

SOCIAL NARRATIVES

CHARACTERISTICS OVERVIEW CHART

Verbal Skills	Grade Levels	Cognitive Level	Areas Addressed
<input checked="" type="checkbox"/> Nonverbal <input checked="" type="checkbox"/> Mixed <input checked="" type="checkbox"/> Verbal	<input checked="" type="checkbox"/> PK <input checked="" type="checkbox"/> Elementary <input checked="" type="checkbox"/> Middle/High	<input checked="" type="checkbox"/> Classic <input checked="" type="checkbox"/> High Functioning	<input type="checkbox"/> (Pre)Academic/Cognitive/Academic <input checked="" type="checkbox"/> Adaptive Behavior/Daily Living <input checked="" type="checkbox"/> Behavior <input checked="" type="checkbox"/> Communication/Speech <input checked="" type="checkbox"/> Social/Emotional

BRIEF INTRODUCTION

Because of their lack of understanding of social cues or rules, people with autism (AU) often face challenges when having to respond to social behavior and engage in social interactions. Social narratives can teach new social skills and encourage individuals to regulate their behavior through relatively short sentences or phrases. In this section, three types of social narratives are introduced: Social Stories™, Power Card strategy, and social scripts.

DESCRIPTION

Social narratives can be used in various ways. Educators, paraeducators, parents, or other professionals can write social narratives for various situations. Based on the child’s needs and functioning levels in an academic or nonacademic setting, social narratives can guide the student toward appropriate behaviors or responses.

Even though there are special steps and rules to be developed for each type of social narrative, the following guidelines are generally considered appropriate for creating social narratives:

1. Identify the social situation or setting to be taught.
2. Identify the target behavior to teach and define it operationally for data collection.
3. Collect data to decide the baseline of the target behavior.

4. Write a social narrative based on the child's needs and functioning levels. Decide the length of the narrative, including the number of sentences, phrases, level of vocabulary, and so on.
5. Use visual cues, including pictures, photos, or symbols, concerning the child's interests and levels.
6. Read the social narrative to the child and model the desired behavior.
7. Collect data on the target behavior.
8. Review the data and results of the intervention.
9. Consider and address the maintenance and generalization of the target behavior.

SOCIAL STORIES™

DESCRIPTION – SOCIAL STORIES™

Social Stories™ have been proven effective as strategies to change target behaviors. De-veloped by educators or others familiar with the child, Social Stories™ are written short stories that inform or describe an activity and the anticipated behavior associated with it. Social Stories™ also provide social information to teach appropriate social behavior governed by various unwritten and unspoken rules and nonverbal cues.

In her guidelines for Social Stories™, Gray (1995) outlines four types of sentences: descriptive, perspective, directive, and affirmative sentences. A descriptive sentence provides the facts in a situation or the main aspects of the topic. A perspective sentence describes others' feelings, thoughts, or beliefs. A directive sentence describes desired responses to social situations, gives the child alternative choices or behaviors, and usually begins with *I will, I may, or I will try*. In addition, a directive sentence should be developed carefully, based on the possibility of literal interpretation. Finally, an affirmative sentence can be used to reassure the child by providing common values and meanings in a given culture.

Examples of basic sentences include:

Descriptive sentences

- My name is Justin.
- There are many people in a cafeteria during lunch time.
- We have circle time at school.
- Some children are talking loudly in a hallway.

Perspective sentences

- My teacher knows about my schedule.
- Some people like to read scary books.
- Some people believe in UFOs.
- My sister likes to play the violin.

Directive sentences

- I will try to listen to a teacher's speech.
- I will stay at home when my mom leaves to pick up my brother.
- When I have a question in class, I will raise my hand.

Affirmative sentences

- This is okay.
- This is a good idea.
- This is very important to do.

STEPS – SOCIAL STORIES™

According to Gray (1995, 2000), creating Social Stories™ involves the following four steps:

1. *Think about and picture the goal of the Social Story™.* The main goal of Social Stories™ is to teach social rules or cues directly. Therefore, the adult must provide accurate information and descriptions of the concepts that need to be learned.
2. *Gather information about the topic.* The adult needs to deliberate on the topic, including when and where it occurs, who is involved, what to do in the process or sequence, and why people behave in certain ways.
3. *Tailor the text.* Guidelines for creating Social Stories™ include (a) write in three parts, introduction, body, and conclusion; (b) provide accurate information about “wh” questions for the activity or target behavior; (c) write with a first-person perspective; (d) use positive language; (e) consider the basic Social Story™ ratio of two to five descriptive, perspective, and/or affirmative sentences; and (f) use literally accurate words (e.g., *usually* or *sometimes*).
4. *Teach with the title.* A title that addresses the overall meaning or a core concept of the story should be developed.

BRIEF EXAMPLE – SOCIAL STORIES™

Brandon is a third grader who has autism. He likes to follow his routine and often has meltdowns when his schedule changes unexpectedly. Ms. Young, his teacher, planned to use a Social Story™ to help Brandon deal with unexpected situations. The Social Story™ on the next page was developed by Ms. Young. She introduced the story to Brandon with pictures of him and the calendar he always carries. She had Brandon read the story with her and explained the possible situations. After introducing the story, she set up a time for Brandon to read this Social Story™ every morning. His meltdowns about unexpected changes have decreased, and Ms. Young has gradually expanded the Social Story™ strategy to address his other behavior challenges.

