

Using Social Stories with Children with Asperger Syndrome

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Abstract

Recent studies support the use of social stories with children with Asperger Syndrome (AS), but the number of studies is small. The purpose of this study was to examine the effects of an individualized social story intervention on the social behavior, specifically sportsmanship, of a ten year old boy with AS and to add to the body of research that has already been conducted on the use of social stories with children with AS. Data revealed an increase in social behavior. Unfortunately maintenance of the target behavior was not observed. Also some caution must be taken in generalizing the findings of a single-subject research study across students, settings or other behaviors. These findings suggest that social stories may be effective for children with AS in increasing prosocial behavior in a group setting (e.g., sportsmanship).

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Using Social Stories with Children with Asperger Syndrome

How Do Social Stories Work and Why Use Them?

Have you ever heard the phrase, “He marches to the beat of his own drum?”

Generally, that means the person one is referring to does things in his own way regardless of what other people think. People with Asperger Syndrome/High Functioning Autism (AS/HFA) might be thought of in a similar way. However, the big difference is they do not choose to be different and their differences are generally in dealing with the social world. They are lacking in certain social skills that will allow them to function successfully in social situations.

Making friends and behaving appropriately in social situations are areas of significant difficulty for children with Asperger Syndrome/High-functioning autism (Mesibov, Shea, & Adams, 2001). Children with AS/HFA do not pick up the unstated rules of social interactions. One way to minimize anti-social behaviors is by directly instructing them in the area of social skills.

Carol Gray, a public school teacher of students with AS/HFA, developed the social story technique as a way to deliver direct instruction of social skills (Gray & Garand, 1993). A social story is a series of brief, written sentences that explain events or situations in the person's life that are causing difficulty. The assumption is that the difficulty is probably due to a lack of information or cognitive confusion. Gray and

Garand (1993) state that social stories must be individually written for each student because each individual's areas of confusion and ways of understanding are different. Social stories are usually written in the first person and should contain a high proportion of sentences that describe and explain the situation. A smaller proportion of the sentences contain directions for the youngster. Gray recommends a “social story ratio” of 0-1 directive sentences for every 2-5 descriptive sentences (Mesibov et al., 2001). Descriptive sentences are those that explain and describe the scenario to the child and include the description of the setting, the people present and the sequence. Directive sentences explain what should ideally occur and the behavior the child should exhibit. Gray and Garand (1993) also suggest that perspective sentences be included. Perspective sentences explain how other people in the scenario may react and what they might say or do. Social stories for young children are generally brief, while those for older students and adults can be somewhat longer, as the concepts that may need to be explained are more complex.

The format for writing social stories has evolved since Gray first began writing them in 1993. Other sentences are now recommended as well (Gray, 2000). Affirmative sentences, control sentences and cooperative sentences may be included. Affirmative sentences look at cultural beliefs that are shared and offer understanding of situations. Control sentences explain who will help the student to recall information. Cooperative sentences explain who will help the student in these scenarios and what assistance they

can provide. A complete social story, should include between two and five perspective, descriptive, cooperative, and/or affirmative sentence, for each directive or control sentence (Gray).

Originally when Gray created social stories, she discouraged the use of pictures with the stories. Gray & Garand (as cited in Rust & Smith, 2006) believed that pictures might detract from the point of the social story and should not be used. However, she has since revised her thinking. If pictures will benefit the child, they may be used. It is important to realize that pictures may keep the child from generalizing the skill beyond the area shown in the illustration, and this needs to be considered when making this decision.

Social stories address the difficulty that children with AS/HFA have in “reading minds.” This is commonly referred to as a “theory of mind” deficit (Moyes, 2001). Children with AS/HFA have difficulty thinking about the thoughts of others and granting them importance. It also makes it difficult for these individuals to see that things happening to them may be accidental and not intentional. They have difficulty seeing the whole picture, and not just the details.

