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AUGMENTATIVE AND ALTERNATIVE COMMUNICATION IN NONSPEAKING AUTISTIC INDIVIDUALS: EVIDENCE FOR EARLY PROVISION AND ITS ROLE IN PROMOTING VERBAL COMMUNICATION

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Abstract

This narrative review examines the role of augmentative and alternative communication (AAC) in supporting communication development among nonspeaking autistic individuals. The reviewed literature suggests that AAC should not be treated as a last resort or as a threat to spoken language development; rather, it can function as an enabling communication pathway that may support, and in many cases strengthen, verbal communication over time. Across the studies included in the source document, early access to AAC, especially speech-generating devices and aided modeling, is consistently associated with improved communication opportunities, reduced frustration, and better participation in daily environments.

Introduction

Autistic individuals who are nonspeaking or minimally verbal represent a population whose communication needs have historically been under-recognized. The draft source highlights that older terminology such as "minimally verbal" is increasingly being replaced with more respectful language such as "nonspeaking autistic," reflecting a neurodiversity-affirming approach. It also emphasizes that nonspeaking does not mean lacking thoughts, understanding, or the desire to communicate; rather, it reflects a mismatch between internal language and functional spoken output.

Tager-Flusberg and Kasari (2013) identified minimally verbal school-aged autistic children as a neglected group, drawing attention to the lack of tailored communication supports and the overreliance on informal parent report rather than direct, evidence-based assessment. Since then, more recent reviews and studies have strengthened the case for AAC as a legitimate and effective intervention for autistic children with limited speech. The central concern addressed in this review is whether AAC suppresses speech or instead facilitates communication development, particularly when introduced early.

Methodology

This narrative review is based on 11 peer-reviewed studies and systematic reviews published between 2020 and 2025. The included literature represents a range of study designs, including randomized controlled trials, systematic reviews, meta-analyses, case studies, qualitative studies, and observational research. The focus was on studies examining AAC use in nonspeaking or minimally verbal autistic individuals, especially the effects of AAC on spoken language, social communication, and functional participation.

The studies were selected to address two main questions: whether AAC use hinders or supports

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speech development, and whether early AAC provision leads to better communication outcomes than delayed or withheld AAC intervention. In line with narrative review methodology, the evidence is synthesized thematically rather than through a strict systematic protocol.

Discussion

The literature reviewed in this narrative review consistently indicates that augmentative and alternative communication (AAC) should not be viewed as a substitute for spoken language, but rather as a legitimate pathway for enhancing communication in nonspeaking autistic individuals. One of the most persistent barriers to AAC adoption is the assumption that introducing a communication device may reduce a child's motivation to speak or interfere with speech development. The studies summarized in this review do not support that concern; instead, they suggest that AAC either has a neutral effect on spoken language or is associated with improvements in expressive communication over time. This is a particularly important finding because delays in AAC provision are often based not on empirical evidence, but on lingering misconceptions within families, clinical settings, and educational environments.

A key issue identified is the historical under-recognition of nonspeaking autistic individuals as a distinct and underserved population. Tager-Flusberg and Kasari (2013) argued that school-aged autistic children with minimal speech were a neglected subgroup, noting the lack of tailored communication planning and the overdependence on parent report rather than direct, standardized assessment. This observation remains relevant because many children continue to be assessed through a lens that underestimates their receptive understanding and communicative capacity. The present review supports the view that nonspeaking does not mean incapable of thought, language comprehension, or meaningful social participation. Rather, it reflects a mismatch between internal language and access to functional spoken output.

The evidence also strongly supports early introduction of AAC. Several studies summarized in the source document suggest that waiting for speech to emerge before offering AAC may unnecessarily deprive children of an essential communication route during a critical developmental period. Therrien et al. (2025), for example, reviewed AAC interventions using speech-generating devices in autistic preschoolers and found meaningful gains in expressive communication, particularly when intervention was introduced early. This is consistent with the developmental principle of neuroplasticity, which suggests that early childhood provides a highly responsive period for language and communication learning. From this perspective, delaying AAC is not a neutral decision; it may reduce access to interaction, learning, and participation during a time when communication foundations are being formed.

Another central conclusion from the studies is that AAC does not suppress speech development. This is perhaps the most clinically important myth addressed in the draft material. A major review by Schlosser and Wendt, as summarized in the source file, found no evidence that AAC reduced spoken language in autistic children; rather, several studies reported either maintenance or improvement in speech after AAC introduction. More recent findings support this position as well. Allen et al. (2023) reported that responsiveness to speech-generating device input was associated with spoken language growth in minimally verbal autistic children. Likewise, Liang et al. (2025) found that aided AAC interventions in elementary-aged students were linked not only to functional communication but also to broader social language gains. Together, these studies indicate that AAC may function as a language scaffold, supporting the transition from limited expression to more flexible communication.