When My Schedule Is Changed

Sometimes I get angry when schedules change. (Descriptive)

Teachers usually tell me before things change. (Descriptive)

Sometimes teachers cannot tell me before things change. (Descriptive)

I will ask a teacher what to do if I am confused about the new schedule, instead of crying or yelling. (Directive)

Then I will try to understand and respect what the teacher says. (Directive)

Schedules can be changed, and it is okay to follow a new schedule. (Affirmative)

When the schedule is changed, I will follow the new schedule. (Directive)

TIPS FOR MODIFICATION – SOCIAL STORIES™

Using multimedia such as computer-based programs or videotaping can help magnify the effects of Social Stories™. For example, video modeling combined with Social Stories™ can help students use self-monitoring or self-management of their emotions or behaviors (Hagiwara & Myles, 1999; Scattone, 2008).

RESEARCH TABLE – SOCIAL STORIES™

Number of Studies	Ages (year)	Sample Size	Area(s) Addressed	Outcome
90+	3-15	200+	Appropriate behavior, conversation skills, prosocial behavior, problem behavior, self-awareness, repetitive behaviors, inappropriate sexual behavior, mealtime skills, unsafe behavior, obsessional behavior	Mixed

Note: Includes reviews by Karkhaneh, M., Clark, B., Ospina, M.B., Seida, J.C., Smith, V., Hartling, L. (2010), Kokina, A. & Kern, L. (2010), Reynhout, G. & Carter, M. (2010), Wang & Spillane (2009) and Ali & Frederickson (2006). Studies reviewed overlapped between review papers.

STUDIES CITED IN RESEARCH TABLE– SOCIAL STORIES™

1. Chan, J.M., O'Reilly, M.F., Lang, R.B., Boutot, E.A., White, P.J., Pierce, N., Baker, S. (2010). Evaluation of Social Stories™ intervention implemented by pre-service teachers for students with autism in general education settings. *Research in Autism Spectrum Disorders*, 5, 715-721.
Three 8-yr-old boys with ASD received a Social Stories intervention to improve their behaviors in an elementary school classroom. The intervention was delivered once a day by pre-service teachers in each of the three classrooms. While the results indicated that Socials Stories can be implemented with fidelity by pre-service teachers, the actual classroom behavior of the three boys was not meaningfully improved by the intervention.
2. Hanley-Hochdorfer, K., Bray, M.A., Kehle, T.J., Elinoff, M.J. (2010). Social stories to increase verbal initiation in children with autism and asperger's disorder. *School Psychology Review*, 39(3), 484-492.
This study reports the failure to demonstrate an effect for the implementation of social stories with 4 middle-school students with ASD. In a multiple-baseline-across-participants design none of the four participants showed any meaningful increases in the number of social initiations or responses to peers (both targeted by the social stories designed for each participant) in the natural environment.
3. Karkhaneh, M., Clark, B., Ospina, M.B., Seida, J.C., Smith, V., Hartling, L. (2010). Social stories to improve social skills in children with autism spectrum disorder: A systematic review. *Autism*, 14(6), 641-662.
The authors reviewed 6 randomized controlled or controlled clinical trials evaluating Social Stories interventions (135 total participants). All of the reviewed studies were unpublished dissertations. 5 of 6 studies reported beneficial effects of social stories intervention relative to control or comparison groups.
4. Kokina, A. & Kern, L. (2010). Social story interventions for students with autism spectrum disorders: A meta-analysis. *Journal of Autism and other Developmental Disabilities*, 40, 812-826.
The authors reviewed 18 single-subject design studies (44 participants) evaluating the use of Social Stories interventions (SSI). The results of the studies were synthesized to identify overall effectiveness and any variables associated with differential efficacy of SSI. Quantitative analysis placed SSI into the "low/questionable" category in terms of quality of evidence for effectiveness. SSI interventions were most effective for decreasing problem behaviors, when the target children controlled the intervention, when they were read immediately prior to entering the situation they described, and when they were longer and contained pictures. Participants most likely to respond to SSI were elementary aged students with higher communication skills, lower social skills, and lower levels of challenging behavior.

5. Litras, S., Moore, D.W., Anderson, A. (2010). Using video self-modelled social stories to teach social skills to a young child with autism. *Autism Research and Treatment, 2010*, 1-9. The study reported the successful use of a video self-modeled social story intervention package to increase three pro-social behaviors of a 3-yr old boy with ASD. Using a multiple-baseline-across-skills design, the experimenters demonstrated that appropriate social skills only emerged following the introduction of the treatment package. The target skills also generalized to new settings and people. Increases in overall social engagement and verbal communication were also reported, but it was not clear that the increases were directly related to the introduction of the treatment package.
6. Okada, S., Ohtake, Y., Yanagihara, M. (2010). Improving the manners of a student with autism: The effects of manipulating perspective holders in social stories –A pilot study. *International Journal of Disability, Development, and Education, 57(2)*, 207-219. The purpose of this study was to evaluate the effect of altering the perspective of social stories (perspective as child, preferred person, etc.) in an effort to improve the posture of a 14-yr old boy with ASD. None of the social stories were successful in improving the participant’s posture.
7. Reynhout, G. & Carter, M. (2010). Evaluation of the efficacy of social stories using three single subject metrics. *Research in Autism Spectrum Disorders, 5*, 885-900.

This paper reported the results of a quantitative meta-analysis of the results of 62 studies investigating the effects of Social Stories interventions with people with ASD and other disabilities. Overall, Social Stories had only a small positive effect on target behaviors, but results were variable across studies. The concurrent use of reinforcement procedures appeared to slightly enhance the effectiveness of Social Story interventions, and Social Stories were slightly more effective for people who did not have an ASD diagnosis.