Moyes (2001) believes there are many advantages to using the social stories method. Social stories help to correct false assumptions or “rigid” thinking. They provide a formula to teach a social skill. This strategy is also highly visual, which can be a strength for many of these children. Social stories help to teach “theory of the

mind” skills and can be utilized by teachers and parents across many environments.

Finally, social stories can be saved and reviewed as needed.

Social stories are relatively simple for teachers and practitioners to implement (Gray, 1998). Because of their relatively strong language and cognitive skills and desire for structure in social situations, students with Asperger Syndrome often respond positively to strategies that prescribe what to do in various social situations, including ones that may result in aggressive behaviors (Simpson & Myles, 1998). Social stories structure the individual's behavior and social responses by offering individualized and specific response cues.

With more and more students with Asperger Syndrome/High-functioning Autism entering classrooms, teachers need strategies to help these children learn and function in social environments. Social stories are a strategy that is easy to incorporate in the day-to-day routine/schedule of a general education classroom. Also, children with Asperger syndrome will continue to be served in general education settings, so adapting and evaluating the effectiveness of specific techniques should be part of future research (Safran, 2001).

This study looks to add to the body of research on the use of social stories with children with AS/HFA. It is hypothesized that the participant in the study will demonstrate improved social skills after being taught how to respond in a specific social situation through the use of a social story.

Literature Review

The identification of autism and Asperger Syndrome (AS) dates back to the early 1940s (Safran, 2001), however, it wasn't until the mid-1990s that Asperger Syndrome was accepted as a distinct childhood “mental disorder” in America. According to the DSM-IV (American Psychiatric Association, 1994), symptoms of AS overlap with other conditions. It is often the unique combination of behaviors in social interaction and restricted areas of interest that confuses professionals and parents alike and commonly leads to misdiagnosis. Two primary clusters of traits must be present to qualify for a diagnosis of AS. The first primary cluster is a qualitative impairment in social interaction and the second describes the individual's restricted areas of interest and stereotyped behaviors and activities (Safran, 2001).

While only a small percentage of individuals with autism are considered to be high functioning, all children with AS have average to above average intelligence (Safran, 2001). In fact, many with AS may be intellectually gifted, which may mask the many difficulties they experience from adults and peers alike (Wing, 1998), making it even more difficult to diagnose.

Because Asperger Syndrome is a relatively new category in the autism spectrum disorders (ASD), research is somewhat limited in the area of interventions, specifically social stories. The research conducted over the past 10 years has shown social stories to be successful when applied to a wide variety of problem behaviors including aggression,

screaming, grabbing toys, using inappropriate table manners, and crying (Scattone, Tingstrom & Wilczynski, 2006). Swaggart and colleagues (1995) were the first to empirically validate this intervention by teaching a young girl with autism appropriate greeting behavior and two boys, one with autism and one with a pervasive developmental disorder, how to share. Swaggart and associates observed a reduction in aggression as well as an increase in appropriate greetings and sharing for these participants. Researchers have also found social stories to be effective in decreasing tantrums, cheating, and negative comments when playing games (Kuttler, Myles, & Carlson, 1998).

In addition, researchers investigated the effectiveness of social stories for skill acquisition. Hagiwara and Myles (1999) adapted social stories to a computer-based format in order to teach hand washing to two participants and on-task behavior to another. However, they observed only modest improvements from baseline to intervention. Barry and Burlew (2004) taught play skills and choice to two participants with severe autism. Improvements occurred, and the participants learned to play appropriately with materials and peers.

Investigators also examined social stories as a means for improving social interactions for children with autism. Norris and Dattilo (1999) created social stories in order to improve a young girl's initiations and responses to peers during lunchtime. They developed three social stories that included picture prompts, and each day

randomly selected and read one story to her. Although inappropriate verbalizations decreased, all social interactions also decreased, suggesting either that the varied content of the social stories made it difficult for the participant to focus on more than one instruction or that social stories may need to be part of a treatment package that includes other interventions when targeting complex behavior like social initiations and responses.

