



# Peer Mentoring Improving Psychosocial Outcomes for Individuals with Autism

Alyssa Kozlowski, B.A., Graduate Student, Elmhurst University  
Jennifer M. D. Kremkow, Ph.D., Assistant Professor, Elmhurst University

## Background

- ❖ **Autism spectrum disorder** (ASD) is, “... a neurodevelopmental disorder characterized by deficits in social communication and social interaction and the presence of restricted, repetitive behaviors,” (ASHA, 2021).
- ❖ **Prevalence**
  - ❖ As of 2020, “there are approximately 1 in 54 children identified with autism” (Maenner et al., 2020).
- ❖ **Etiology**
  - ❖ To date, researchers have not determined a specific cause, potential causes of autism may include genetic differences, differences in brain development or function, and exposure to harmful environmental substances (ASHA, 2019).
- ❖ **Evaluation**
  - ❖ A comprehensive evaluation completed by a psychologist, psychiatrist, pediatric neurologist or developmental pediatrician is used to diagnose autism based on criteria from The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) to categorize an individual’s behaviors and characteristics (Bagnell, 2019; Choueiri & Zimmerman, 2017).
- ❖ **Characteristics**
  - ❖ ASD presents different dependent on the individual and severity.
  - ❖ Hallmark behaviors include: repetitive behaviors; crying, laughing or angry for unknown reasons; difficulty with transitions; easily upset by sounds, smells or textures; liking only a few food items; choosing foods based on look or texture; interest in a few objects or topics.
  - ❖ They may also have difficulties in communication and social skills (ASHA, 2021; Ames et al., 2016)
    - ❖ Specifically, difficulty relating to others; understanding abstract language and initiating social interactions; maintaining joint attention and playing with others. This may include responding to others, acknowledging how others feel, and taking turns during play and within conversations. Autism affects an individual’s ability to make and keep friends. (Bradley, 2016).

## Populations

<i>School-Aged Students</i>	<i>Young Adulthood</i>
Adolescence is a vulnerable time of life for many students, as many substantial developmental changes occur.	Due to increased demands and transitions, individuals with ASD may face challenges at a greater extent depending on their level of independence and maturity (Yamuna, 2013).
Social deficits become more apparent as social interactions and relationships become more sophisticated as children get older (Sofronoff et al., 2017).	Possible transitions: entering the workforce, starting college, training for a vocation (McVey et al., 2016).
Adolescents with autism reported they felt nervous to talk to peers; felt paralyzed by fear; felt like an outcast; stated they were not very good at social interactions; and felt isolated and afraid of saying the wrong thing or being judged.	May face psychologic, sexual, emotional, and cognitive changes, while dealing with changing societal and parental expectations and novel physical, emotional and social challenges depending on the type of transition (Yamuna, 2013).
Providing additional support, by training teachers and including stimuli in their environment will help these students achieve greater academic and social success. (Atherton et al., 2019).	May face difficulties with social skills, empathy, loneliness and social anxiety compared to their typical developing peers (Friedman et al., 2013; McVey et al., 2016).
	Self-regulation deficits may impact their friendships, employment and may result in a lower quality of life compared to typical developing adults (Nowell et al., 2019).

## Psychosocial Outcomes

- ❖ Individuals with autism...
  - ❖ May have difficulty coping with increased demands, transitions, and complex social situations.
  - ❖ May struggle to develop meaningful social relationships due to their behavioral outbursts and selective interests, which can lead to depression (ASHA, 2020; Kunzi, 2015).
  - ❖ Are often more prone to heightened stress and comorbid psychological diagnoses (Zimmerman, Ownsworth et al., 2018).
- ❖ Research
  - ❖ Approximately, 11-84% of children and young people with ASD experience anxiety (Levy & Dunsmuir, 2020).
  - ❖ Siew et al. (2017) also found young adults with ASD have a higher prevalence of anxiety, depression, aggression, and hostility compared to typically developing young adults.
  - ❖ Tan and Simmonds (2011) found children with improved self-regulatory abilities demonstrated more positive behavioral patterns and social benefits, which in turn enhanced their long-term psychological and emotional satisfaction.

## Interventions

- ❖ Treatment is specific to the individual and their needs since individuals with autism can have such varying needs (Provenzani et al., 2020).
  - ❖ It often includes multiple tools to address all areas of need.
- ❖ **Types**
  - ❖ Behavioral interventions, cognitive behavioral interventions, language training, modeling, scripts, pivotal response treatment, emotional management and naturalistic teaching strategies (National Standards Report, 2015).
- ❖ **Social Skills Interventions**
  - ❖ Psychosocial interventions, behavioral interventions, modeling, direct instruction, naturalistic interventions, community-based programs, group therapy, cognitive based training and mentoring all focus on refining social skills and helping individuals develop strategies to enhance their interpersonal interactions.