8. Schneider, N. & Goldstein, H. (2010)., Using social stories and visual schedules to improve socially appropriate behaviors in children with autism. *Journal of Positive Behavior Interventions, 12(3)*, 149-160. This study examined the effects of Social Stories on the engagement levels of three children with ASD in inclusive classroom settings. In a multiple-baseline-across-participants design, the introduction of Social Stories led to moderate improvements in engagement levels for all three participants. One participant also had a visual schedule added to the intervention after several days of just Social Stories, and the effect was again minimal –with engagement levels returning to nearly baseline levels by the end of treatment.
9. Graetz, J. E., Mastropieri, M. A., & Scruggs, T. E., (2009). Decreasing inappropriate behaviors for adolescents with autism spectrum disorders using modified Social Stories™. *Education and Training in Developmental Disabilities, 44*, 91-104. The effects of a modified Social Story™ intervention on inappropriate social behaviors of three adolescents (ages 12 to 15) with moderate autism was conducted. Baseline data were collected on inappropriate behaviors (refusal to stand, use of a high-pitched voice, and

placing hands/objects in mouth). Individualized stories were created for each student. The intervention resulted immediately improved behavior for two of the participants and these improvements were maintained.

10. Mancil, G. R., Haydon, T., & Whitby, P. S. (2009). Differentiated effects of paper and computer-assisted Social Stories™ on inappropriate behavior in children with autism. *Focus on Autism and Other Developmental Disabilities, 24*, 205-212.
This study compared Social Story™ presentation in two formats across three elementary-age students with autism. Interpretation of the results documents a decrease in the frequency of problem behavior for each participant. Outcomes were slightly better for the story in PowerPoint™ format than for the paper format. Results were maintained in the training setting and were generalized to another setting with a single verbal prompt. Teachers reported that the PowerPoint format was easily implemented, and students indicated that they liked the computer-assisted format.
11. Quimbach, L. M., Lincoln, A. J., Feinberg-Gizzo, M. J., Ingersoll, B. R., & Andrews, S. M. (2009). Social Stories™: Mechanisms of effectiveness in increasing game play skills in children diagnosed with autism spectrum disorders using a pretest posttest repeated measures randomized control group design. *Journal of Autism and Developmental Disorders, 39*, 299-321.
Forty-five children (ages 7 to 14) participated in an intervention to increase social skills. Different Social Story interventions were used (standard, directive, or control). All were equally effective.
12. Wang, P., & Spillane, A. (2009). Evidence-based social skills interventions for children with autism: A meta-analysis. *Education and Training in Developmental Disabilities, 44*(3), 318-342.
The purpose of this study was to provide a synthesis of research studies published in the last ten years on interventions to increase social skills for children and adolescents with ASD, examine the outcomes of these studies and evaluate whether a given intervention meets the criteria for evidence-based practice. Thirty-eight studies were included in this review. Six of these studies with 18 students were about Social Stories™. While Social Stories™, peer-mediated, and video-modeling all met the criteria for evidence-based; only video-modeling meets criteria for being evidence-based as well as demonstrating high effectiveness as an intervention strategy.
13. Chan, J. M., & O'Reilly, M. F. (2008). A Social Stories™ intervention for students with autism in inclusive classroom settings *Journal of Applied Behavior Analysis, 41*, 405-409.
Two boys, ages, five and six, participated in a study designed to determine whether Social Stories™ would improve social behaviors (i.e., proximity, raising hand, making appropriate statements, and asking others to play). Stories Story™ use resulted in changes in the children's behavior that were maintained over time.
14. Ozdemir, S. (2008). The effectiveness of Social Stories™ on decreasing disruptive behaviors of children with autism: Three case studies. *Journal of Autism and Developmental Disorders,*

28, 1689-1696.

Social stories were created for three participants, ages 7 and 9, to decrease three target behaviors: using a loud voice in class, chair tipping, and cutting in lunch line. Social stories were implemented, and direct observations of participants' target behaviors were conducted three times per week. The present study findings suggest that the use of properly constructed social stories without additional behavioral management interventions may be effective in decreasing the disruptive behaviors of children with autism.

15. Sansosti, F. J., & Powell-Smith, K. A. (2008). Communication skills of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Interventions, 10*(3), 162-178.

This study investigated the impact of computer-presented Social Stories™ and video on the social communication skills of three children with high-functioning autism/Asperger Syndrome (ages 6 to 10 years). The treatment package was effective in increasing the rate of social communication skills. Generalization was observed in one participant.

16. Sansosti, F. J., & Powell-Smith, K. A. (2008). Using computer-presented Social Stories™ and video models to increase social communication of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Interventions, 10*, 162-178.

Three children with autism participated in a study to determine whether rates of social communication would increase in unstructured times. Interactions increased across all three participants and generalized for one.

17. Scattone, D. (2008). Enhancing the conversation skills of a boy with Asperger's disorder through Social Stories™ and video modeling. *Journal of Autism and Developmental Disorders, 38*, 395-400.

A 9-year-old boy with Asperger Syndrome participated in a study combining Social Stories™ with video modeling in an effort to enhance his conversation skills. An increase in two out of three targeted conversation skills occurred, and generalized behavior changes were observed.

18. Crozier, S., & Tincani, M. (2007). Effects of Social Stories™ on prosocial behavior of preschool children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 37*, 1803-1814.

Three children with autism between 3 and 5 years old participated in a study investigating the effects of Social Stories™ on prosocial behavior in an inclusive setting. Social Stories™ increased appropriate behavior and decreased inappropriate behavior for two participants. The addition of verbal prompts (Condition C) was necessary to increase appropriate behavior for the third participant.

19. Quilty, K. M. (2007). Teaching paraprofessionals how to write and implement Social Stories™ for students with autism spectrum disorders. *Remedial and Special Education, 28*, 182-189.

