayazi and colleagues, as both studies led to an increase in desired social behaviors for all participants in most social skill areas.

In contrast, Scattone, Tingstrom, and Wilczynski revealed through findings of a three week multiple baseline study, that not all participants using social stories actively increased their understanding of the social skills (Scattone, et al., 2006). One out of their three participants did not change behavior after the instruction of the intervention whatsoever, whereas the other two were able to show an increase in desired behaviors (Scattone, et al., 2006). Similarly, in the present study Student #3 did not increase in the area of social exchanges. This finding, coupled with the finding of Scattone et al. warrants additional research to better understand why social stories are more effective for certain students, and why social stories may be less effective for the specific skill areas of social exchanges.

Additionally, Carol Gray and Joy Garand elucidate that social stories offer children the opportunity to engage in appropriate social experiences, allow for unproblematic transitions and changes to occur throughout the day for children, and initiate children to new academic and social skills areas of learning (Gray & Garand, 1993). Social stories can support children that struggle with socialization by providing practice of everyday social skills through realistic scenarios to increase knowledge of targeted social skills. (Gray & Garand, 1993). Findings of the present study corroborate the recommendations of Carol Gray and Joy Garand as the intervention led to an increase in appropriate social experiences for all participants.

Furthermore, Briody and McGarry indicate that social stories can offer assistance to children by providing examples of social problems and their solutions, from sharing, to

using appropriate words, to explaining to children how to collaborate within a group setting (2005). The social stories utilized in the present study appear to have provided participants with examples of how to appropriately socialize with peers.

### **Limitations**

There were several limitations to this study. The primary limitation included the sample size of only 3 participants. Although the involved participants utilized the strategies of the social stories, additional participant data would strengthen study findings.

Moreover, another limitation was a lack of parental response providing consent for students to participate in the study. This lack of parental consent further limited the number of study participants.

Furthermore, time during the school day was another limitation of this study. The children were observed for an hour each day during center time. To accommodate data collection, the classroom schedule needed to be adjusted to allow for an hour of daily social play time. Time during the spring semester for completion of the master's thesis was another limitation in this study. As the school year was nearing the end, Institutional Review Board approval was accelerated and individual phases of the study were shortened. The study may have yielded stronger results had each phase lasted additional weeks, and had maintenance data collection to assess generalization of skills taken place again several weeks post intervention.

An additional limitation was study design, as this study was presented utilizing an AB, one baseline, one intervention, design. This study would have yielded stronger

findings had it been expanded to an ABAB design with additional intervention phases, time permitting.

Lastly, teacher involvement and participation was another limitation of this study. As time and schedules toward the end of the school year conflicted, it was hard to keep data collection as the highest priority. Nevertheless, teachers were very cooperative in understanding the importance of maintaining proper data collection.

### **Implications**

Implications for practice include the need for teachers to be knowledgeable about the use of social stories. Teachers should be provided with training in how to use appropriate social stories depending on individual student need, and how social stories can be utilized in a classroom setting. Teachers should also be aware that social stories can be used in conjunction with their existing behavior practices, leading to increased behavioral outcomes.

Implications for future research involving social stories include recommendations for researchers to use larger scale study methodology with increased participants to yield stronger results. Researchers should also investigate the participants preferred areas of play (i.e. block center, pretend center, art center, or manipulatives center), to maximize results when using the social stories. Researchers may also consider the effect of increasing the duration of time that each social story is read to a participant to ensure maximum comprehension of the story's purpose. Suggestions and recommendations to improve implementation of social stories may be gathered from a larger participant population and an extended time frame in which to conduct intervention phases.

## **Conclusions**

It appears the effect of social skills may vary for children depending on the skill and behavior of the individual. Additionally, ensuring that a child is focused and actively participating in the reading of the social stories is vital to the success and outcome of the intervention. Lastly, it is recommended that parents and teachers collaborate and use social stories in both the home and school setting to increase likelihood of desirable behaviors.

After examination of the results of this study, it can be concluded that the use of social stories is an effective intervention for improving the social skills of children in an inclusive setting with typical peers. Participants in this study were successful in increasing behaviors in the areas of impulse control, social exchanges, and verbal requests and in maintaining those skills beyond the intervention. It was also clearly evident, throughout this study, that all the children in the classroom were able to develop and foster increased interactions with one another, allowing for new friendships to blossom.

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