

Critical Review:
In children with Childhood Apraxia of Speech (CAS), does the use of augmentative and alternative communication (AAC) impede speech and language development?

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This study presents a critical review of research examining the effectiveness of implementing augmentative and alternative communication (AAC) on the speech and language development for children with Childhood Apraxia of Speech (CAS). This critical review includes the evaluation of one systematic review, one qualitative research methodology (in the form of an online focus group), four single-subject research designs, and one case study. The results of this review suggests thathaths

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Results

Systematic Reviews of the Literature

A systematic review critically examines and collects information from multiple research studies, and analyzes the existing literature on a specific topic. It presents an overview of primary studies on a subject, and is often used as a more efficient and cost effective way of generating answers to research questions.

Blischak, Lombardino & Dyson (2003) explored the use of

Procedures for the IMI and baseline sessions were described in detail and were conducted consistently across multiple environments (at school, home, or

generalizability to the population at large. The current review described studies revealing evidence to suggest that AAC intervention facilitates and enhances natural speech, communication and language development for children with CAS supporting the question at hand. Though the research does not explicitly indicate the most effective AAC device or the most successful intervention approach for children with CAS, there are a wide range of AAC aids and treatment approaches described, all of which indicate positive outcomes for speech and language development. Collectively, the studies provide evidence to support the benefits of AAC use for children with CAS, highlighting the positive impact of implementing AAC intervention in conjunction with natural speech therapy.

The studies explored in this critical review are in the form of case study reviews, systematic reviews, qualitative research and single subject research designs without controls presenting methodological limitations. Limited conclusions and generalizations can be drawn as a result of small sample sizes, and a lack of longitudinal data was collected to support or deny the maintenance and generalizations following AAC intervention for children with CAS. Limited internal validity was presented in the single-subject (AB) research designs. While an ABA design would establish causality more effectively, this was not possible for this population as it is unethical to withdraw the AAC device implemented in treatment, and the only option for withdrawal would be the support from a speech-language pathologist.

The participant selection criteria presented limitations due to population variability. Selection criteria was impacted by the differences in severity of CAS, comorbidities, and other external factors that contributed to treatment. As a result, despite the suggestive and equivocal evidence offered in the research, conclusions beyond the subjects described in the studies must be drawn with caution.

Similar results across the studies highlighted that speech, language, and communication development are effectively facilitated by AAC () -85 BT0 0 0.24 227..85 () 3 (e)3 (a 1) 3 (y)rae.24 22swlang 3 43 480Tf [(acr) 2 (o) -1 (s) 1 (s-4

