

Augmentative & Alternative Communication Intervention Efficacy for Adolescents and Adults with Autism Spectrum Disorder

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Background

- There has been a large amount of growth in AAC research in recent years¹
- Given the high prevalence of ASD today, much of this research has focused on evaluating intervention efficacy for individuals with ASD
- However, this focus has overwhelmingly centered on the evaluation of AAC intervention efficacy specifically with young children with ASD²
- This focus is largely driven by the importance of early intervention³
- However, adolescence and adulthood are quite different from childhood; adolescents and adults are quite different from children
- Therefore, AAC intervention that is effective for adolescents and adults may utilize different modalities or strategies and target different goals from interventions for young children

Method

- The goal of the current study was to understand AAC intervention efficacy specific for adolescents and adults with ASD
- A systematic review was completed to compile and evaluate currently published AAC intervention research focused on supporting communication in adolescents and adults with ASD
- The review followed Cochrane Collaborative guidelines relative to establishing a codebook prior to the review, search procedures, and presentation of results⁴
- Improvement Rate Difference (IRD)⁵ was used as the effect size measure with which the data of all included studies were analyzed

Overall Results and Efficacy

Research Identified

- 18 published studies have evaluated the efficacy of AAC intervention for adolescents and/or adults with ASD
- These 18 studies included a total of 19 unique participating adolescents/adults with ASD
- 11 of the 18 identified studies provided either suggestive, preponderant, or conclusive evidence
- These 11 studies are considered below relative to AAC efficacy for adolescents and adults with ASD^{*}

Overall Efficacy according to Improvement Rate Difference

- 76% of controlled observations showed a "Very Large" effect
- 17% of controlled observations showed a "Moderate" effect
- 7% of controlled observations showed a "Small" or "Questionable" effect

Results

Efficacy by AAC Modality

- 7 studies found high-tech AAC (e.g., tablets) effective
- 3 studies found mid-tech AAC (e.g., recorded buttons) effective
- 2 studies found low-tech AAC (e.g., communication books) effective

Efficacy by Instructional Strategies

- 8 studies found prompting AAC use to be effective
- 7 studies found responding to AAC utterances to be effective
- 2 studies found communication partner strategy instruction to be effective
- 1 study found video modeling to be effective
- 1 study found communication support strategies to be effective
- 1 study found instructing on AAC use to be effective

Acknowledgements and References

Acknowledgements

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- For more information related to AAC intervention efficacy for adolescents and adults with ASD, please see the recently published systematic review cited below. This systematic review was submitted after ASHA proposals were submitted. Therefore, a portion of the content on this poster is also included in the article.
 - Holyfield, C., Drager, K. D., Kremkow, J. M., & Light, J. (2017). Systematic review of AAC intervention research for adolescents and adults with autism spectrum disorder. *Augmentative and Alternative Communication*, 1-12.
- *Some studies provided evidence for multiple categories of efficacy.

References

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- ⁴Higgins, J., & Green, S. (Eds.). (2011). *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration.
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