Three students aged 6 to 10 and three paraprofessionals as pairs participated in a study to determine if paraprofessionals could effectively be taught to write and implement Social

Stories™. Results showed that paraprofessionals could be taught how to write and implement Social Stories™, and the targeted student behaviors decreased.

20. Reynhout, G., & Carter, M. (2007). Social Story™ efficacy with a child with autism spectrum disorder and moderate intellectual disability. *Focus on Autism and Other Developmental Disabilities, 22*, 173-182.
An 8-year-old boy with moderate intellectual disability and associated language impairment participated in a study designed to decrease repetitive tapping behavior. The target behavior was decreased, and the decrease was associated with increased comprehension of the Social Story™.
21. Ali, S., & Frederickson, N. (2006). Investigating the evidence base of Social Stories™. *Educational Psychology in Practice, 22*, 355-377.
A review of research on social stories undertaken between 1994 and 2004 was carried out and, overall, this intervention has been effective with individuals with autism. The authors reviewed 15 articles. Fourteen were counted for this document as one study was reported Wang & Spillane (2009). A total of 46 children between the ages of 3 and 15 were studied.
22. Soenksen, D., & Alper, S. (2006). Teaching a young child to appropriately gain attention of peers using a social story intervention. *Focus on Autism and Other Developmental Disabilities, 21*, 36-44.
The purpose of this study was to assess the effectiveness of a Social Story™ intervention in teaching a 5-year-old child with hyperlexia (school-identified as autism) to appropriately obtain the attention of his peers. The intervention consisted of verbal and visual cues incorporated into a storybook format. The results of the study indicated that the Social Story was effective in increasing in gaining attention from peers within three settings within an inclusive school.
23. Crozier, S., & Tincani, M. J. (2005). Using a modified Social Story™ to decrease disruptive behavior of a child with autism. *Focus on Autism and Other Developmental Disabilities, 20*, 150-157.
This study examined the effects of a modified Social Story™, with and without verbal prompts, on the disruptive behavior of an 8-year-old boy with autism. The disruptive behavior decreased during both phases of the intervention, but to a greater degree when the story was paired with prompting.
24. Hutchins, T. L., & Prelock, P. A. (2005). Using Social Stories™ and Comic Strip Conversations™ to promote socially valid outcomes for children with autism. *Seminars in Speech & Language, 27*, 47-59.
Two children aged 6 and 12 years participated in this study designed to assess the efficacy of a family-centered, collaborative approach to developing Social Stories™ and Comic Strip Conversations™. The results reported that some dynamic, evolving, and contextual aspects of child functioning were revealed.

25. Brownell, M. D. (2002). Musically adapted Social Stories™ to modify behaviors in students with autism: Four case studies. *Journal of Music Therapy, 39*, 117-144.
Participants were four male students aged 6 to 9 with a primary diagnosis of autism. For three participants, both the reading and singing condition were significantly more effective in reducing the target behavior than the no-contact control condition. The singing condition was significantly more effective than the reading condition only for one participant.
26. Kuttler, S., Myles, B. S., & Carlson, J. K. (1998). The use of Social Stories™ to reduce precursors to tantrum behavior in a student with autism. *Focus on Autism and Other Developmental Disabilities, 13*, 176-182.
The authors analyzed the effectiveness of Social Stories™ in reducing precursors to tantrum behavior in two social environments: morning work time and lunchtime. A 12-year-old boy with autism participated. The data revealed a decrease in precursors to tantrum behavior when the intervention was available to the student and an increase in targeted behavior when the intervention was withdrawn.

REFERENCES – SOCIAL STORIES™

- Ali, S., & Frederickson, N. (2006). Investigating the evidence base of Social Stories™. *Educational Psychology in Practice, 22*, 355-377.
- Brownell, M. D. (2002). Musically adapted Social Stories™ to modify behaviors in students with autism: Four case studies. *Journal of Music Therapy, 39*, 117-144.
- Chan, J. M., & O'Reilly, M. F. (2008). A Social Stories™ intervention for students with autism in inclusive classroom settings *Journal of Applied Behavior Analysis, 41*, 405-409.
- Chan, J.M., O'Reilly, M.F., Lang, R.B., Boutot, E.A., White, P.J., Pierce, N., Baker, S. (2010). Evaluation of Social Stories™ intervention implemented by pre-service teachers for students with autism in general education settings. *Research in Autism Spectrum Disorders, 5*, 715-721.
- Crozier, S., & Tincani, M. J. (2005). Using a modified Social Story™ to decrease disruptive behavior of a child with autism. *Focus on Autism and Other Developmental Disabilities, 20*, 150-157.
- Crozier, S., & Tincani, M. (2007). Effects of Social Stories™ on prosocial behavior of preschool children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 37*, 1803-1814.
- Graetz, J. E., Mastropieri, M. A., & Scruggs, T. E., (2009). Decreasing inappropriate behaviors for adolescents with autism spectrum disorders using modified Social Stories™. *Education and Training in Developmental Disabilities, 44*, 91-104.
- Gray, C. (1995). *Writing social stories with Carol Gray*. Arlington, TX: Future Horizon.