## Peer Mentoring

- ❖ **Mentoring** is a type of teaching approach used in many different scenarios and settings. A mentor can be a “coach” or someone who is more knowledgeable about a particular topic (Gehrke, 1988).

### Peer Mentoring

- ❖ Intervention where an individual works with a peer, or someone around the same age as them, who is more experienced in a particular skill area (Ogilvie, 2011).
- ❖ Helps mentee acquire information and the mentor to share feedback with them.
- ❖ May be used to help an individual adjust to a new environment and provide them support in areas they find overwhelming or confusing.

### Components

- ❖ Holistic
- ❖ Individualized
- ❖ Flexible
- ❖ Stable
- ❖ One-on-one meetings
- ❖ Review what went well and what to improve.
- ❖ Include specific teaching of social aspects.
- ❖ Mentors should phrase suggestions positively.
- ❖ Set social participation goals and implement planned steps to achieve goals with peer’s help.
- ❖ (Van Ryzin & Roseth, 2018; Lott et al, 2019; Hamilton et al., 2016; Siew et al., 2017; Ames et al., 2016; Thompson et al., 2018).

### Selecting a peer

- ❖ Peers should be...
  - ❖ Interested in participating (Hamilton et al., 2016).
  - ❖ A positive role model (Hamilton et al., 2016).
  - ❖ Accountable and knowledgeable on topic/disorder
- ❖ Matching peers and mentees based on commonalities between pair can increase likelihood of a positive interaction (Hamilton et al., 2016).
- ❖ Consider mentees preferences and what they may feel most comfortable with (Hamilton et al., 2016).

## Benefits

Greater academic achievement	Feelings of anxiousness and nerves at the beginning of the mentorship because they did not know the peer (Siew et al., 2017).
More positive peer relationships compared to competitive or individualistic instructional approaches (Van Ryzin & Roseth, 2018).	Some mentees became overdependent on their mentor (Siew et al., 2017).
Students develop social, vocational and organizational skills to assist in their success at the university level (Ames et al., 2016; Gunn et al., 2017).	Individual barriers, such as resistance to learning and instruction if they are in denial of their limitations (Lott et al., 2019).
Ease transition, manage academic work, and improve independence and social engagement (Siew et al., 2017)	Poor mental state may impact their ability to accept advice
Build new skills and emotional benefits.	Mentors in a poor mental state may not set a good example or provide appropriate advice.
Benefits mental health, specifically reducing feelings of anxiety and helping them feel more socially supported (Siew et al., 2017).	Familial influences and comorbidities during mentoring program may cause negative outcomes (Lott et al., 2019).
Provides mentees a sense of belonging, leading to improvements in academic performance, a reduction in stress and increases in well-being and feelings of inclusion (Siew et al., 2017).	Low engagement, negative attitudes and mismatched characteristics may impede on the mentor mentee relationship (Lott et al., 2019).

Mentees reported having someone accessible to ask questions or express concerns to was helpful (Lott et al., 2019).	Logistical barriers such as scheduling conflicts or other personal priorities may limit availability (Lott et al., 2019).
Provided mentees moral support and a helpful ear to listen to their challenges (Gunn et al., 2017).	
Helped mentees discuss their fears and accept their feelings, they provided moral support (Gunn et al., 2017).	

## Discussion

- ❖ **Given the social impairments present in individuals with autism and the potential benefits of peer mentoring, individuals with autism may improve social outcomes following participation.**
- ❖ **Purpose**
  - ❖ As individuals with ASD get older the pressure to have successful social connections becomes greater. Communicating with others is a necessary aspect of many life activities and helping them work on this aspect is vital to their success. Improving social communication can help individuals with autism make more friends, succeed in school and have better vocational outcomes.
  - ❖ The ability to engage in good social conversation is an essential life skill needed for all successful adult interactions (Bambara et al., 2018). This is why participation in a peer mentorship program may help individuals participate in more social interactions and in turn benefit their long-term health.
- ❖ **Findings**
  - ❖ These programs can provide support in areas such as academics, career-related topics, or psychosocial objectives (Siew et al., 2017). Thompson et al. (2018) evaluated multiple peer mentoring programs and found peer mentoring helped the individuals with ASD identify their personal strengths, increase autonomy, achieve goals and obtain a positive social relationship. Bambara et al. (2018) found peer mediated intervention to be a promising approach to improve conversational skills and increase engagement in meaningful social conversations of high school students with ASD. Peer mentoring also provides students with ASD a sense of belonging in the community (Ames et al., 2016). Van Ryzin and Roseth (2018) found peer mentoring promoted independence, confidence, and social engagement.
- ❖ **Lasting Impact post mentorship**
  - ❖ Navigate challenging situations and build skills to help them reach success (Siew et al., 2017).
  - ❖ Academic benefits and increased autonomy one-year post peer mentoring (Hillier et al., 2019)

## Speech Language Pathologist Role

Individuals with ASD are frequently referred to Speech Language Pathologists (SLPs) to work on their communication and social skills.	
For mentors	For mentees
Be a resource	Can refer appropriate clients to peer mentorship programs (Parsons et al., 2019).
Can provide training containing resources, techniques and information about autism to better equip them to assist their mentee.	Can provide supplemental practice to mentees to help them achieve their greatest outcomes during the mentorship.

