

Improving Social Skills for individuals with autism spectrum disorder

Ayman Bawakid

Special Education Department Umm Al Qura University

Abstract

This literature review seeks to find the importance of social skills for humans and find the different perspectives on the definition of social skills. It also seeks to find the importance of social skills for individuals with autism and how critical social skills are for individuals with autism. Finally, this literature review talked in detail about different intervention to improve social skills for individuals with autism which included the following: (a) social stories, (b) peer-mediated interventions, (c) visual-based instruction, and (d) cognitive-behavioral training. The questions that were addressed in this paper are: What is the importance of social skills? How could we improve the social skills of individuals with autism?

Keywords: Autism, Social skills, Interventions for autism, Interventions for social skills, social stories, Peer-mediated interventions, Visual-based instruction, Cognitive-behavioral training.

Imagine a 6-year-old boy who just joined a school as a first-grade student. This student has a weakness in his social skills. Therefore, he faced many social challenges in many situations before he joined the school. Now, after the student entered the school with his social skills weaknesses, he is facing major challenges in making new friends at the school, he is also not able to play any social games with any student at the school. He is not able to ask about any new information that he gained at the school with any student due to his social skills difficulties. So, do you think the student will be able to successfully complete the first grade and move to second grade with his social skills challenges? Do you think there are some strategies that could be used to help that 6 years old boy to overcome his social challenges? What do you think a special education teacher could do to help that student with his social challenges?

Social skills are one of the most important skills for human beings. It is a skills humans learn and develop over time (Kwon et al., 2014). Social skills are used to communicate and interact with others daily and come in different verbal, nonverbal, written, and visual forms (Banda & Grimmatt, 2018). The American Psychological Association (APA) defined social skills as

a set of learned abilities that enable an individual to interact competently and appropriately in a given social context. The most commonly identified social skills in Western cultures include assertiveness, coping, communication and friendship-making skills, interpersonal problem solving, and the ability to regulate one's cognitions, feelings, and behavior (APA, 2013, Sec. Social skills).

Additionally, Gresham (1986) suggested three perspectives that can be used to define social skills. First, a behavioral perspective is defined as the specific habits or behaviors that enhance the chances of pleasant social encounters and decrease the chances of bad ones. Second, a peer acceptance perspective is defined as acceptance or popularity among peers or friends. Third, the social validity perspective is a relevant and substantial social effect resulting from social behaviors. Seven social elements are used to measure social skills in children from a young age up to the high school level. Those elements are called the Social Skills Improvement System (SSIS; Gresham & Elliott, 2008). These elements include: (a) communication or making eye contact or engaging in a conversation; (b) cooperation, which involves working with others; (c) assertion, or speaking up in front of others; (d) responsibility, involves positive actions or behaviors toward others; (e) empathy, in which one attempts to help others feel better; (f) engagement, such as making friends; and (g) self-control, which involves managing emotions in social circumstances that are challenging or stressful.

Why are Social Skills Important?

Social skills are important for individuals' long-term success; they are crucial skills when communicating with others, including starting and ending a conversation (Deming, 2017). Social skills are also associated with academic achievement and play a major role in behavioral outcomes (Ashdown & Bernard, 2012; DiPrete & Jennings, 2012; Domitrovich et al., 2017; McClelland et al., 2007). There are many reasons for the importance of social skills. First, they may help strengthen relations with others (Sklad et al., 2012). Second, they increase the chance of having a high-quality social life, positively affecting physical health (Umberson & [Montez](#),

2010). Third, children's social withdrawal and social skills issues have been connected to depressive symptoms. So, having effective social skills may prevent mental illness (Perren et al., 2012). Fourth, kindergarten students with social skill impairments are more likely to be victimized by their peers; therefore, improving social skills might help reduce victimization among peers (Perren et al., 2012). Fifth, the literature has shown that a higher level of social-emotional skills may improve academic performance (Elias & Haynes, 2008). Finally, workers who need to seek collaboration and resources to work successfully benefit from social skills. Thus, social skills may affect job performance (Hochwarter et al., 2006).

Individuals with ASD and Social Skills

Social skills deficits are major challenges individuals with ASD experience (Petursdottir & Gudmundsdottir, 2021). Some of the social skills difficulties students with ASD may have include difficulties establishing interactions, responding appropriately, empathizing with others, theory of mind—or considering others' perspectives, and showing interest in others. Additionally, social skills deficits for individuals with ASD may lead to more serious problems such as weak academic achievement, failure in social situations, rejection by peers, anxiety, depression, and other forms of psychopathology (Kwon et al., 2014). The capacity to form meaningful social interactions is hampered by social skills deficiencies, which frequently leads to retreat and a life of social isolation in children with ASD. On the other hand, successful emotional, cognitive, and social growth facilitates the development of social skills. As a result, a strong social skills program and intervention should be a part of all educational programs for children with ASD (Bellini et al., 2007).