Many studies have combined social stories with other interventions, including verbal and pictorial prompts, behavior charts, reinforcement for appropriate responding, a social skills training methodology, and a response-cost system (Swaggart, Gagnon, Bock, Earles, Quinn, & Myles, 1995). Thiemann and Goldstein (2001) used a treatment package in their social story intervention for targeting conversation skills for five participants with autism. They combined social stories with verbal prompts, pictorial cues, and self-evaluative video feedback. The treatment package was effective for developing these skills, and the authors observed some generalized treatment effects across untrained behaviors. However, they did not assess individual components of the package, making it difficult for other researchers to determine the exact role that social stories played in the improvements for the participants.

In each of these studies, positive trends in data were observed. However, in all of these studies, the participants had a primary diagnosis of autism, and in most of these studies the goal of the intervention was to increase prosocial behaviors by eliminating

pervasive problem behaviors.

In a study conducted by Scattone, Wilczynski, Edwards & Rabian (2002) social stories were used as the sole intervention without the use of verbal or pictorial prompts or other interventions for three participants with autism. A reduction in disruptive behaviors occurred for two of the three participants with improvements for the third participant modest at best.

To date, many studies involving social stories have been geared toward reducing isolated inappropriate behaviors, with some investigations targeting skill acquisition and increases in appropriate social interactions. Also, many previous studies have included other interventions or components in addition to social stories.

Empirical support for social story interventions is limited, but promising. However, with increased emphasis on evidence-based practice, more research is necessary so that educational personnel can be confident when choosing social stories as possible interventions for children with AS (Sansosti, Powell-Smith, & Kincaid, 2004). Very little research exists regarding the effects of social story interventions specifically for individuals diagnosed with AS.

Over the past several years, the number of children and youth identified as having AS has increased substantially. In a recent report, Hyman, Rodier, and Davidson (2001) suggested prevalence rates for AS to be as high as 63 per 10,000 births. Such increases are likely to lead to significant increases in referrals for special education (Sansosoti &

Powell-Smith, 2006). With this in mind, developing and implementing effective programming for children with AS becomes a challenge for special education. Safran (2001) further reiterates that referrals for special education services can be expected to sharply increase in the near future for two reasons. First, AS has for the first time, been included in the most recent edition of the Diagnostic and Statistical Manual IV of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) and second, studies conducted in Europe suggest there is a large underserved student population in North America (Ehlers & Gillberg, 1993). Information is therefore desperately needed to assist educators in screening for those at risk for AS and to help plan effective interventions (Safran, 2001).

The most appropriate method for incorporating social skills training for children with AS has received little research attention. Although there is a growing body of research on interventions for higher-functioning individuals with autism, few studies have systematically addressed the efficacy of social skills interventions with purely AS samples (Sansosti, & Powell-Smith, 2006). This presents a challenge for assisting students with AS in schools. Additional challenges are presented by recent policy shifts in the Individuals with Disabilities Education Act in 1997 (IDEA, 1997) and its current reauthorization in 2004 (IDEA, 2004). Both versions of the law emphasize the use of evidence-based practices based on rigorous scientific research for students with disabilities (Sansosti, & Powell-Smith, 2006).

As a result of the law, it now becomes necessary to evaluate educational interventions with samples of children with AS. As the number of children identified with AS continues to rise, it is imperative that educators and other educational service personnel be knowledgeable of interventions that will benefit these children with cognitive strengths but severe social weaknesses.

The purpose of this study was to assess the effectiveness of a social story designed to increase an identified target behavior for an elementary school student with Asperger Syndrome. Gray's guidelines were followed in the construction of the social story. The participant has shown great difficulty in group situations, specifically when playing games. He can be extremely oppositional and negative. This study was designed to determine if a relationship existed between use of a social story and a positive behavior change, adding to the current body of research on social stories.

