# Using Social Stories To Improve Challenging Behaviors In Young Children With Emotional and Behavioral Disabilities

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**Abstract**

*This study explores the effects of social stories on the social skills of children with autism. Participants were 40 children in KG. 2 from two private kindergartens in Matrooh .A pre-post design was used to examine the effectiveness of the social stories Intervention Strategy on the challenging behaviors of the target children . Findings from this study indicated the effectiveness of the social stories intervention employed in improving the challenging behaviors of the target children. On the basis of the findings, the study advocated for the effectiveness of the social stories intervention employed in improving the challenging behaviors of the target children.*

*Keywords*: Social stories, challenging behaviors, children with emotional and behavioral disorders (E/BD)

**Introduction**

Children with emotional and behavioral disorders (E/BD) have academic, behavioral, and social needs that may impact their ability to be successful in the classroom. Children with emotional and behavioral disorders (E/BD) have a number of maladaptive behaviors that impede their relations with teachers and peers (Kauffman, 2001) as well as their academic success (Wagner & Cameto, 2004). For example, elementary-aged children with E/BD are less academically engaged, display higher rates of disruptive/inappropriate behavior, and have higher rates of course failure than both their typically developing peers and their peers served under other IDEA eligibility criteria (Cullinan, Evans, Epstein, & Ryser, 2003).

These characteristics also were consistent among students with E/BD at the middle and high school levels (Cullinan & Sabornie, 2004; Lane, Carter, Pierson, & Glaeser, 2006). In addition, several recent investigations have demonstrated that these characteristics are stable over time (Hayling, Cook, Gresham, State, & Kern, 2008) regardless of the age at which they are first identified. For example, Bilancia and Rescorla (2010) measured academic, behavioral, and social characteristics of children with E/BD over six years. Regardless of their age at the beginning of the study (two groups: 4 to 5 or 6 to 7), their deficits remained stable over time.

Given the unique learning needs of individuals with emotional and behavioral disorders, social stories may provide an effective strategy to improve challenging behaviors. Carol Gray, a special education teacher, developed social stories in order to enable individuals with an autistic spectrum disorder to "read, interpret, and respond effectively to their social world" (Gray, 1994, p.5). A social story is a concise narrative about a situation, concept, behavior, or social skill that is written and implemented according to specific guidelines. Social stories are designed to bring predictability to a situation by providing specific and relevant social cues as well as defining the appropriate responses to a social situation.(Adel Abdulla & Mourad Ali, 2014).

*Behavioral Characteristics of Children with Emotional and Behavioral Disorders*

Children with emotional and behavioral disorders (EBD) commonly engage in behaviors (e.g., verbal and physical aggression; social skills acquisition and performance deficits) that negatively influence both their ability to successfully negotiate peer and adult relationships and their educational experience (Cullinan and Sabornie 2004; Gresham et al. 2004; Landrum et al. 2003; Walker et al. 1992;Walker et al. 2004). Many of these children have social skill deficits, often displayed as less mature or inappropriate social behavior (Kauffman, 2005, p. 10). Children may have difficulty engaging in appropriate play or social

interactions and may at times become aggressive. Some children in this population may act out in class, and others may be withdrawn and become socially isolated. The inability to interact with others has a negative impact on academic achievement (Cullinan, 2004, p. 33) and places children at risk for the development of secondary problems (e.g., drug and alcohol abuse).(Delano& Stone, 2008).

*Social Stories*

Carol Gray is the director of The Gray Center for Social Learning and Understanding. Gray has served as a teacher for students with ASD for over 22 years. Gray developed Social Stories and Comic Strip Conversations (Gray, 1998). These resources are used worldwide with individuals with ASD. According to Gray, Social Stories are designed to share social information in a way that will be easily understood by the audience. A Social Story describes a situation, skill, or concept in a way that is relevant to the student. Information often given in the stories includes: where and when a situation may take place, who is involved in the situation, and why the particular situation may occur. Gray explains that, in the stories, relevant social cues, perspectives of others, and common responses to the situation are given. The stories may also explain what other people know, feel, or believe; Social Stories can also explain concepts that are abstract and often difficult to understand (Gray).

According to Gray (2011), Social Stories should affirm something the individual does well while teaching the target behavior or skill. The goal of a Social Story should not be to change the individual's behavior, but to improve understanding of social situations that may lead to increased appropriate behavior. According to Gray, the understanding a person gains often promotes self-esteem, can calm and create order in a turbulent situation, promote independence, reduce anxiety, and increase social understanding.