- Gray, C. A. (2000). *The new social story book™*. Arlington, TX: Future Horizons.
- Hagiwara, T., & Myles, B. S. (1999). A multimedia social story intervention: Teaching skills to children with autism. *Focus on Autism and Other Developmental Disabilities, 14*, 82-95.
- Hanley-Hochdorfer, K., Bray, M.A., Kehle, T.J., Elinoff, M.J. (2010). Social stories to increase verbal initiation in children with autism and asperger's disorder. *School Psychology Review, 39*(3), 484-492.
- Hutchins, T. L., & Prelock, P. A. (2005). Using Social Stories™ and Comic Strip Conversations™ to promote socially valid outcomes for children with autism. *Seminars in Speech & Language, 27*, 47-59.
- Karkhaneh, M., Clark, B., Ospina, M.B., Seida, J.C., Smith, V., Hartling, L. (2010). Social stories to improve social skills in children with autism spectrum disorder: A systematic review. *Autism, 14*(6), 641-662.
- Kokina, A. & Kern, L. (2010). Social story interventions for students with autism spectrum disorders: A meta-analysis. *Journal of Autism and other Developmental Disabilities, 40*, 812-826.
- Kuttler, S., Myles, B. S., & Carlson, J. K. (1998). The use of Social Stories™ to reduce precursors to tantrum behavior in a student with autism. *Focus on Autism and Other Developmental Disabilities, 13*, 176-182.
- Litras, S., Moore, D.W., Anderson, A. (2010). Using video self-modelled social stories to teach social skills to a young child with autism. *Autism Research and Treatment, 2010*, 1-9.
- Mancil, G. R., Haydon, T., & Whitby, P. S. (2009). Differentiated effects of paper and computer-assisted Social Stories™ on inappropriate behavior in children with autism. *Focus on Autism and Other Developmental Disabilities, 24*, 205-212.
- Okada, S., Ohtake, Y., Yanagihara, M. (2010). Improving the manners of a student with autism: The effects of manipulating perspective holders in social stories –A pilot study. *International Journal of Disability, Development, and Education, 57*(2), 207-219.
- Ozdemir, S. (2008). The effectiveness of Social Stories™ on decreasing disruptive behaviors of children with autism: Three case studies. *Journal of Autism and Developmental Disorders, 28*, 1689-1696.
- Quilty, K. M. (2007). Teaching paraprofessionals how to write and implement Social Stories™ for students with autism spectrum disorders. *Remedial and Special Education, 28*, 182-189.
- Quimbach, L. M., Lincoln, A. J., Feinberg-Gizzo, M. J., Ingersoll, B. R., & Andrews, S. M. (2009). Social Stories™: Mechanisms of effectiveness in increasing game play skills in children diagnosed with autism spectrum disorders using a pretest posttest repeated measures

randomized control group design. *Journal of Autism and Developmental Disorders*, 39, 299-321.

Reynhout, G., & Carter, M. (2007). Social Story™ efficacy with a child with autism spectrum disorder and moderate intellectual disability. *Focus on Autism and Other Developmental Disabilities*, 22, 173-182.

Reynhout, G. & Carter, M. (2010). Evaluation of the efficacy of social stories using three single subject metrics. *Research in Autism Spectrum Disorders*, 5, 885-900.

Sansosti, F. J., & Powell-Smith, K. A. (2008). Communication skills of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Interventions*, 10(3), 162-178.

Sansosti, F. J., & Powell-Smith, K. A. (2008). Using computer-presented Social Stories™ and video models to increase social communication of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Interventions*, 10, 162-178.

Scattone, D. (2008). Enhancing the conversation skills of a boy with Asperger's disorder through Social Stories™ and video modeling. *Journal of Autism and Developmental Disorders*, 38, 395-400.

Schneider, N. & Goldstein, H. (2010)., Using social stories and visual schedules to improve socially appropriate behaviors in children with autism. *Journal of Positive Behavior Interventions*, 12(3), 149-160.

Soenksen, D., & Alper, S. (2006). Teaching a young child to appropriately gain attention of peers using a social story intervention. *Focus on Autism and Other Developmental Disabilities*, 21, 36-44.

Wang, P., & Spillane, A. (2009). Evidence-based social skills interventions for children with autism: A meta-analysis. *Education and Training in Developmental Disabilities*, 44(3), 318-342.

RESOURCES AND MATERIALS – SOCIAL STORIES™

- Carol Gray Center: Official Home for Social Stories™:
<http://www.thegraycenter.org/social-stories>
The official site of Social Stories™.
- National Professional Development Center on Autism Spectrum Disorders: Social Narratives: Evidence-Based Practice Brief. <http://autismpdc.fpg.unc.edu/content/social-narratives>
The NPDC has developed evidence-based practice (EBP) briefs for their identified EBP. Each brief contains an overview, step-by-step directions for implementation, implementation checklist, and evidence base.

- Social Stories. ASAT: Association for Science in Autism Treatment: <http://www.asatonline.org/intervention/treatments/social.htm>
This is a research summary of peer-reviewed research with strong scientific designs.
- Social Stories™ Intervention Strategy: http://www.autismtaskforce.com/downloads/social_stories_may_2006.pdf
This document includes a concise description of the strategy as well as a list of other resources.
- Teaching Children with Autism: Social Stories™: <http://www.polyxo.com/socialstories/>
This webpage contains several Social Stories™ examples.

These articles provide guidelines for the development of Social Stories™, examples, and research on this intervention.

- Balazs, T., & Wolfe, P. S. (2008). Social Stories™ for sexuality education for persons with autism/pervasive developmental disorder. *Sexual Disabilities, 26*, 29-36.
- Kuo, H., & Mirenda, P. (2003). Social Story™ interventions for young children with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 18*, 219-227.
- More, C. (2008). Digital Social Stories™ targeting social skills for children with disabilities: Multidimensional learning. *Intervention in School and Clinic, 43*, 168-177.
- Rust, J., & Smith, A. (2006). How should the effectiveness of Social Stories™ to modify the behavior of children on the autism spectrum be tested? Lessons from the literature. *Autism, 10*, 125-138.
- Sansosti, F. J., Powell-Smith, K. A., & Kincaid, D. (2004). A research synthesis of Social Story™ interventions for children with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 19*, 194-204.