Interventions to Improve Social Skills

There are many interventions used to improve social skills. However, the extant body of literature focuses on four interventions usually used to improve social skills: (a) social stories, (b) peer-mediated interventions, (c) visual-based instruction, and (d) cognitive-behavioral training (Wang & Spillane, 2009).

Social Stories. Gray (1998) defined social stories as short stories that explain social events to children with ASD and assist them in acquiring socially appropriate behaviors. Acar et al., (2017) conducted a study using an alternating treatment design to evaluate the effectiveness of two interventions in which mothers used social stories and VM to improve social skills in students with ASD. The participants in this study conducted in Turkey were three mothers with their three male children, 6 to 10 years of age—all of whom were identified with ASD by a physician. The mothers in this study were between the ages of 33 and 45. The first child in this study was Kerem, who was 7 years old and in the first grade at the time of the study; Kerem received support services. Kerem was verbal and could read and write. Ruzgar, the second participant, was 6 years old and attended a special education center to receive the appropriate services. Ruzgar had limited verbal language. The third participant was Yamen, a 10-year-old who received services through a special education center. Yamen was on a below-average reading and writing level and had a weakness in problem-solving skills.

The mothers who implemented the intervention were trained by the researchers to ensure they understood how to implement the intervention and collect the data. In order to train the mothers to conduct the intervention, the researcher conducted role-playing sessions; the

researcher role-played as the child, and the mothers role-played as the interventionist. The researcher did not start collecting data until the mothers reached 100% accuracy in the role-playing scenarios. The mothers conducted the baseline condition before the intervention for a minimum of three sessions. Once the baseline was stable, the intervention condition started. The intervention was conducted 5 days a week. During the intervention condition, the mothers alternated the two intervention conditions with the child (i.e., social stories and VM). After the intervention phase, the maintenance and generalization phases started. There were only two maintenance sessions conducted with only two children. Interobserver reliability data were collected for 30% of all conditions and was 100%. Results demonstrated the mothers implemented social story and VM with 100% fidelity. Also, regarding the intervention itself, the results showed that both interventions were effective in improving social skills with children with ASD. Specifically, VM was more helpful and effective for two out of three participants, and the social story was more effective for one out of three children. Interviews were conducted with the mothers to measure the study's effectiveness and social validity and the process their children were following. The results of the interviews were positive.

A limitation of the study was that there were only three study participants, all of whom were male. The author suggested future research should be done with female participants to see the effect of these interventions on them.

Peer-Mediated Intervention. Another strategy shown to improve social skills is peer-mediated intervention. Peer-mediated intervention is defined as a strategy that enlists the help of

typically developing peers to teach children with ASD social skills and enhance their social interactions, mostly in a school environment (Płatos & Wojaczek, 2018).

Loncola and Craig-Unkefer (2005) conducted a study using a single-subject design (multiple baseline across dyads) to evaluate the effects of peer-mediated strategy to improve social communication skills on six students (five male, one female) with ASD. A multiple baseline across dyads design was selected to enable the intervention implementation for two students simultaneously. The participants were between the ages of 6 and 8. The first participant was A1, a 6-year-old Hispanic girl with weak language performance compared to her peers. She could understand Spanish and English but did not engage with other children and preferred to play alone. The second participant in the article was A2, a 6-year-old White male who understood English but did not use it. His teachers and parents identified him as having social weaknesses. The third participant, B1, was a 6-year-old boy who was Middle Eastern and spoke Arabic and English very well. He was also identified with social weaknesses compared to his peers. The fourth participant, B2, was an 8-year-old African American boy who could understand English. He was identified with social weakness compared to his peers. The fifth participant, C1, was a 7-year-old White boy. He spoke Polish at home and English at school. He also had social weakness. The last participant, C2, was a 7-year-old Hispanic student who spoke English and had social weakness compared to his peers. All phases in this study were video recorded. The baseline phase was conducted three times per week. Each session during baseline was 10 minutes long. The purpose of the baseline phase was to measure the student's social performance before implementing the intervention. The intervention phase started after the

baseline phase was finished. During the intervention, the researcher had three components: (a) a play organizer session, (b) a 10-minute play session, and (c) a review session. The participants were asked to do those components in dyads. However, the interventionist suggested roles for the children and ways to talk with each other. All sessions were videotaped to ensure interobserver reliability; the second researcher observed 20% of the videos, and interobserver reliability was 80%, with a range of 71% - 89%. Results indicated a functional relation between the peer mediated intervention and the participants' social skills (i.e., all participants improved their social skills). One of the study's major limitations was that there were no maintenance nor generalization sessions. The reason stated was that the study was implemented in the school, and the participants finished their school year before the authors could implement a follow-up or generalization phases. Suggestions for future research included conducting generalization and maintenance sessions to determine if the social skills were maintained and if they generalized to novel settings.