Method

In answering the research question of whether the use of social stories improves social behavior for students with Asperger Syndrome, many steps were taken. The methodology section will describe the participant's information, the setting of the study, an explanation of the intervention strategy, and the procedure for data collection.

Participant

Johnny (age 10 years 10 months) attends fourth grade in the general education classroom for all but 30 minutes of the school day. He is served in the special education classroom for the remaining 30 minutes. According to his Individualized Education Program (IEP), the thirty minutes in the special education classroom is used to help Johnny get organized for the day, complete assignments and/or tests, and prepare for any changes from the regular routine that may occur during the school day. As with most students with Asperger Syndrome Johnny has some difficulty adjusting when changes are made in the daily routine. He is served by the special education teacher at the very beginning of the day in hopes of preventing any “meltdowns” due to changes in the schedule or routine. Johnny has above average intelligence. He functions at or above grade level in math. Despite these strengths, Johnny has some trouble with reading comprehension and writing. With support from the special education teacher, Johnny

does well academically. Most of his difficulty arises in group situations. He can become oppositional and negative when playing games. When Johnny was observed on the playground prior to this study, his oppositional behaviors occurred frequently when playing the game of kickball. Every recess, Johnny would join in the game only to quit playing shortly after because of complications in his relationships with his peers.

Setting

Observations were conducted at his school during regular school hours. The school is located in a rural community in Southeastern Ohio. The primary setting was the playground because it was the location the identified behavior targeted for the social story intervention was observed. The playground was an open area with several pieces of play equipment (i.e., swing sets, jungle gyms, monkey bars, etc.), a hard-surfaced area for basketball, and four square, and an open field to play an active sport. Johnny always ran to the open field to play kickball as soon as he was released from lunch. Fourth grade students were the only group on the playground during recess.

Intervention Strategy

A social story (based on the format suggested by Carol Gray) was designed to address an identified target behavior, good sportsmanship, for the participant. The social story provided the participant with appropriate social initiations and responses he was

expected to make to his peers during a kickball game (see Appendix A). For Johnny, sportsmanship was defined as instances in which he actively treated teammates, opponents and referees with respect. Some examples of good sportsmanship would be offering positive encouragement during play, helping a player off the ground, taking turns, and following the rules of the game. Nonexamples of good sportsmanship might include arguing with opponents or own team members, making negative comments or making aggressive actions toward a teammate or opponent.

The pages of the social story were typed on white paper and then mounted on black construction paper. One or two sentences were placed on each page. Next, the pages were compiled into a book-like format that was spiral bound at the top. The use of the social story was not combined with the use of another intervention, including illustrations.

Data Collection

Baseline data was collected for five days. The participant was observed in the setting where the maladaptive behavior occurred most often, on the playground during recess. Event recording was used to collect data about how often the target behavior was occurring (see Appendix B for the event recording sheet). Any time Johnny argued with an opponent or teammate, made a negative comment, or was aggressive towards a teammate or opponent, a tally was counted. Event recording was the chosen means for

collecting data due to its ease of use and its non-disruptive nature. Behavior was recorded at recess every day for one week.

During the next two weeks the intervention was introduced. The social story was read just before the time when the target behavior generally occurred. This was prior to recess, during the last five minutes of lunch. Not only was the social story read to Johnny, but it was read by Johnny as well, to insure comprehension since that can be an area of difficulty for him. This was done every day during the two week intervention period. Then the participant was observed and data was collected using event recording during the specific time period.

This study used a single subject design. Basically the participant was compared to himself. Baseline and intervention data were compared and the social story intervention served as the independent variable. According to Alberto & Troutman (1999), single subject designs require measures of baseline data be taken, as well as measures of the intervention conditions, and if the design shows at least one replication of results, a functional relationship can be determined.

To compare data collected, an AB design was used. In this study, A served as the baseline, and B served as the social story intervention. The graph was designed to make the event recording data visual. The AB design was chosen for its simplicity. However, the weakness with the AB design is its difficulty in demonstrating if the intervention would repeat itself in the future if variables continued to be manipulated (Alberto &

Troutman, 1999).