POWER CARD STRATEGY

DESCRIPTION – POWER CARD STRATEGY

Special interests are often powerful motivators for individuals with autism (Klin, Danovitch, Merz, & Volkmar, 2007; Winter-Messiers, 2007; Winter-Messiers et al., 2007). The Power Card Strategy (Gagnon, 2001) is designed around a student's special interest. The strategy, consisting of a brief scenario and a visual cue, helps students learn appropriate interactions and social behaviors through their special interests. Since many students with autism learn better when they have visual cues such as pictures, photographs, or symbols, these elements are incorporated.

As one type of visual supports, the Power Card Strategy includes a short script written in the first person from the perspective of an embedded hero or character related to the child's special interest to serve as a strong motivator for the child. A small card (e.g., 3" x 5") with a visual representation of the student's special interest synthesizes the behavior the student should use.

STEPS – POWER CARD STRATEGY

1. *Identify the target behavior or situation to teach.* Teachers or other instructors need to identify one problem behavior or situation to address that can be linked to the student's special interest.
2. *Identify the child's special interest or reinforcer.* The child's interest can vary from a person to a cartoon character. The favorite hero or star can be the child's role-model in a scenario.
3. *Conduct a functional assessment.* Through a functional assessment, the teacher can determine the reason for a problem behavior or situation. Many reasons, including triggers, associated with the underlying characteristics of AU (e.g., sensory issues, lack of social understanding, or poor communication skills) should be considered (Aspy & Grossman, 2007).
4. *Determine whether the Power Card Strategy is appropriate.* No one strategy fits everyone. In many cases, the Power Card Strategy can serve as an alternative and appropriate way for the student to engage in a targeted behavior.
5. *Collect baseline data.* In order to implement and monitor the target behavior, the instructor should collect baseline data on the target behavior.
6. *Write the scenario and create the Power Card.* The scenario should be developed based on the child's need and functioning level. A short script, including simple sentences, should be written from the first-person perspective and in the present tense.
7. *Introduce the Power Card to the child.* Before and after presenting the Power Card to the child, the teacher and the child should discuss the script and the Power Card. The teacher and the child can read the script together, and further, the child can be encouraged to read the script independently.
8. *Collect data during the intervention.* To determine the effectiveness of the Power Card Strategy, data should be collected through the whole process.

9. *Evaluate the effectiveness of the strategy.* Evaluate the results and determine how long the Power Card needs to be continued.
10. *Consider whether to fade the strategy.* Depending on the student's needs, a fading procedure can be decided upon.

BRIEF EXAMPLE OF A POWER CARD

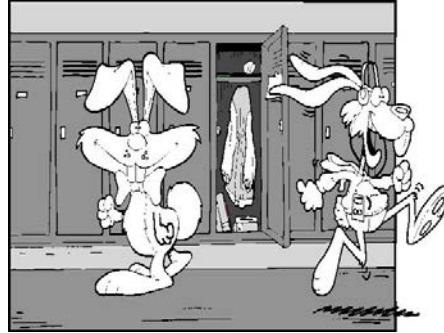
This Power Card scenario and Power Card were written for 7-year-old Julio, whose special interest was Big Bunny. Julio's targeted skill was understanding that sometimes people accidentally bump into each other.

POWER CARD SCENARIO

Big Bunny likes his friends and teachers and says "hi" to them when he sees them. He knows that his friends and teachers want to help him. So whenever he is confused or does not know what to do, he asks. He usually gets an answer right away. Big Bunny and his friends are often busy and in a hurry. When they are in a hurry, sometimes they bump into each other. They try to say, "Sorry" or "Excuse me," but sometimes they are in such a hurry that they don't realize that they have bumped into someone and, therefore, don't say anything. This is usually just a mistake.

Just like Big Bunny and his friends, you and other students bump into each other. When that happens, the person who bumps into the other should try to say, "Sorry" or "Excuse me." However, if the person who bumps does not remember, it is just a mistake. If someone bumps into you and doesn't say anything, just keep moving. Just like Big Bunny.

POWER CARD



1. Say “hi” to teachers and friends.
2. When your friends say “hi” to you, smile and say “hi” to your friends, too.
3. When somebody bumps into you in a hallway and says “Sorry,” just say, “That’s all right” and keep walking.
4. When somebody bumps into you in a hallway and doesn’t say anything, just ignore him or her and keep walking.

RESEARCH TABLE – POWER CARD STRATEGY

Number of Studies	Ages (year)	Sample Size	Area(s) Addressed	Outcome
2	10-17	4	Appropriate behavior, sportsmanship skills, conversation skills	+

STUDIES CITED IN THE RESEARCH TABLE – POWER CARD STRATEGY

1. Davis, K.M., Boon, R.T., Cihak, D.F., Fore III, C. (2010). Power cards to improve conversational skills in adolescents with asperger syndrome. *Focus on Autism and Other Developmental Disabilities, 25(1)*, 12-22.
The purpose of this study was to evaluate the impact of providing visual prompts (Power Cards) reminding the speaker of previously mastered conversation skills (asking about the interests of the conversational partner and allowing them to talk about that interest) on the conversations of three teenagers with Aspergers in a school setting. In a multiple-baseline-across-participants design, the introduction of Power Cards produced a moderate

improvement in the percentage of time the students with Aspergers spent talking about their conversational partner's interests, and the results generalized from role-plays during teaching interactions to a structured interaction with a novel peer in another class.