Cognitive Behavior Training. Cognitive-behavioral training is a form of psychotherapy treatment that teaches people how to recognize and modify harmful or distressing thinking patterns that affect their behavior and emotions (Bock, 2007).

Bock (2007) evaluated the effect of cognitive behavior training on improving social skills for students with ASD at the elementary level. A multiple-baseline-across-settings design was used to measure the effectiveness of the intervention across different settings. The participants were four elementary students between 9 and 10 years of age who were identified with ASD based on full clinical assessment. All students previously received social skills instruction;

however, they were still identified with social skills weaknesses. The first participant was a 9-year-old White boy in the fourth grade with a full-scale IQ (FSIQ) of 104. The second participant was a 9-year-old White boy in the fourth grade with an FSIQ of 100. The third participant was a 10-year-old Native American boy in the fifth grade with an FSIQ of 98. The fourth participant was a 9-year-old Native American boy in the fourth grade with an FSIQ of 110. The author used social-behavioral learning strategy intervention stories.

A total of 12 social-behavioral stories (three stories for each participant) were developed by the author to improve three specific social skills (i.e., time spent participating in group learning activities, playing a sports game with others, and visiting one or more friends during lunch). During the baseline condition, all sessions were recorded. No intervention was implemented during the baseline phase; however, the author provided corrective feedback to the participants. After the baseline condition finished, the intervention phase started. During the intervention phase, the stories were given to the participant to read. Immediately after reading the stories, they went to the setting where they were expected to perform the target behavior. After the intervention phase, the maintenance phase started. The maintenance phase was conducted for 5 months, during which data were collected once a month across all settings. All sessions were recorded to measure procedural reliability. Procedural reliability in all study phases was averaged 100%. Results indicated improvement in social skills for all four participants after the intervention was implemented.

Furthermore, all participants maintained their performance even after the intervention was no longer provided. One month after the follow-up phase, the author provided a social

validity questionnaire to the participants and their teachers to measure the social validity of the study. The social validity assessments showed a positive result of the intervention and the procedure that was being followed. One of the study's major limitations was that the author did not implement a generalization session for any participants. Therefore, the author encouraged future researchers to implement generalization sessions to confirm the effectiveness of this intervention.

Video-Based Instruction. Another strategy to improve social skills is video-based instruction. Video-based instruction includes presenting participants video footage of a correct example of a particular action or task to teach skills (Clinton et al., 2016).

Conclusion

Social skills are one of the most important skills for human beings. They are crucial skills when communicating with others, including starting and ending a conversation. Social skills are also associated with academic achievement and play a major role in behavioral outcomes for every individual. Human beings usually can gain social skills naturally. However, individuals with autism often need interventions and tools in order to be able to gain those skills. (i.e., social skills). they usually have difficulties establishing interactions, responding appropriately, empathizing with others, theory of mind—or considering others' perspectives, and showing interest in others. The extant body of this literature focuses on four interventions usually used to improve social skills. First, social stories, which is using social stories as short stories that explain social events to children with ASD and assist them in acquiring socially appropriate behaviors. Second, peer-mediated interventions, which is a strategy that enlists the help of

typically developing peers to teach children with ASD social skills and enhance their social interactions, mostly in a school environment. Third, cognitive-behavioral training which is a form of psychotherapy treatment that teaches people how to recognize and modify harmful or distressing thinking patterns that affect their behavior and emotions. Finally, visual-based instruction which includes presenting participants video footage of a correct example of a particular action or task to teach skills.