The mechanism through which AAC supports speech development appears to be multimodal learning. When a child selects a symbol or activates a speech-generating device and simultaneously hears the spoken output, visual, motor, and auditory pathways are activated together. This repeated pairing may strengthen

Frontier in Medical & Health Research

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symbolic understanding and support the development of phonological and semantic connections. The draft also emphasizes aided language stimulation, or modeling, as a critical intervention strategy. In this approach, communication partners use the AAC system themselves while speaking to the child, thereby demonstrating how the system works in real interaction. This not only increases exposure to language but also reduces communicative pressure and frustration, making the interaction more natural and responsive. The implication is that AAC success depends not only on device access, but also on how consistently adults model and support use of the system.

This also makes clear that communication outcomes are strongly influenced by context. Baker et al. (2023), as described in the draft, showed that school-age autistic children used their speech-generating devices more often during unstructured classroom periods, such as snack or break times, than during formal instructional activities. This finding suggests that communicative participation is shaped by environmental opportunity, not simply by ability. In other words, even when a child has access to AAC, the system may remain underused if the surrounding environment does not invite or reinforce communication. For this reason, AAC intervention must extend beyond device provision and include collaboration with teachers, paraprofessionals, and families to build communication opportunities across the day. This broader ecological perspective is necessary if AAC is to support real-world participation rather than remain limited to therapy sessions.

A further theme in the literature is that AAC benefits should be evaluated beyond speech output alone. The draft rightly argues that access to AAC allows individuals to express thoughts, reduce frustration, engage socially, and improve quality of life. This broader view is important because communication is not valuable only when it results in spoken words. For many nonspeaking autistic individuals, the ability to express needs, participate in family routines, and initiate social exchanges may be just as important as gains in oral speech. In this way, AAC supports autonomy and personhood, not merely language performance.

High-tech speech-generating devices appear especially promising because they offer dynamic vocabulary, voice output, and flexible communication opportunities. At the same time, low-tech tools may still be useful depending on the child's needs, environment, and access to technology. What matters most is not whether the system is simple or sophisticated, but whether it is implemented consistently and supported by communication partners. Chavers et al. (2022) demonstrate this point clearly, showing that when a speech-generating device is paired with systematic prompting and time-delay strategies, children with severe autism can develop multistep requesting and basic social small talk. This is important because it expands AAC beyond requesting and into more socially meaningful forms of interaction.

Laubscher et al. (2025), as summarized in the source document, reported strong parental frustration, repeated delays, and experiences of being told that AAC would prevent speech from developing. These experiences are not trivial; they represent missed opportunities for communication support and can contribute to family stress and child exclusion. Delayed access should therefore be understood as an ethical issue as well as a clinical one. If a child is unable to communicate effectively, withholding AAC limits participation in education, relationships, and daily life during critical developmental years.

Wendelken-Garcia and Fagan (2023) found that AAC research is not always reflected in the everyday practice of speech-language pathologists, suggesting that evidence-based strategies are not being adopted consistently. Similarly, Siyambalapitiya et al. (2024) identified barriers such as inadequate training, funding limitations, and continued reliance on outdated assumptions about AAC. These findings imply that the challenge is not a lack of evidence, but a lack of implementation. Improving graduate-level training, parent coaching, interdisciplinary collaboration, and access to AAC resources may help close this gap.

Frontier in Medical & Health Research

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Scope of Studies

The reviewed literature spans preschool through school-age populations and includes studies conducted in classrooms, therapy settings, and broader natural environments. It also includes different AAC forms, such as high-tech speech-generating devices, letter boards, and aided interventions integrated into developmental-behavioral approaches. This breadth strengthens the review because it shows that AAC effectiveness is not limited to one device type or one age group. At the same time, the source material acknowledges important limitations in the evidence base. Some studies are small, some rely on case designs, and many are conducted in highly controlled conditions that may not fully reflect real-world communication environments. The draft also notes a gap between research findings and clinical practice, with some clinicians and families still delaying AAC despite evidence supporting early use.

Conclusion

The overall evidence supports early AAC provision for nonspeaking autistic individuals and rejects the myth that AAC prevents speech development. Instead, AAC appears to improve access to communication, support expressive language, and in many cases contribute to spoken language growth. Clinical decision-making should therefore prioritize early, individualized, and context-sensitive AAC intervention rather than waiting for speech to emerge on its own.

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