A growing body of literature has investigated the effectiveness of Social Stories . Several studies have reported positive effects on the use of Social Stories  to reduce challenging behaviors (Adams, Gouvousis, VanLue, & Waldron, 2004; Agosta, Graetz, Mastropieri & Scruggs, 2004; Brownwell, 2002; Crozier & Tincani, 2005, Kuoch & Mirenda, 2003; Kuttler, Myles, & Carlson, 1998; Lorimer et al., 2002; Reynhout & Carter, 2007; Scattone, Wilczynski, Edwards, & Rabian, 2002). A number of studies have also reported positive results on the use of Social Stories to increase appropriate behaviors (Barry & Burlew, 2004; Bledsoe, Smith-Myles,& Simpson, 2003; Crozier & Tincani, 2007; Delano & Snell, 2006; Ivey, Heflin, & Alberto, 2004; Norris & Dattilo, 1999; Sansosti & Powell-Smith, 2006; Swaggart et al., 1995; Thiemann & Goldstein, 2001), decreasing aggressive behavior (Adams, Gouvousis, Van Lue, & Waldron, 2004; Gray & Garand, 1993; Romano, 2002; Rowe, 1999), increasing the use of appropriate social skills (Barry & Burley 2004; Hagiwara, 1999; Pettigrew, 1998), increasing greeting behavior and initiation of play activities (Feinberg, 2001), increasing on-task behavior (Brownell, 2002), increasing appropriate meal-eating behavior (Staley, 2001; Adel Abdulla & Amal Mostafa ,2012) and decreasing precursors of tantrum behaviors (Simpson & Myles, 2002).This research provides preliminary support for the use of Social Stories (Sansosti, Powell-Smith, & Kincaid, 2004) and suggests that the Social Story intervention is a promising practice for supporting appropriate behavior and teaching prosocial skills to students with autism (Simpson et al., 2005, p. 147).

Collectively, these studies showed that social stories can improve a wide range of behavior. Because young children with EBD may benefit from instruction in some of the same skills targeted in previous research on Social Stories (e.g., decreasing challenging behaviors, increasing appropriate social and communication skills), the Social Story intervention may be a useful tool for teachers working with young children with EBD. The purpose of the present study was to examine the extent to which social stories can be used to

improve challenging behaviors of children with Emotional and Behavioral Disorders. The primary research question was, what effects will social stories have on challenging behaviors of children with Emotional and Behavioral Disorders?

## Method

### Participants

Participants were 40 children in KG. 2 from two private kindergartens in Matrooh . Parental informed consent forms were sent home by the kindergarten's director to parents of potential participants telling them about the study and requesting them to give permission for their children to participate. Through a previous comprehensive psychological evaluation; namely The Behavioral and Emotional Rating Scale–Second Edition (BERS-2) Parent Rating Scale (PRS) each targeted child had received a primary diagnosis of Emotional and Behavioral Disorders.

### Dependent Measure

*Child's Challenging Behaviour Scale (CCBS)*. (Bourke-Taylor, Law, Howie & Pallant, 2010) The CCBS is a brief, psychometrically sound in strument that provides clinicians with a new tool that measures a mother's rating of her school aged child's behaviours that are challenging and associated with reduced maternal mental health and caregiving capacity. The CCBS assists professionals to identify mothers and family situations who may be in need of more support and interventions. The CCBS was designed for mothers of school aged children with disabilities, aged 5 through 18 years. A mixed method instrument design model was applied to the research that developed the CCBS. An initial qualitative study generated items (Bourke-Taylor, Howie & Law, 2010), and quantitative data were collected from 152 mothers of a school aged child with a disability in Victoria, Australia. Eleven items were included in the CCBS in the form of statements. Respondents are asked to rate their level of agreement using a five point Likert response scale(1 = strongly agree, 2 = agree, 3 = neither agreeor disagree, 4 = disagree, 5 = strongly disagree). See Appendix(A) for instructions for completing the scale, scale items and response schedule. Prior to scoring, two items must be reverse scored (Item 3: My child aggravates others; andItem 6: My child can be stubborn and uncooperative).This means that a value of 5 = 1; 4 = 2; 3 = 3; 2 = 4; 1 = 5. Following reversal of these two scale items, the total score on the CCBS is calculated by summing the scores, with possible scores ranging from 11 to 55. Higher scores on the CCBS indicate that the child exhibits more challenging behaviours. Psychometric evaluation of the CCBS on the population of Victorian mothers of school aged children with disabilities (N = 152) revealed the following properties. The Cronbach alpha value was high (0.89) indicating excellent internal consistency. Tests of normality on the eleven item scale revealed a slightly skewed normal distribution (-0.279) and kurtosis(-0.226); a non significant Kolmogorov-Smirnov statistic (p= 0.07); a reasonably straight Normal Q-Q plot; and an acceptable Detrended Normal Q-Q plot (Bourke-Taylor, Law, Howie, Pallant, 2010). The CCBS was therefore deemed to be normally distributed with a mean score of 34.4 and standard deviation of 9.3 (range: 11 to 54). Factor analysis supported its unidimensionality. Further information about construct validity has been published (Bourke-Taylor, Law, Howie & Pallant, 2010).