A relationship between the social story intervention and behavior was determined by analyzing the data and constructing a graph. Improvement due to the intervention could be determined if the trend on the graph showed the target behavior occurred less frequently and thus point to a possible relationship if the intervention were repeated. A positive behavior change would be desirable and could serve as a precursor to further research investigating the use of social stories with students with Asperger syndrome.

Results

The social story intervention occurred over three consecutive weeks or 15 weekdays. The participant had no absences during this three-week period. Baseline data was collected during the initial five days, followed by the social story intervention during the last ten days. During the intervention phase, the child and the researcher were the persons responsible for reading and reviewing the social story each day.

The participant had a social story created that addressed his difficulties with negative social behavior when participating in a group activity. The group activity was playing kickball. Examples of poor sportsmanship included arguing with a teammate or opponent, making negative comments or being aggressive toward another participant in the game. Five minutes prior to recess and the beginning of the game, the social story was read by Johnny and read to Johnny by the researcher. For the following 20 minutes the participant was observed and event recording took place. Johnny demonstrated relatively stable rates of poor sportsmanship during baseline, with an overall mean of five occurrences per recess. The following table and graph demonstrate the number of occurrences of poor sportsmanship over the course of the three-week period.

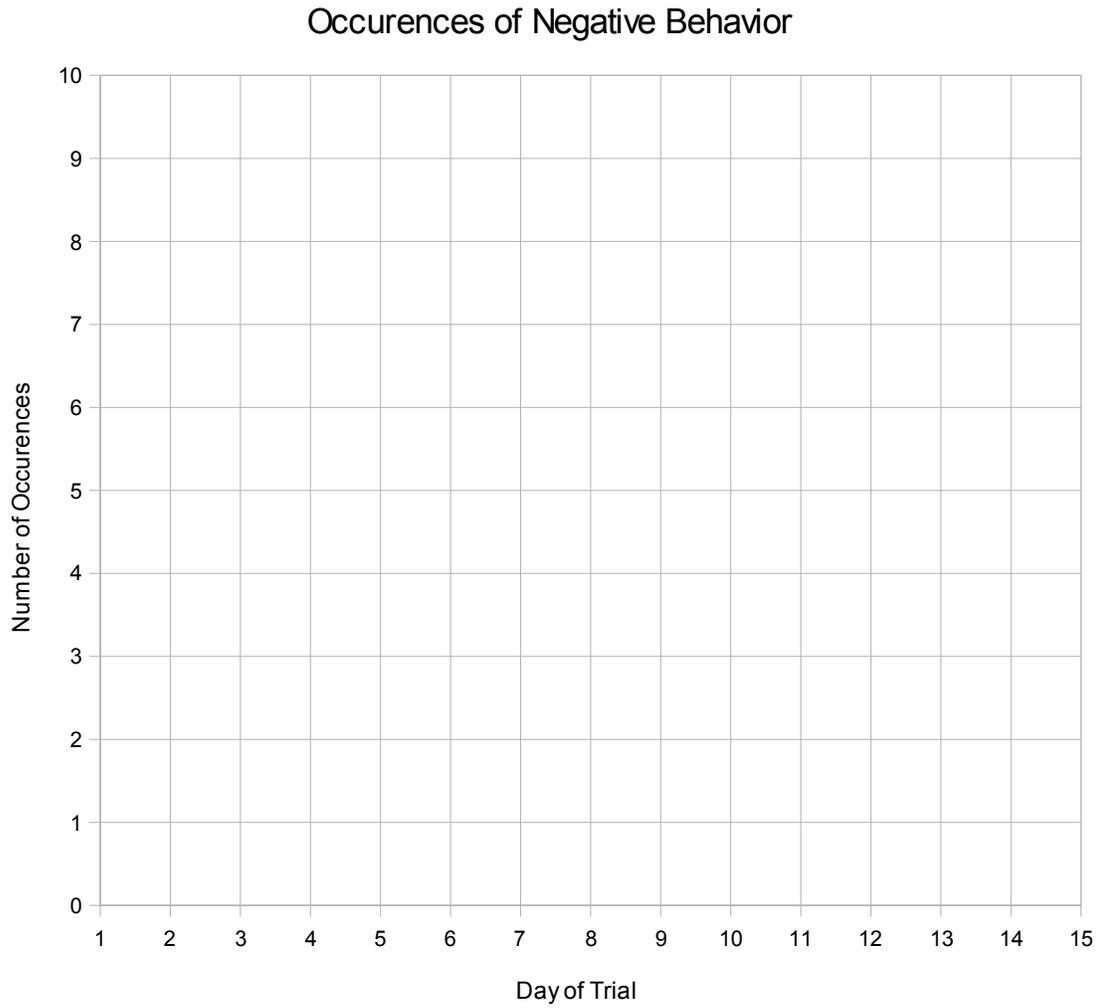
Table 1

Total Occurrences of Negative Social Behaviors

			Number of Interferences		
<u>Week</u>	<u>Days</u>	<u>Events</u>	<u>Wk. 1 Avg.</u>	<u>% compared to Wk. 1 Avg</u>	<u>Effect</u>
1	1	5	5	100%	Baseline
1	2	4	5	80%	Baseline
1	3	7	5	140%	Baseline
1	4	4	5	80%	Baseline
1	5	5	5	100%	Baseline
2	6	3	5	60%	Intervention
2	7	3	5	60%	Intervention
2	8	2	5	40%	Intervention
2	9	3	5	60%	Intervention
2	10	2	5	40%	Intervention
3	11	2	5	40%	Intervention
3	12	2	5	40%	Intervention
3	13	1	5	20%	Intervention
3	14	0	5	0%	Intervention
3	15	0	5	0%	Intervention

Graph 1

Total Occurrences of Negative Social Behavior



