

research snapshot

summarize | mobilize

Benefits of Cognitive Enhancement Therapy for Verbal Adults With Autism Spectrum Disorder



What is this research about?

Many individuals with Autism Spectrum Disorders (ASD) have problems with social and non-social information processing. Treatments targeting these deficits have primarily been developed for children. Information processing deficits can decrease a person's ability to succeed in adult life and can lead to outcomes such as unemployment and poor quality of life. Therefore, there is a need for interventions targeting information processing problems in adults with ASD. The present study assessed the effects of Cognitive Enhancement Therapy (CET) in these individuals.

What did the researchers do?

The researchers used a sample of 14 verbal adults with a diagnosis of ASD. Each individual participated in 18 months of CET, which included 60 hours of computer-based training in attention, memory and problem solving, as well as 45 hours of group sessions to enhance social thinking (e.g., taking someone else's perspective). Each participant completed cognitive and behavioural assessments prior to therapy, halfway through therapy (at 9 months), and upon completing therapy.

What you need to know:

Many individuals with ASD have impairments in information processing. This study indicated that Cognitive Enhancement Therapy (CET) could be successfully adapted for verbal adults with ASD. Further research, using a randomized controlled trial and a larger sample size, needs to be conducted before drawing conclusions on the efficacy of CET for this population.

What did the researchers find?

The researchers found that by the end of therapy, participants showed a significant improvement in non-social information processing, in all areas except attention/vigilance, with the greatest improvement being in processing speed. Significant improvements also occurred in the social information processing domains, social thinking and social functioning. Improvements in social information processing extended to benefits in broader areas such as occupational and interpersonal effectiveness. As acknowledged by the authors, there was no comparison group (but a study with a comparison group is being conducted), so we do not know for sure that the changes were because of CET or by other experiences or time.

How can you use this research?

CET can be successfully adapted for verbal adults with ASD to help improve social and non-social information processing, indicating that interventions that target processing impairments can be helpful into adulthood. This is the first study to assess CET (originally developed for individuals with schizophrenia) in adults with ASD, and more research in this area could be beneficial for developing interventions for adults with ASD.

About the Researchers

The authors of this article work at the University of Pittsburgh. Shaun M. Eack's main interests include the development, implementation, and evaluation of psychosocial treatment methodologies. Hogarty and colleagues (2004) developed Cognitive Enhancement Therapy.

Citation

Eack, S. M., Greenwald, D. P., Hogarty, S. S., Bahorik, A. L., Yitschge, M. Y. Mazefsky, C. A., & Minshew, N. J. (2013). Cognitive enhancement therapy for adults with autism spectrum disorder: Results of a 10-month feasibility study. *Journal of Autism and Developmental Disorders*, 43, 2866-2877.

Keywords

Autism Spectrum Disorder, Cognitive Enhancement Therapy, Adult treatment

This research summary was written by Casey Fulford for the Chair in Autism Spectrum Disorders Treatment and Care Research. This research summary, along with other summaries, can be found on our [blog](#) and at asdmentalhealth.ca/research-summaries

About the Chair

The Chair in Autism Spectrum Disorders Treatment and Care Research is dedicated to studying ways to improve the mental health and well-being of people with Autism Spectrum Disorders (ASD) and their families in Canada.

The Chair is funded by the Canadian Institutes of Health Research in partnership with Autism Speaks Canada, the Canadian Autism Spectrum Disorders Alliance, Health Canada, NeuroDevNet and the Sinneave Family Foundation. Additional funds from the Spectrum of Hope Autism Foundation and support from York University.

For more information, visit the Chair in Autism Spectrum Disorders Treatment and Care Research website at asdmentalhealth.ca

Partners

