Augmentative & Alternative Communication and Early Language Development of Children with ASD

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Abstract

People with autism spectrum disorder (ASD) face challenges in the areas of social skills and verbal/nonverbal communication, with a wide range of severities. For many with autism, augmentative and alternative communication (AAC) devices provide an effective method of expressing themselves, connecting with others, and navigating their world.

However, myths about AAC persist, especially in the context of early speech and language development. The importance of early intervention for children with autism, including consideration of a multimodal AAC approach tailored to the needs of the child, will be discussed. Future considerations for research will also be presented.

Introduction: Neurodiversity

What is neurodiversity?
- "a combination of traits that are seen as both strengths and challenges." – Neurodiversity Hub
- Includes a wide range of people and their experiences—with autism, ADHD, dyslexia, and many others.

- Behaviors of children on the autism spectrum are viewed as negative by educators (Dorney & Erickson, 2019).
- This includes behaviors that hold communicative intent.
- The focus turns to "eliminating the behaviours rather than on attributing meaning to and building on them (Fox et al., 2000)"
- Ultimately, there is no "one size fits all" (Rose et. al., 2020)

Early Speech & Language Development with ASD & AAC

- Early intervention can be used to implement "ways to communicate early in life when speech is physically compromised, slow to emerge, or absent" (Romski et al, 2015).
- Implementing AAC with young children on the spectrum has been shown to improve speech production (Ganz, 2015).
- AAC in early intervention has significant potential to support language development (expressive & receptive) based on areas of social behaviors, attention, and representational use of objects (Rose et al, 2020).

Effectiveness of Multimodal AAC Intervention

- Both "low-tech and high-tech aided AAC systems … picture-exchange-based AAC and speech generating devices (SGDs) have been demonstrated, via meta-analyses and systematic reviews" to improve outcomes for children with ASD (Ganz, 2015).
- A study on gaze behavior of children with ASD discusses multimodal AAC use as effective approach (Gillespie-Smith & Fletcher-Watson, 2014).

References
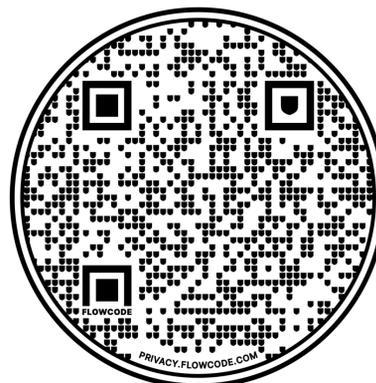
Facilitators, Barriers, & Myths
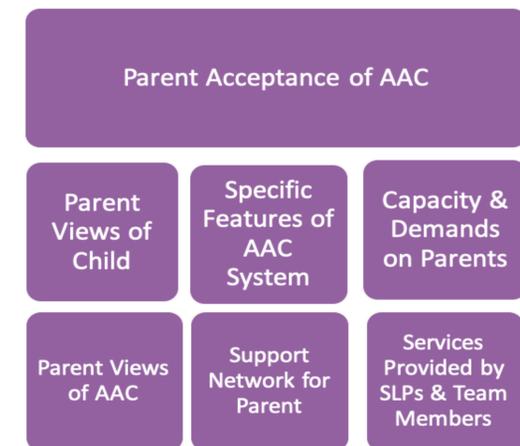
Moorcroft, A., Scarinci, N., & Meyer, C. (2020)

Facilitators—SLP knowledge, clinical decisions, & family involvement (Sievers et al, 2020); Family-centered; consistency of services; access to multidisciplinary team; accessibility of device; parent involvement; child's perceived improvement.

Barriers—Lack of access to services; parents & communication partners (lack of training & support, hesitancy to participate); struggle of child to utilize system (Donato et al, 2018).

Myths—
- Child will not speak, develop language, or learn complex language
- Child is too young, must be able to manually touch, must start with low-tech
- AAC will solve all of the child's problems.

Future Research

- Investigate effectiveness of multimodal approach across contexts
- Further research into utilizing mobile phones as primary devices
- Focused research on generalizing effective multimodal AAC use (Ganz, 2015)

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