The total number of occurrences varied during the baseline phase. Johnny exhibited as many as seven negative social behaviors in one game of kickball and there were two days that occurrences of poor social behavior were limited to four. An average of five negative social behaviors occurred during the first week, the baseline phase. During the first week of the intervention Johnny's targeted behavior decreased. One exception occurred during the intervention phase, whereby Johnny's behavior regressed, but very little. The slight increase occurred between days eight and nine. Unfortunately, no anecdotal information was available to explain the increase in Johnny's poor sportsmanship behavior for that day. As the intervention continued, his number of negative social behaviors decreased. By the end of the two-week intervention phase, Johnny had two consecutive days where he exhibited no negative social behaviors during the game of kickball. Overall, the results indicate that the introduction of a social story dealing with good sportsmanship had a positive effect for this 10 year old boy with Asperger Syndrome.

Discussion and Conclusions

This study sought to determine the effectiveness of using social stories to teach a child with Asperger Syndrome how to be a good sport. Overall, the use of a social story was a successful intervention strategy to teach this positive social behavior. Following implementation of the social story intervention the participant showed an increase in positive social behavior when included in a game of kickball.

The findings of this study contribute in several ways to the effectiveness of social stories literature. First, this research demonstrates the potential benefits of using social story interventions to teach new prosocial behaviors to children with AS. The results of this study were similar to those found previously for autism spectrum disorder populations (e.g. Norris & Dattilo, 1999; Swaggart et al., 1995; Thiemann & Goldstein, 2001). In addition, the results of this study appear to replicate the findings by Kuttler et al. (1998) and Swaggart, et al., (1995) by demonstrating a change in behavior following the implementation of the social story. The impact of this study may be significant for the research literature on social story interventions because it demonstrates how social stories can be used to teach specific social skills to individuals with AS.

