

## Social or Language Intervention for High Functioning Autism Children

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### Clinical Question:

In children with high functioning autism disorders, does having a social or language intervention improve their communication expression in social situations

### Sources of Evidence:

Casenhiser, D. M., Binns, A., McGill, F., Morderer, O., & Shanker, S. G. (2015). Measuring and supporting language function for children with autism: Evidence from a randomized control trial of a social-interaction-based therapy. *Journal of Autism & Developmental Disorders*, 45(3), 846-857. doi:10.1007/s10803-014-2242-3

Dalwai, S.H., Modak, D. K., & et al. (2017) Effects of multidisciplinary intervention on clinical outcomes of children with autism spectrum disorder in Mumbai, India. *Disability, CBR & Inclusive Development*, 28(2), 95. Doi:10.5463/dcid.v28i2.508

D'Amico, M. m., & Lalonde, C. (2017). The effectiveness of art therapy for teaching and social skills to children with autism spectrum disorder. *Art therapy: Journal of the American Art Therapy Association*, 34(4), 176-182. Doi: 10.1080/07421656.2017.1384678

Lopata, C., Thomeer, M. L., Volker, M. A., Toomey, J. A., Nida, R. E., Lee, G. K., ...Rodgers, J. D. (2010). RCT of a manualized social treatment for high-functioning autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 40(11), 1297+. DOI: 10.1007/s10803-010-0989-8

### Synthesis of Evidence:

Four articles were reviewed as evidence in this report. Two quasi-experimental studies, an individual randomized control trial, and an experimental study.

Casenhiser, Binns, et al. (2014) conducted a randomized control trial that evaluated the effectiveness of language-based therapy in helping high functioning autistic children improve their language function. The study included children ages 2-4 who had been diagnosed with a Pervasive Developmental Disorder and who were on the autism spectrum. The control group, which included 39 members (26 completed the study), received various language therapies of their choice. The MEHRIT group, which included 34 members (25 completed the study), received several social/language interaction-based therapies that amounted to 2 hours per week of therapy and 3 hours per day interacting with their parent. The results showed that the MEHRIT group had more improvement in the four areas of language development than did the control group. While the CT group did show improvement, the MEHRIT group showed more improvement when responding to social cues and forming responses.

Dalwai, Modak, et al. (2017) conducted a quasi-experimental study to analyze clinical outcomes in terms of functional changes in children with Autism Spectrum Disorder (ASD), before and after receiving a multidisciplinary development intervention program. The 38 children were selected from 5 child development centers in Mumbai. All children received occupational therapy and speech therapy, and parental counseling. All children were provided 2-3 occupational therapies a week, 1-2 speech therapy sessions, and parent counseling once a

month, over the span of about 6 months. The results were measured by the Childhood Autism Rating Scale and Vineland Social Maturity Scale, before and after interventions. The results showed the model used in this multidisciplinary intervention, and adherence to its protocols, had significant positive change in CARS total score, specifically in the verbal and nonverbal communication. It also had a significant change in the VSMS sub-scale. These significant changes are partly due to the integrated, individualized and multidisciplinary nature of the intervention.

D'Amico and Lalonde (2017) conducted a quasi-experimental study to evaluate the effectiveness of art therapy in teaching social skills to children with autism spectrum disorder. This study consisted of 6 children; 5 boys and 1 girl. The subjects completed a social skills improvement system rating scale providing an analysis of the social skills and problems behaviors in reference to developing peers. The children met in group sessions lasting 75 minutes long for 21 weeks where art-based intervention was applied and aimed to address areas of social difficulty. Results showed an enhanced ability to engage and assert themselves in social ways. The children developed an ability to cooperate, communicate and problem solve as well as be able to reflect on their own behaviors.

Lopata, Thomeer, et al. (2010) conducted a randomized control trial to examine the efficacy of a manualized social intervention for children with high functioning autism spectrum disorders. The study included 38 children in a controlled setting at a university college. 16 children were given a social intervention for five hours a day, five days a week, while the other 16 were not given one at all. Seven areas were used to measure results and primary outcomes. Five out of the seven showed significant change supporting the hypothesis that a manualized intervention can improve social behavior in children with high functioning autism spectrum disorders. Of the five areas that showed significant result, ASC Total Score, DANVA-2 Child Faces and BASC-2 Social Skills showed significant increase, while BASC-2 Withdrawal and SRS showed significant decrease. Results of all seven areas moved in the expected direction to support the hypothesis.

### **Conclusions:**

The evidence from all four articles had a positive outcome toward answering our PICO question. All four articles support the fact that implementing a language or social intervention does, in fact, improve children with HFASD's communication in social situations. Although the language or social interventions implemented in each article varied widely in the type of intervention, the amount of time with the treatment intervention, as well as length of time that the study was done over, the results still yielded significant change in all studies.

### **Implications for Nursing Practice:**

Evidence suggests that the use of a social or language intervention should be used to help children with high functioning autism improve their social skills and communication. These practice interventions should be presented in schools as part of the HFASD children's schedule, as well as at home with parents. Evidence shows that the more consistent the interventions are over longer periods of time, the more improvement in social communication will be seen.