NASET's Autism Spectrum Disorder Series

Using Social Stories to Decrease Negative Behaviors in Students with Autism and Other Disabilities

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This issue of **NASET's Autism Spectrum Disorder series** comes from the Fall 2021 edition of the Journal of the American Academy of Special Education Professionals (JAASEP). It was written by Vivian Williams, Ed.D. from the University of California Santa Barbara. Social stories are effective interventions that can be used to manage negative behaviors and develop social skills. However, contradictory results are suggested within the research because of variability in designing social stories, intervention phases, target behaviors, and treatment protocol. Social story interventions may reduce negative behaviors among many children and adolescents with autism, other pervasive developmental disorders, and emotional and behavioral disabilities. Many research studies focused on the implementation of social stories with children and adolescents who range from 3-15 years of age. From these studies, social stories were found to be an effective intervention for increasing appropriate behaviors and decreasing challenging behaviors. This paper examines current research in the use of social stories' intervention to reduce negative behaviors for students with autism and other disabilities.

Abstract

Social stories are effective interventions that can be used to manage negative behaviors and develop social skills. However, contradictory results are suggested within the research because of variability in designing social stories, intervention phases, target behaviors, and treatment protocol. Social story interventions may reduce negative behaviors among many children and adolescents with autism, other pervasive developmental disorders, and emotional and behavioral disabilities. Many research studies focused on the implementation of social stories with children and adolescents who range from 3-15 years of age. From these studies, social stories were found to be an effective intervention for increasing appropriate behaviors and decreasing challenging behaviors. This paper examines current research in the use of social stories' intervention to reduce negative behaviors for students with autism and other disabilities.

Keywords: validity, tracking, peer reviewed intervention (PMI), social narrative, pervasive developmental disorder (PDD), autism, asperger, emotional disturbance (ED)

Using Social Stories to Decrease Negative Behaviors in Students with Autism and Other Disabilities

Several studies have been conducted that examined the impact of implementing social stories to reduce challenging behaviors in children with autism and other disabilities where positive outcomes were found. Other studies reported an increase in appropriate behaviors with the use of social stories (Delano & Stone, 2008). Social stories are effective interventions that have been used to manage negative behaviors and develop social skills. Results of research has remained contradictory for the use of social stories to decrease negative behaviors in students with autism and other disabilities, due to variability in the design of social stories, intervention phrases, identified target behaviors, and treatment protocol. This paper examined research that utilized quasi-experimental and single-subject design methods to study the use of social story interventions to reduce negative behaviors for students with autism and other disabilities.

Wong (2013) reported that social stories were listed under the evidence-based practice of social narratives. In social narratives, social situations are comprehensive and include relevant cues and examples for appropriate responding. In addition, the learner's individualized needs dictated the short, story descriptions, and often the stories encompassed pictures or other visual aids. According to Gray (2010), social stories included a written description around an identified target behavior and the social situation outlined the specific behaviors that were expected to occur. Additionally, Gray reported that challenging behaviors could be managed in numerous settings with story-based interventions. Story based interventions provided a simple way to teach individuals with autism spectrum disorder (ASD). Gray and Gerand (1993) introduced the most recognized story-based intervention (social story). Like Gray (2010), Gray and Garand defined social stories as written from the child's perspective and including short, simple texts and visual supports. The authors introduced social story interventions to children with autism as a strategy to teach them how to read social situations. Although social stories were developed specifically to help students with autism, the authors also acknowledged that children with autism were not the only children who struggled with proper responding and understanding in social situations. Consequently, students with a variety of disabilities may benefit from social story interventions.