2. Keeling, K., Myles, B. S., Gagnon, E., & Simpson, R. L. (2003). Using the Power Card Strategy to teach sportsmanship skills to a child with autism. *Focus on Autism and Other Developmental Disabilities, 18*, 105-111.

This study was designed to teach sportsmanship skills to a 10-year-old girl with autism. The Power Card Strategy was effective, and the behaviors generalized across multiple settings.

REFERENCES – POWER CARD STRATEGY

Aspy, R., & Grossman, B. G. (2007). *The Ziggurat model: A framework for designing comprehensive interventions for individuals with high-functioning autism and Asperger Syndrome*. Shawnee Mission, KS: Autism Asperger Publishing Company.

Davis, K.M., Boon, R.T., Cihak, D.F., Fore III, C. (2010). Power cards to improve conversational skills in adolescents with asperger syndrome. *Focus on Autism and Other Developmental Disabilities, 25(1)*, 12-22.

Gagnon, E. (2001). *Power cards: Using special interests to motivate children and youth with Asperger Syndrome and autism*. Shawnee Mission, KS: Autism Asperger Publishing Company.

Keeling, K., Myles, B. S., Gagnon, E., & Simpson, R. L. (2003). Using the Power Card Strategy to teach sportsmanship skills to a child with autism. *Focus on Autism and Other Developmental Disabilities, 18*, 105-111.

Klin, A., Danovitch, J. H., Merz, A. B., & Volkmar, F. R. (2007). Circumscribed interests in higher functioning individuals with autism spectrum disorders: An exploratory study. *Research and Practice for Persons with Severe Disabilities, 32*, 89-100.

Winter-Messiers, M. A. (2007). From tarantulas to toilet brushes: Understanding the special interest areas of children and youth with Asperger Syndrome. *Remedial and Special Education, 28*, 140-152.

Winter-Messiers, M. A., Herr, C. M., Wood, C. E., Brooks. A. P., Gates, M. A. M., Houston, T. L., & Tingstad, K. I. (2007). How far can Brian ride the Daylight 4449 Express: A strength-based model of Asperger Syndrome based on special interest areas. *Focus on Autism and Other Developmental Disabilities, 22*, 67-79.

RESOURCES AND MATERIALS – POWER CARD STRATEGY

- Gagnon, E. (2001). *Power cards: Using special interests to motivate children and youth with Asperger Syndrome and autism*. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Power Card Strategies:
<http://www.autismspectrumilstu.edu/resources/factsheets/powercard.shtml>
This article gives the user basic Power Card information and includes an example.

SOCIAL SCRIPTS

DESCRIPTION – SOCIAL SCRIPTS

Social scripts include written sentences or paragraphs that students with autism can use in academic and nonacademic settings and situations. Research has demonstrated that social scripts support students with AU and enhance their social interactions, communication, and various other behaviors, especially when they have limited expressive language. Students who have difficulties in initiating communication or generating language under stress can also benefit from social scripts. In such cases, the student memorizes the social script and learns when and how to use it appropriately. Social scripts can be taught through modeling, prompting, and reinforcement.

BRIEF EXAMPLE – SOCIAL SCRIPTS

Andy's social script for requesting:

When students want to ask something during class, they raise their hand and wait until the teacher allows them to talk. Then they can ask questions.

Here are some words that I can use in class for this purpose.

“May I ask a question?”

“I have a question.”

“Would you please say that again?”

TIPS FOR MODIFICATIONS – SOCIAL SCRIPTS

Audiotaped social scripts can be useful for the child who has difficulties with reading. If a child has problems memorizing the written social scripts, they may be written on cue cards that the student can carry with her. Pictorial social scripts are also suggested to prompt target behaviors or decrease problem behaviors by appealing to students’ visuals learning style (Ganz, Kaylor, Bourgeois, & Hadden, 2008).

SUMMARY – SOCIAL SCRIPTS

Social scripts support children with autism to engage in activities and social interactions by providing information and instruction for appropriate social behavior. Using social narratives also can help students recognize and manage their emotions to prevent meltdowns.

RESEARCH TABLE – SOCIAL SCRIPTS

# of Studies	Ages (years)	Sample Size	Area(s) Addressed	Outcome
9	4-adult	38	Appropriate behavior, verbal communication skills, social skills, peer interaction, game play	Generally positive

STUDIES CITED IN THE RESEARCH TABLE – SOCIAL SCRIPTS

1. Wichnick, A.M., Vener, S.M., Pyrtok, M., Poulson, C.L. (2010). The effect of a script-fading procedure on responses to peer initiations among young children with autism. *Research in Autism Spectrum Disorders, 4*, 290-299.
This study reports the successful use of a script fading procedure to teach three children with ASD (ages 5-7) to respond to peer initiations. In a multiple-baseline-across-participants design, all three children showed increased rates of responding to social initiations following the introduction of treatment. The children also showed increased use of unscripted responses to initiations following the fading of the scripts.
2. Parker, D. & Kamps, D. (2010). Effects of task analysis and self-monitoring for children with autism in multiple social settings. *Focus on Autism and Other Developmental Disabilities, 1-12*.

This study evaluated the effects of an intervention involving the use of a self-monitored social script by 2 9-yr old children with ASD in a multiple-baseline-across-settings design. Each child was given a social script to follow in each of three game conditions with peers (i.e., games, cooking, restaurant) and then asked to self-monitor when the steps had been completed. Peers were trained to prompt the children, and the scripts were faded as mastery of game skills increased. Both students increased their appropriate play skills as a result of intervention.