This study contributes to the development of evidence-based approaches for student support personnel working with individuals with AS. Although AS is a low-incidence disorder, the likely inclusion of a student with AS within general education classes, given Safran's (2001) projections, suggests that educators will be called on to

design and implement social skills interventions. Because social stories are developed with the individual in mind, student support personnel stand at the forefront of assisting educators with the design, implementation, and evaluation of social story effectiveness (Sansosti & Powell-Smith, 2006).

Limitations

It is important to note several limitations to this investigation. Interpretation and generalization of the findings must take into consideration as possible limitations the study's single-subject design and the relatively short duration of the intervention. Given the diversity of individuals with AS, it is not known whether social stories would be effective in teaching other individuals with AS, beyond the subject in this investigation. In terms of length, data were collected for 15 days. An intervention across additional days would have permitted for a maintenance phase. However, the student's availability did not allow for a longer study phase.

Some caution must be taken in generalizing these findings across settings and other behaviors as well. Even within this study, it would have been interesting to see if the improved social behavior generalized to the physical education environment. The physical education teacher experienced the same difficulties with Johnny in group activities in her class as he did on the playground. Would the social story intervention for good sportsmanship have helped in that setting too?

Finally, the amount of social consequences for the participant was not assessed. The social consequences coming from peers and teachers were not evaluated. Without such information, it is difficult to identify whether the rehearsal of the social story was more effective than the natural reinforcement the participant received for engaging in the target behavior. This study was not designed to assess the contribution of this social reinforcement apart from the social stories.

Although this study was implemented with one student over a limited period of time, the findings suggest that the intervention deserves further investigation.

Suggestions for Future Research

Research evaluating the effects of the social story intervention has a relatively short history (Delano & Snell, 2006). Many of the studies that have been conducted examine social stories as a part of a larger treatment package. It would be useful if more of these studies evaluated social stories alone.

In the future, it may be beneficial to have the student assist with writing the story as well as reviewing and modifying it before intervention begins. In addition, most of the existing studies, either an adult or peer read the social story to the participant. If the participant contributed both to the development of his/her own social story and read it aloud to another person, the participant may take more ownership of the social story and thus the social story intervention would be more successful.

Additional research should clarify the characteristic behaviors of those students most likely to benefit from social stories, that is, the children who will be most responsive to a social story intervention. It is likely that a variety of variables are responsible for the success of a social story intervention. The social awareness of the individual may be the most important, and could be especially true when a social story is used to teach a social skill. Other variables such as an individual's language/communication skills and behavioral characteristics may be responsible for the success or failure of a social story.

The age of the participant may also influence the social story's effectiveness. It would be valuable to examine how the social story benefits older children. For some students adolescence may be a time of increased motivation for learning social skills. Along those same lines, the possible role of peers in the social story intervention should be further evaluated. Much of the literature on social skills suggests the benefits of peer involvement in social skills intervention. Lee and Odom (1996) trained peers without disabilities to make social initiations to two children with autism who engaged in high rates of stereotypic behavior. When peers made initiations, target children's rates of social interaction increased and decreases in stereotypic behavior were observed. The inclusion of peers may have enhanced the effectiveness of the social story intervention. Additional research could explore this issue.

The issue of maintenance is also an important area in need of additional research.

Perhaps, future researchers should require a longer intervention period. Gray (2000) cautioned that fading may not always be appropriate. She did, however, suggest rewriting the social story and omitting directive sentences or parts of directive sentences. This would provide an opportunity for the target child to recall key information without fading the entire story. Another strategy suggested by Gray is to increase the amount of time between readings of the social story. Future researcher might examine both of these techniques.

Finally, it is important that research investigate the use of social stories to improve social engagement in a variety of home and community settings. Most of the previous studies on the effects of social stories were school based. The inability to develop normal social relationships is perhaps the single most defining feature of autism and Asperger Syndrome (Delano & Snell, 2006). This difficulty in relating to others dramatically affects a child's family life and community participation. Therefore, there is a great need for intervention research addressing social functioning in these nonschool environments. Because social stories are best developed by people who know the child well, and because they are relatively easy to implement, this intervention may be especially well suited to family and community settings.

