

The effects of unaided augmentative and alternative communication interventions on communication in children with autism spectrum disorders:

A scoping review

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Introduction

- There is growing evidence regarding the benefits of augmentative and alternative communication (AAC) systems in facilitating communication development in children with autism spectrum disorder (ASD).
- A perusal of the literature showed that more research is needed on the effects of unaided AAC on communication in children with ASD.
- This scoping review aimed to explore the literature on the effects of unaided AAC interventions on communication in children with ASD.

Methods

- A scoping review design was utilised to summarise and synthesise evidence, identify divergences in the literature, and disseminate research findings.
- The scoping review aimed to map the nature, features, and volume of the literature.



Main findings



- Sixty-two studies were included in this scoping review.
- Studies demonstrated the positive effect of unaided AAC interventions on both expressive and receptive language skills, as well as various social communication skills in children with ASD.



Table 1: The effect of unaided AAC interventions on receptive language

Design	Unaided AAC interventions	Receptive language skills	Effectiveness
Single-subject case design	Gestures, vocalisations, facial expressions, manual signs	Discriminating vocabulary, receptive labelling, understanding vocabulary	Highly/fairly effective
Group design	Gestures	Recognising target gestures	Large effect

Table 2: The effect of unaided AAC interventions on expressive language

Design	Unaided AAC interventions	Expressive language skills	Effectiveness
Single-subject case design	Gestures, vocalisations, facial expressions, sign language, manual signs, simultaneous communication and Makaton	Vocabulary, verbal responding, labelling common objects, requesting, using descriptive sentences, single words, signs, intentional vocalisations, imitation, spontaneous utterances, multi-word utterances, and functional speech	Highly/fairly effective
Group design	Manual signs, gestures, vocalisations, sign language, social communication, and eye-gaze	Imitating signs or words, producing target gestures, increasing use of vocalisations, using spoken vocabulary, and using non-imitative words	Small to large effect

Table 3: The effect of unaided AAC interventions on social communication skills

Design	Unaided AAC interventions	Social communication skills	Effectiveness
Single-subject case design	Gestures, vocalisations, facial expressions, sign language, manual signs, and eye-gaze	Empathetic responses, responding to a stimulus, appropriate interactions, intentional communication, participation, social acuity, and a decrease in destructive behaviour	Highly/ fairly effective
Group design	Facial expressions, gestures, eye-gaze and vocalisations	Emotion recognition, joint attention, joint engagement, play, and non-imitative communicative acts	Small to large effect

Implications for practice

Clinicians working in the field of ASD should consider the use of unaided AAC interventions for children with ASD to target expressive and receptive language, as well as social communication skills.

Scan the QR code to access the full study