Keeter and Bucholz (2012) indicated that many students with varying disabilities struggled with emotional functioning in social situations. Children with learning disabilities, as well as attention deficit hyperactive disorders, intellectual disabilities, and emotional behavior disorders also benefited from social story interventions. Specifically, Delano & Stone (2008) found that students identified with emotional or behavioral disorders that exhibited inappropriate social behaviors had difficulty engaging in appropriate play and often presented aggressive behaviors. Keeter and Bucholz (2012) expanded research on social stories and added the use of literacy-based (social story) interventions with students with intellectual disabilities. Positive results in behavior were found using social stories and focusing on a target behavior for a group of middle school students with mild/moderate intellectual disabilities. Additionally, Delano and Stone

(2008) extended the use of social stories to young children with emotional and behavioral disabilities (EBD). Sansosti and Powell-Smith (2006) recommended the use of social stories for a child with Asperger Syndrome (AS). Volmar and Klin (2000) described children with Asperger Syndrome as children with average to above average cognitive skills, who also lacked an understanding of appropriate social behaviors and had limited social interaction abilities.

Harjusola-Webb, Hubbell and Bedesem (2012) reported that social story interventions were easy to design and implement in a classroom setting. They described social stories as a strategy that involved the child reading a simple, unique story with detailed explanations on how to negotiate a situation that was challenging to the individual child. Some social narratives may be offered as a printed book that presents a challenging social situation. Others social narratives are described as more complex and included digital stories with PowerPoint and video. Additionally, the authors implemented a combination of peer-mediated intervention (PMI) and social narratives as a combined model. Peers were trained to facilitate prosocial interactions with a 5-year old boy with autism by helping to teach the target behavior of turn taking in an inclusive classroom. The benefits from the combined intervention of PMI and social stories resulted in increased turn-taking interactions and appropriate social skills. Considering both PMI and social narratives as evidence-based interventions for increasing positive behaviors were incorporated, the study concluded it was difficult to differentiate the direct benefit of the social story alone. Conclusively, the authors determined that the combined model of PMI and social stories increased positive behaviors for both, children with disabilities and their peers.

Similarly, Spencer, Simpson and Lynch (2008), stated that social stories were not designed to address all behavior situations; therefore, they should not be implemented separately but within a child's overall educational plan. Previous research studies combined social stories with other interventions such as, verbal prompting (Cozier & Tincani, 2005), schedules, prompting and token economies (Kuttler, Myler, & Carlson, 1998) and videotaped feedback to teach social skills (Theimann & Goldstein, 2001). The use of social stories simultaneously with other

interventions allowed children with ASD and other disabilities to engage in learning appropriate behaviors with positive outcomes.

Delano and Stone (2008) identified some advantages for using social stories in the classroom. The advantages included teachers can individualize social stories to the specific needs of each child, the instructional time needed is minimal, and other effective strategies can be easily incorporated. Social stories supported students with emotional and behavioral disabilities, through behavior intervention plans and social skills curriculum. Several studies supported positive effects of using social stories including Adams, Gouvousis, VanLue and Waldron (2004), who found a reduction in challenging behaviors and Barry and Burlew (2004), who reported an increase in appropriate behaviors.

Graetz, Mastropieri and Scruggs (2009) implemented an intervention with three adolescents with ASD. They utilized a modified social story and addressed specific behaviors. The modified social stories included real photographs, many visuals and were written to address individual target behaviors. The target behaviors of the three adolescents included refusal, using a loud pitch voice and placing one's hands and objects in mouth. The authors did not follow the original social stories guidelines purposed by Gray & Garand (1993). Social stories, with the use of visuals (color photos) were an effective intervention and resulted in a decrease in inappropriate behaviors for adolescents with ASD. A multiple baseline design was used to track the data that concluded with immediate reductions in inappropriate behaviors (Graetz, Mastropieri & Scruggs, 2009).

Sansosti and Powell-Smith (2006) also utilized a multiple baseline across participants design. Three elementary students with Asperger Syndrome participated in social story interventions that addressed their targeted behavior during the school day. Their intervention included a parent component with journaling and tracking levels of appropriate social interactions with typical peers. After the implementation of social stories, two of the participants showed increased social

engagement; therefore, a measurement of effectiveness was noted in the summary. However, no evidence of maintenance or generalization of skills was documented for the participants.