## Conclusion

- ❖ **Peer mentoring may be an appropriate program to help individuals with autism work on their social skills in an individualized, controlled environment with someone who has special training to assist them.**
- ❖ A mentor can...
  - ❖ Help organize a mentee’s calendar to ensure they complete tasks on time.
  - ❖ Provide support as they speak to one of their teachers or ask questions after class.
  - ❖ Practice conversing with mentee about a variety of topics in a more natural setting.
  - ❖ Provide emotional support and encouragement through challenging interactions or situations.

## Resources

1. American Speech-Language-Hearing Association. (2021). Autism spectrum disorder. Retrieved February 24, 2020, from www.asha.org.
2. Ames, M. E., McMorris, C. A., Alli, L. N., & Beblo, J. M. (2016). Overview and evaluation of a mentorship program for university students with ASD. *Focus on Autism & Other Developmental Disabilities*, 31(1), 27-36. <https://doi.org/proxy.elmhurst.edu/10.1177/1088357615583465>.
3. Anderson, C., & Butt, C. (2017). Young adults on the autism spectrum at college: Successes and stumbling blocks. *Journal of Autism & Developmental Disorders*, 47(10), 3029-3039. <https://doi.org/10.1007/s10803-017-3218-x>.
4. Atherton, G., Lummis, B., Day, S. X., & Cross, L. (2019). What am I thinking? Perspective-taking from the perspective of adolescents with autism. *Autism: The International Journal of Research & Practice*, 23(5), 1185-1200. <https://doi.org/proxy.elmhurst.edu/10.1177/1362361318793409>.
5. Bagnell, K. B. (2019). Diagnostic criteria, treatment and long-term considerations for individuals with autism: Foundation for the life care plan. *Journal of Life Care Planning*, 17(2), 19-29.
6. Bambara, L. M., Thomas, A., Chovanec, J., & Cole, C. L. (2018). Peer-mediated intervention: Enhancing the social conversational skills of adolescents with autism spectrum disorder. *TEACHING Exceptional Children*, 51(1), 7-17.
7. Bury, S. M., Hedley, D., Ujarević, M., Dissanayake, C., & Gal, E. (2019). If you’ve employed one person with autism ...: An individual difference approach to the autism advantage at work. *Autism: The International Journal of Research & Practice*, 23(6), 1607-1608. <https://doi.org/proxy.elmhurst.edu/10.1177/1362361318794957>.
8. Choueiri, R. N., & Zimmerman, A. W. (2017). New assessments and treatments in ASD. *Current Treatment Options in Neurology*, 8(19).
9. Friedman, N. D. B., Werfield, M. E., & Parish, S. L. (2013). Transition to adulthood for individuals with autism spectrum disorder: Current issues and future perspectives. *Neuropsychiatry*, 3(2), 181-92.
10. Gehrke, N. (1988). Toward a definition of mentoring. *Theory into Practice*, 27(3), 190. <https://doi.org/proxy.elmhurst.edu/10.1080/00405848809543350>.
11. Grace, E., & Raghavendra, P. (2019). Cross-age peer-e-mentoring to support social media use: A new focus for intervention research. *Communication Disorders Quarterly*, 40(3), 167-175. <https://doi.org/proxy.elmhurst.edu/10.1177/1525740118760216>.
12. Gunn, F., Lee, S. H., & Steed, M. (2017). Student perceptions of benefits and challenges of peer mentoring programs: Divergent perspectives from mentors and mentees. *Marketing Education Review*, 27(1), 15-26. <https://doi.org/proxy.elmhurst.edu/10.1080/10528008.2016.1255500>.
13. Hamilton, J., Stevens, G., & Girdler, S. (2016). Becoming a mentor: The impact of training and the experience of mentoring university students on the autism spectrum. *PLoS ONE*, 11(4), 1-13. <https://doi.org/proxy.elmhurst.edu/10.1371/journal.pone.0153304>.
14. Hillier, A., Goldstein, J., Tomatore, L., Byrne, E., & Johnson, H. M. (2019). Outcomes of a peer mentoring program for university students with disabilities. *Mentoring & Tutoring: Partnership in Learning*, 27(5), 487-508. <https://doi.org/proxy.elmhurst.edu/10.1080/13611267.2019.1675850>.
15. Kunzi, K. (2015). Improving social skills of adults with autism spectrum disorder through physical activity, sports, and games: A review of the literature. *Adulthoodspan*, 14(2), 100-113. <https://doi.org/proxy.elmhurst.edu/10.1002/adsp.12008>.
