



What is the effectiveness of art therapy for improving or managing symptoms associated with autism spectrum disorder in children under the age of 18?

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Relevant Allied Health Discipline	Occupational Therapy
Sources searched	PubMed, Medline, PsycINFO, Scopus, Emcare and Embase were all searched on the 29th of August 2020. Google Scholar and UniSA library were searched on the 1st of September 2020. Google was searched on the 4th of September 2020 for grey literature.
Quality appraisal of the body of Evidence	<p>Strength of Evidence: Various levels of evidence ranging from level I to level IV on the NHMRC hierarchy level. Six of the eight evidence sources are Level III or below.</p> <p>Statistical significance: Four of the eight sources displayed statistically significant p-values ($p < 0.05$). A limited number of sources presented the p-values due to some of the studies being qualitative studies</p> <p>Clinical significance: The outcomes of each study are of clinical significance due to art therapy-based interventions having high potential in improving symptoms associated with ASD. Art therapy-based interventions can be of benefit to clinicians, as it can facilitate the process of developing a program to improve or manage ASD symptoms.</p> <p>External Validity/Applicability: Although the population group within each study were similar in age, this similarity does not improve external validity. Due to ASD being a broad spectrum, external validity is greatly impacted, therefore clinicians would be required to change the degree of difficulty of activities based on the client's level of functioning.</p>
Summary of Evidence findings	Four studies utilised creative arts, three utilised theatre/performing arts and one study used a combination of both creative art and theatre/performing arts type interventions, with all studies having discussed positive outcomes. The four studies that utilised creative art type interventions had the following outcomes of improved social skills, motor skills, learning and emotional regulation. The other three studies that used theatre/performing arts based interventions displayed similar outcomes, with the addition of reduced behavioural problems and increased understanding/comprehension of instructions. The study that utilised both creative arts and theatre/performing arts also had similar findings, one overlapping finding is that of an increase in intrapersonal processes.
Conclusions	The evidence suggested that art therapy may be effective for improving or managing symptoms associated with Autism Spectrum Disorder in children under the age of 18.
Implications for clinical practice	Art therapy-based interventions can be utilised by clinicians to improve or manage ASD symptoms. However, they must be wary of the importance of catering activities to their client's function, as people with ASD present with highly varied symptoms.

- Schweizer, C., Knorth, E.J., Spreen, M. (2014). Art therapy with children with Autism Spectrum Disorders: a review of clinical case descriptions on 'what works', *Arts in Psychotherapy*, 41(5), 577-593.
- Corbett, B.A., Key, A.P., Qualls, L., Fecteau, S., Newsom, C., Coke, C. & Yoder, P. (2015). Improvement in social competence using a randomized trial of a theatre intervention for children with Autism Spectrum Disorder, *Journal of Autism and Developmental Disorders*, 46(2), 658-672.
- D'Amico, M., Lalonde, C. & Snow, S. (2015). Evaluating the efficacy of drama therapy in teaching social skills to children with Autism Spectrum Disorders, *Drama Therapy Review*, 1(1), 21.
- Chincholkar, V., Veeraraghavan, S. & Mangla, P. (2019). The unfinished painting- an arts based therapy approach as an early intervention module for children with Autism Spectrum Disorder, *Journal of Evidence Based Medicine and Healthcare*, 6(40), 2663-2665.
- Koo, J. & Thomas, E. (2019). Art therapy for children With Autism Spectrum Disorder in India', *Art Therapy*, 36(4), 209-214.
- Lee, G.T., Chou, W. & Feng, H. (2017). Social engagements through art activities for two children with Autism Spectrum Disorders', *International Journal of Education through Art*, 13(2), 217-233.
- Kanareff, R.L. (2002). Utilizing group art therapy to enhance the social skills of children with Autism and Down Syndrome, ProQuest Dissertations Publishing.

This evidence summary has been prepared by undergraduate students as part of the HLTH 3057 Advanced Evidence Based Practice course. Due to limitations of assignment requirements reviews are limited to a maximum of 8 evidence sources. Conclusions and implications for clinical practice reported are provisional based on the evidence identified in this review and should be contextualized to local practice, clinical expertise and patient values. For further information on the review process please contact steve.milanese@unisa.edu.au