3. Wichnic, A. M., Vener, S. M., Keating, C., & Pouson, C. L. (2009). The effect of a script-fading procedure on unscripted social initiations and novel utterances of young children with autism. *Research in Autism Spectrum Disorders, 4*, 51-64.
One 4-year-old and two 6-year-olds with autism participated in a study designed to increase social interactions with peers using social scripts. Participants' interactions increased and generalized to unscripted and novel situations.
4. Ganz, J. B., Kaylor, M., Bourgeois, B., & Hadden, K. (2008). The impact of social scripts and visual cues on verbal communication in three children with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 23*, 79-94.
Three children between the ages of 7 and 12 participated in the study designed to measure acquisition of verbal communication skills. The intervention was highly effective for scripted statements, ineffective for unscripted statements, and produced variable results for total communicative statements.
5. Sarokoff, R. A., Taylor, B. A., & Poulson, C. L. (2001). Teaching children with autism to engage in conversational exchanges: Script fading with embedded textual stimuli. *Journal of Applied Behavior Analysis, 34*, 81-84.
This study investigated the effects of a script-fading procedure using embedded text to teach two children with autism to engage in conversation statements about the stimuli. Results indicated that the use of scripts along with stimuli containing embedded text was effective in teaching the children to engage in conversation statements about the stimuli. Further, both participants' scripted statements generalized to novel stimuli and to situations where a novel peer participated in the snack or video game sessions.
6. Thiemann, K. S., & Goldstein, H. (2001). Social stories, written text cues, and video feedback: Effects on social communication of children with autism. *Journal of Applied Behavior Analysis, 34*, 425-445.
The study investigated the effects of written text and pictorial cuing with supplemental video feedback on the social communication of five students with autism and social deficits. Results showed increases in targeted social communication skills and support using visually cued instruction to guide social language development.
7. Stevenson, C. L., Krantz, P. J., & McClannahan, L. E. (2000). Social interaction skills for children with autism: A script-fading procedure for nonreaders. *Behavioral Interventions, 15*, 1-20.
The study examined the effectiveness of audiotaped scripts and script fading for four boys with autism who were nonreaders. The audiotaped scripts were introduced and systematically faded to teach participants to converse with a target adult. Results indicated

that the intervention procedures increased unscripted interaction; the effects were maintained.

8. Kamps, D. M., Potucek, J., Lopez, A. G., Kravits, T., & Kemmerer, K. (1997). The use of peer networks across multiple settings to improve social interaction for students with autism. *Journal of Behavioral Education, 7*, 335-357.
Three students aged 6-8 with autism participated in the study designed to promote social interaction. Script use resulted in increased interaction time for all students, with generalization to nonintervention settings for two students.
9. Loveland, K. A., & Tunali, B. (1991). Social scripts for conversational interactions in autism and Down Syndrome. *Journal of Autism and Developmental Disorders, 21*, 177-186.
Thirteen persons with autism and 13 persons with Down Syndrome aged 5-27 participated in the study. Compared to the other group of participants, significantly more participants with autism required modeling, and a smaller percentage of the autism group exhibited improvement after modeling.

REFERENCES – SOCIAL SCRIPTS

- Ganz, J. B., Kaylor, M., Bourgeois, B., & Hadden, K. (2008). The impact of social scripts and visual cues on verbal communication in three children with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 23*, 79-94.
- Kamps, D. M., Potucek, J., Lopez, A. G., Kravits, T., & Kemmerer, K. (1997). The use of peer networks across multiple settings to improve social interaction for students with autism. *Journal of Behavioral Education, 7*, 335-357.
- Loveland, K. A., & Tunali, B. (1991). Social scripts for conversational interactions in autism and Down Syndrome. *Journal of Autism and Developmental Disorders, 21*, 177-186.
- Parker, D. & Kamps, D. (2010). Effects of task analysis and self-monitoring for children with autism in multiple social settings. *Focus on Autism and Other Developmental Disabilities, 1-12*.
- Sarokoff, R. A., Taylor, B. A., & Poulson, C. L. (2001). Teaching children with autism to engage in conversational exchanges: Script fading with embedded textual stimuli. *Journal of Applied Behavior Analysis, 34*, 81-84.
- Stevenson, C. L., Krantz, P. J., & McClannahan, L. E. (2000). Social interaction skills for children with autism: A script-fading procedure for nonreaders. *Behavioral Interventions, 15*, 1-20.
- Thiemann, K. S., & Goldstein, H. (2001). Social stories, written text cues, and video feedback: Effects on social communication of children with autism. *Journal of Applied Behavior Analysis, 34*, 425-445

Wichnic, A. M., Vener, S. M., Keating, C., & Pouson, C. L. (2009). The effect of a script-fading procedure on unscripted social initiations and novel utterances of young children with autism. *Research in Autism Spectrum Disorders, 4*, 51-64.

Wichnick, A.M., Vener, S.M., Pyrtek, M., Poulson, C.L. (2010). The effect of a script-fading procedure on responses to peer initiations among young children with autism. *Research in Autism Spectrum Disorders, 4*, 290-299.

RESOURCES AND MATERIALS – SOCIAL SCRIPTS

- Social Scripts: http://www.leics.gov.uk/autism_social_scripts.pdf
This pdf document provides a concise description of social scripts.
- Social Scripts: <http://www.specialed.us/autism/assist/asst13.htm>
This brief description of social scripts points out the specificity of social scripts and provides an example.

These resources discuss research on communication interventions, including social scripts.

- Goldstein, H. (2002). Communication intervention for children with autism: A review of treatment efficacy. *Journal of Autism and Developmental Disorders, 32*, 373-396.
- Weiss, M. J., & Harris, S. L. (2001). Teaching social skills to people with autism. *Behavior Modification, 25*, 785-802.