16. Levy, J., & Dunsmuir, S. (2020). Lego therapy: Building social skills for adolescents with an autism spectrum disorder. *Educational & Child Psychology*, 37(1), 58-83.
17. Lott, B. D., Dicks, T. N., Keddem, S., Ganetsky, V. S., Shea, J. A., & Long, J. A. (2019). Insights into veterans’ perspectives on a peer support program for glycemic management. *Diabetes Educator*, 49(6), 607-615. <https://doi.org/proxy.elmhurst.edu/10.1177/1045721719879417>.
18. Maenner, M. J., Shaw, K. A., Bao, J., et al. (2020, March 27). Prevalence of autism spectrum disorder among children aged 8 years — autism and developmental disabilities monitoring network, 11 sites, united states, 2016. *Morbidity and Mortality Weekly Report Surveillance Summaries*, 69(4), 1-12. <http://dx.doi.org/10.15585/mmwr.mm6904a1.external.icon>.
19. McVey, A., Dolan, B., Willar, K., Pleiss, S., Karst, J., Casnar, C., Caiozzo, C., Vogt, E., Gordon, N., & Hecke, A. (2016). A replication and extension of the PEERS® for young adults social skills intervention: Examining effects on social skills and social anxiety in young adults with autism spectrum disorder. *Journal of Autism & Developmental Disorders*, 46(12), 3739-3754. <https://doi.org/proxy.elmhurst.edu/10.1007/s10803-016-2911-5>.
20. National Standards Report. (2015). National standards project. *National Autism Center*.
21. Nowell, S. W., Watson, L. R., Boyd, B., & Klingler, G. (2019). Efficacy study of a social communication and self-regulation intervention for school-age children with autism spectrum disorder: A randomized controlled trial. *Language, Speech & Hearing Services in Schools*, 50(3), 416-433. [https://doi.org/proxy.elmhurst.edu/10.1044/2019\\_LSHSS-18-0093](https://doi.org/proxy.elmhurst.edu/10.1044/2019_LSHSS-18-0093).
22. Ogilvie, C. R. (2011). Step by step. *Teaching Exceptional Children*, 43(6), 20-26. <https://doi.org/proxy.elmhurst.edu/10.1177/00400599104300602>.
23. Parsons, L., Cordier, R., Murray, N., & Jocelyn, A. (2019). A play-based, peer-mediated pragmatic language intervention for school-aged children on the autism spectrum: Predicting who benefits most. *Journal of Autism and Developmental Disorders*, 49(10), 4219-4231.
24. Provenzani, U., Fusar-Poli, L., Brondino, N., Damiani, S., Verucci, M., Meyer, N., Rocchetti, M., & Politi, P. (2020). What are we targeting when we treat autism spectrum disorder? A systematic review of 406 clinical trials. *Autism: The International Journal of Research & Practice*, 24(2), 274-284. <https://doi.org/10.1177/1362361319854641>.
25. Siew, C. T., Mazzucchelli, T. G., Rooney, R., & Girdler, S. (2017). A specialist peer mentoring program for university student on the autism spectrum: A pilot study. *PLoS ONE*, 12(7), 1-18. <https://doi.org/proxy.elmhurst.edu/10.1371/journal.pone.0180854>.
26. Sofronoff, K., Silva, J., & Beaumont, R. (2017). The secret agent society social-emotional skills program for children with a high-functioning autism spectrum disorder: A parent-directed trial. *Focus on Autism and Other Developmental Disabilities*, 32(1), 55-70.
27. Thompson, C., Falkmer, T., Evans, K., Bolte, S., & Girdler, S. (2018). A realist evaluation of peer mentoring support for university students with autism. *British Journal of Special Education*, 45(4), 412-434. <https://doi.org/proxy.elmhurst.edu/10.1111/1467-8576.12241>.
28. Van Ryzin, M. J., & Roseth, C. J. (2018). The power of peer influence to address student behavioral problems. *Phi Delta Kappan*, 99(8), 62-66.
29. Yamuna, S. (2013). Counseling adolescents. *Indian Journal of Pediatrics*, 80(11), 949-958. <https://doi.org/proxy.elmhurst.edu/10.1007/s12098-013-1104-x>.
30. Zimmerman, D., Ownsworth, T., O’Donovan, A., Roberts, J., & Gullio, M. J. (2018). High-functioning autism spectrum disorder in adulthood: A systematic review of factors related to psychosocial outcomes. *Journal of Intellectual & Developmental Disability*, 43(1), 2-19. <https://doi.org/proxy.elmhurst.edu/10.3109/1368250.2016.1262010>.