Keeter and Bucholz (2012) used social stories with five middle school students who had an educational diagnosis of intellectual disability. The students were placed into two groups based on the targeted behaviors of "calling out" and "off task". Three students exhibited off-task behaviors and two students exhibited calling-out behaviors. Although the social stories were not individually written for each participant as proposed by Gray and Garand (1993), all participants decreased their targeted behaviors after the social story interventions.

Social story interventions may reduce negative behaviors among many children and adolescents with autism, other pervasive developmental disorders, and emotional and behavioral disabilities. Many research studies focused on the implementation of social stories with children and adolescents who range from 3-15 years of age. From these studies, social stories were found to be an effective intervention for increasing appropriate behaviors and decreasing challenging behaviors. However, most social story interventions do not represent an independent means of changing behavior in children with autism. Several studies identified social stories as just one intervention strategy, out of many that were needed to improve social and behavior skills. In fact, incorporating social stories into a child's overall educational plan or daily schedule was suggested.

Rhodes (2014) confirmed that social story interventions were successful with the majority of the participants in a study using single subject designs. This study included 15 children between the ages of 3 and 15 years in an educational setting. Despite the variation in the level of success by each participant, Rhodes identified four common themes. The themes that emerged were the participants' ability to read their own social stories, the use of verbal prompts, treatment integrity and teacher acceptance, and maintenance. Thirteen of the 15 participants demonstrated a reduction in the frequency of their individual disruptive behaviors after social story interventions. Rhodes concluded that social stories were beneficial in helping to decrease

negative behaviors and did not cause harm or stigma to students. Additionally, social stories were accepted by both teachers and parents. Gray and Garand (1993) clarified that the use of simple language to explain events that take place in social situations can set the stage for targeting appropriate behaviors.

In a quasi-experimental design between subjects by Hanrahan, etc. (2020) digital social stories interventions were implemented with a group of 9-children on the autism spectrum. A randomized control trial was implemented, as well as an attentional control group for 6-children. The study concluded that the use of digital technology to reduce variability in social story interventions, demonstrated significant improvements in maladaptive behaviors for students with autism. Despite, the limitation of small sample sizes, the increase methodological rigor and intervention fidelity provided consistent evidence of digital social stories and their positive impact on behavior.

Considering the importance of social validity and competence that resulted from social story interventions, it was noted as essential for students with ASD and other disabilities to engage in evidence-based practices. Therefore, continued research on the benefits of social stories in decreasing challenging behaviors is one of the next steps in studying this evidence-based intervention. In addition, due to the ease in designing social stories, the ability to individualize stories and, the opportunities to foster generalization of skills in the natural environment for some children; more research is needed (Harjusola-Webb, Hubbell & Bedesem, 2012).

The future direction for the implementation of social stories should include the identification of what are the specific target behaviors that are more likely to garner benefits,. Additionally, continue to utilize methods and procedures that employ experimental control and greater validity, as well as measuring the impact of enhanced visuals added to stories. Further, consider the benefits of combining other evidence-based interventions with the social story (Sansosti & Powell-Smith, 2006). Finally, more research is recommended to measure the impact of social stories with older students and young adults with autism and other disabilities. We must continue

to identify the critical components of social stories that are responsible for the greatest impact to the improved behavior of children and adolescents with disabilities, and determine how to best implement and integrate social stories in natural environments (Graetz, Mastropieri & Scruggs, 2009).

Limitations noted throughout the research concluded that some social stories differed from the original guidelines by Gray and Gerand (1993), making it difficult to access components responsible for improved behavior. A lack of consistency in social story designs was also mentioned (Graetz, Mastropieri & Scruggs, 2009). Further, limitations included the length and phrase of social story implementation, the fidelity of implementation by teachers, paraprofessionals and parents, as well as the training protocol (Sansoti & Poell-Smith, 2006). Evidence of positive outcomes from social story interventions in decreasing challenging behaviors has not been generalized for all students with autism and other disabilities. Consequently, additional research should continue to investigate the effectiveness of social story interventions for children with autism and other disabilities.

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