References

- Acar, C., Tekin-Iftar, E., & Yikmis, A. (2017). Effects of mother-delivered social stories and video modeling in teaching social skills to children with autism spectrum disorders. *The Journal of Special Education*, 50(4), 215–226. <https://doi.org/10.1177/0022466916649164>
- Ashdown, D. M., & Bernard, M. E. (2012). Can explicit instruction in social and emotional learning skills benefit the social emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal*, 39(6), 397–405. <https://doi.org/10.1007/s10643-011-0481-x>
- Banda, D. R., Matuszny, R. M., & Turkan, S. (2007). Video modeling strategies to enhance appropriate behaviors in children with autism spectrum disorders. *TEACHING Exceptional Children*, 39(6), 47–52. <https://doi.org/10.1177/004005990703900607>
- Bellini, S., & Hopf, A. (2007). The development of the “autism social skills profile”: A preliminary analysis of psychometric properties. *Focus on Autism and Other Developmental Disabilities*, 22(2), 80–87. <https://doi.org/10.1177/10883576070220020801>
- Bellini, S., Peters, J. K., Benner, L., & Hopf, A. (2007). A meta-analysis of school-based social skills interventions for children with autism spectrum disorders. *Remedial and Special Education*, 28(3), 153–162. <https://doi.org/10.1177/07419325070280030401>
- Bock, M. A. (2007). The impact of social-behavioral learning strategy training on the social interaction skills of four students with Asperger syndrome. *Focus on Autism and Other Developmental Disabilities*, 22(2), 88–95. <https://doi.org/10.1177/10883576070220020901>
- Deming, D. (2017). The Growing Importance of Social Skills in the Labor Market. *Quarterly Journal of Economics*, 132(5)1593-1640. <https://doi.org/10.1093/qje/qjx022>.

- Clinton, E., Galletta, A., & Zanton, J. (2016). Overview and critical components of video-based instruction for students with disabilities. *Technology and Disability*, 28(3), 91–100.
<https://doi.org/10.3233/TAD-160447>
- DiPrete, T. A., & Jennings, J. L. (2012). Social and behavioral skills and the gender gap in early educational achievement. *Social Science Research*, 41(1), 1–15.
<https://doi.org/10.1016/j.ssresearch.2011.09.001>
- Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development*, 88(2), 408–416. <https://doi.org/10.1111/cdev.12739>
- Elias, R., & White, S. W. (2018). Autism goes to college: Understanding the needs of a student population on the rise. *Journal of Autism and Developmental Disorders*, 43(3), 732–746.
<https://doi.org/10.1007/s10803-017-3075-7>
- Gresham, F. M. (1986). Conceptual and definitional issues in the assessment of children’s social skills: Implications for classification and training. *Journal of Clinical Child Psychology*, 15(5), 3–15. https://doi.org/10.1207/s15374424jccp1501_1
- Gresham, F. M., & Elliott, S. N. (2008). *Social Skills Improvement System*. NCS Pearson.
- Halle, S., Ninness, C., Ninness, S., & Lawson, D. (2016). Teaching social skills to students with autism: A video modeling social stories approach. *Behavior and Social Issues*, 25, 42–52.
<https://doi.org/10.5210/bsi.v25i0.6190>
- Hochwarter, W. A., Witt, L. A., Treadway, D. C., & Ferris, G. R. (2006). The interaction of social skill and organizational support on job performance. *Journal of Applied Psychology*, 91(8), 482–489. <https://doi.org/10.1037/0021-9010.91.2.482>

- Kwon, K., Kim, E. M., & Sheridan, S. M. (2014). The role of beliefs about the importance of social skills in elementary children's social behaviors and school attitudes. *Child and Youth Care Forum*, 43(4), 455–467. <https://doi.org/10.1007/s10566-014-9247-0>
- Loncola, J. A., & Craig-Unkefer, L. (2005). Teaching social communication skills to young urban children with Autism. *Education and Training in Developmental Disabilities*, 40(3), 243–263. <https://www.jstor.org/stable/23879719>
- McClelland, M. M., Cameron, C. E., Connor, C. M., Farris, C. L., Jewkes, A. M., & Morrison, F. J. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental Psychology*, 43(4), 947–959. <https://doi.org/10.1037/0012-1649.43.4.947>
- Perren, S., Corcoran, L., Cowie, H., Dehue, F., Garcia, D. J., Mc Guckin, C., Sevcikova, A., Tsatsou, P., & Völlink, T. (2012). Tackling cyberbullying: Review of empirical evidence regarding successful responses by students, parents, and schools. *International Journal of Conflict and Violence*, 6(5), 283–292. <https://doi.org/10.4119/ijcv-2919>
- Petursdottir, A. L., & Gudmundsdottir, T. (2021). Supporting social play skill acquisition and generalization of children with autism through video modeling. *Journal of Autism and Developmental Disorders*, 12(3), 674–589. <https://doi.org/10.1007/s10803-021-05204-4>
- Płatos, M., & Wojaczek, K. (2018). Broadening the scope of peer-mediated intervention for individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 48(3), 747–750. <https://doi.org/10.1007/s10803-017-3429-1>
- Sklad, M., Diekstra, R., Ritter, M. D., Ben, J., & Gravesteyn, C. (2012). Effectiveness of school based universal social, emotional, and behavioral programs: Do they enhance students'

development in the area of skill, behavior, and adjustment? *Psychology in the Schools*, 49(9), 892–909. <https://doi.org/10.1002/pits.21641>

Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51(Suppl), S52–S66.

<https://doi.org/10.1177/0022146510383501>