Implications for Practice

For many teachers and education personnel, classroom management, teaching the state standards, and preparing students for state mandated tests consume all the time in the school day. With increasing pressures to bring all students up to the same performance level, students are being pushed on academic tasks with little time allotted to teach social skills.

Because of the relative ease in implementing the social story intervention, educators and related professionals may find it very beneficial and less time-consuming, once created, to incorporate into the busy school day. Teachers could target one student's behavior in the particular setting where the behavior occurs most often. Next, the teacher or related professional could create the social story. Initially, there is time invested in observing the behavior, planning the social story intervention, and implementing the intervention. However, the time invested will probably be far less than the instructional time lost when dealing with outbursts, meltdowns, and tantrums that may result from frustrating situations that the student with AS may not understand.

Mastering a frustrating social skill can only be beneficial. Students with AS may show increased confidence in the social arena. As a result they may become more focused on academic tasks. Also, there is no researched evidence that social story interventions caused increases in a child's negative social behavior. So the worst case scenario is that the negative social behavior would continue even after the social story

has been implemented.

Social story intervention uses a visual medium that can be a strength for many children with Asperger Syndrome. Because they are written down, they can be utilized by teachers and parents across many environments. The more often they are used, and the more settings in which they are used, the more likely the student will learn the accepted social behavior. Again, by writing down the social story, they can be saved and reviewed as needed (Moyes, 2001).

Though most of the research on social stories has investigated the use of the intervention to decrease challenging behaviors, this study and others found social stories to be effective in increasing positive behaviors. Therefore practitioners may find social stories appropriate for both decreasing challenging behaviors and increasing specific prosocial behaviors.

Professional development may be needed for educators and related professionals in order to make it easier to implement the social stories strategy. Use of this strategy can only improve educational practices which in turn can improve student outcomes. If a student with AS can learn a new social skill, it is a winning situation for everyone, the teacher, the school, the parents, all students and especially the child with AS.

Students with AS pose a challenge for educators. With some simple, creative and fun accommodations, these students can achieve success in school. These students force educators to reflect on their practices for all students. These students also help educators

and related professionals to develop compassion for individuals with differences who require special assistance. Incorporating social skills training into the curriculum of the child with AS, whether it is through social stories or not, will provide children with this diagnosis with the tools to navigate a pathway toward a bright and productive future (Moyes, 2001).

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Appendix A
Social Story of Being a “Good Sport”

I like to play games.

My favorite game is kickball.

When we play kickball, one team will win, and one team will lose.

It will always be this way, unless both teams have the same number of points.

This is called a 'tie' game.

When my team wins a game, I feel very happy. Sometimes I dance, cheer, or yell out:

'Yeah!' My teammates usually feel the same way!

When my team loses, I feel sad. Sometimes I feel angry.

When my team loses, I will not hit, punch, or yell mean things when I am angry.

I will not stomp off the field, kick the ball away, or run off.

When I do these things, people will call me a 'sore loser.'

I will try to be happy for the other team when they win.

I will try to shake the winning team members' hands and congratulate them, just as they congratulate me when my team wins.

They worked hard to win, and they are happy!

There will be other times when my team can win.

Being nice when my team loses is called being a 'good sport.'

When I am a 'good sport,' I will have fun playing games with my friends!

It will not matter who wins or loses.

I know that I did my best.

Moyes (2002)

Appendix B

Number of Interferences

<u>Week</u>	<u>Days</u>	<u>Events</u>	<u>Wk. 1 Avg.</u>	<u>% compared to Wk. 1 Avg</u>	<u>Effect</u>
1	1				Baseline
1	2				Baseline
1	3				Baseline
1	4				Baseline
1	5				Baseline
2	6				Intervention
2	7				Intervention
2	8				Intervention
2	9				Intervention
2	10				Intervention
3	11				Intervention
3	12				Intervention
3	13				Intervention
3	14				Intervention
3	15				Intervention