*Independent Variable*

The independent variable was the use of  group social stories. As noted, social stories are short written and pictorial vignettes that are used to help students with Emotional and Behavioral Disorders behave more appropriately and independently. Typically, these stories are written using individuals' specific behaviors and contextual variables as the source of story content. They then use these stories interactively with pupils to improve those particular behaviors in specific contextual situations. Social stories are created using three different sentence types (descriptive, directive, and perspective) that give students information about what is happening, how to behave and how others feel or think about their behavior. Picture cues (e.g., drawings, photographs, or even stick figures) are also used to enhance pupil understanding. Typically, social stories are created using a variety of formats including: (a) illustrations, (b) photographs, (c) symbols (e.g., Picture Exchange Communication System), (d) audio and video-tape, and (e) story boxes. To create social stories, the investigator met initially with the classroom teacher to identify specific target behaviors. Support teacher then photographed children while they were engaged in socially appropriate and inappropriate target behaviors. The investigator then created stories for the four target students using the three primary sentence types. Support teacher was then trained to use social stories. The investigator created each social story based on individual pupil needs. Social stories were read to target children. social stories can be seen in (Appendix B).

*Procedure*

Challenging behaviors level of each child was measured on The *Child's Challenging Behaviour Scale (CCBS)*. The assessment was done in an environment familiar to the children and during their usual intervention time. Treatment consisted of training using social stories . The pretest scores were analyzed to ensure parity among the children. Children in the experimental group received 23 teaching sessions. The duration of each session would be from 15 minutes to 20 minutes. While treatment group children received the training based on social stories, the control group continued with usual special classroom interventions. At the completion of the treatment session, children from both groups were tested again on The *Child's Challenging Behaviour Scale (CCBS)*.

## Results

*Social stories and improvement of challenging behaviors*

The first objective of the study was to determine if use of social stories would be more effective for the treatment group compared to the control group. For this purpose, the post intervention scores of both treatment and control groups were analyzed. Table 1. shows data on ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in The Child's Challenging Behaviour Scale scores. The table shows that the (F) value was (508.767) and it was significant value at the level (0.01).

Table 1. *ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in The Child's Challenging Behaviour Scale scores*

| Source | Type 111 sum of squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Pre | 33.229 | 1 | 33.229 | | |
| Group | 8628..479 | 1 | 8628..479 | 508.767 | 0.01 |
| Error | 627.505 | 37 | 16.960 | | |
| Total | 9304. 400 | 39 | | | |

Table 2. shows T. test results for the differences in post- test mean scores between experimental and control groups in *The Child's Challenging Behaviour Scale scores*. The table shows that (t) vale was (9.670). This value is significant at the level (0.01) in the favor of experimental group .The table also shows that there are differences in post- test mean scores between experimental and control groups in *The Child's Challenging Behaviour Scale scores* in the favor of experimental group .

Table 2. *T- test results for the differences in post- test mean scores between experimental and control groups in The Child's Challenging Behaviour Scale*

| Group | N | Mean | Std. deviation | T | Sig. |
|---|---|---|---|---|---|
| Experimental | 20 | 13.500 | 2.01 | 9.670 | 0.01 |
| Control | 20 | 42.900 | 5.54 | | |

The second objective of the study was to determine the effect of social stories on the development of social skills in children with autism. The treatment consisted of training through use of social stories. The children's performance on *Child's Challenging Behaviour* was measured pre and post intervention. Table 3. shows T. test results for the differences in pre-post testing mean scores for the experimental groups *in The Child's Challenging Behaviour Scale*. The table shows that (t) vale was (9.670). This value is significant at the level (0.01) in the favor of post testing. This indicates that use of social stories had a positive effect on improving challenging behaviors of the targeted children.

Table 3. *T-test results for the differences in pre-post test mean scores for the experimental group in The Child's Challenging Behaviour Scale*

| Testing | N | Mean | Std. deviation | T | Sig. |
|---|---|---|---|---|---|
| pre | 20 | 42.900 | 2.66 | 9.670 | 0.01 |
| post | 20 | 13.500 | 2.01 | | |

**Discussion**

The present study evaluated the effects of social stories intervention on the challenging behaviour of children with Emotional and Behavioral Disorders. The study results showed that the social story intervention was effective in improving challenging behaviors of all children participated in this study. The social stories developed for the study were written according to the Gray's guidelines (1993).

The present study contributes in some ways to the effectiveness of social story literature. First, findings from this study demonstrate the potential benefits of using the social story intervention as an intervention to improve the challenging behaviour of children with Emotional and Behavioral Disorders. The results of this study goes in the same line with Delano & Stone's (2008). Second, pre- post experimental design was used in the present study. Many studies on the effectiveness of social stories have used nonexperimental designs that are plagued by threats to internal and external validity (Kuoch and Mirenda, 2003; Reynhout and Carter, 2006).

In summary, social stories effectively improved the challenging behaviour of children with Emotional and Behavioral Disorders who participated in this study. Overall, results from this study contribute to the social story literature for improving the challenging behaviour. The present study lends empirical support to the notion that children with Emotional and

Behavioral Disorders, specifically young children with Emotional and Behavioral Disorders, can be taught and can learn appropriate social skills and their challenging behaviors can be improved.

**Future Research Recommendations**

Further research is still required to explore the potential benefits of social story intervention for children with Emotional and Behavioral Disorders. Such research may include large scale studies, and a further exploration of the exact influence of student attendance, teacher training, classroom conditions and treatment duration and intensity.

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