Including Parents in AAC Interventions for Children with ASD: Insights from an Ecological Technology-based Intervention

Charles Fage1, Pascale Grevesse2, Marina Robert3, Christelle Maillart1

1 Unité de Logopédie Clinique, Faculté de Psychologie, Logopédie et Sciences de l’Éducation, Université de Liège, Belgique
charles.fage@uliege.be
christelle.maillart@uliege.be

2 Logopédie Indépendante, Obalix, Belgique
p.grevesse@hotmail.com

3 Logopédie, IRE Les Hautes-Roches, Saint-Malo, France
hautes-roches.ortho.ted@엽35.org

Context

Clinical research demonstrated the relevance of including parents as interventionists for children with Autism Spectrum Disorders (ASD). Notably, conducting interventions at home could represent a success factor for children with ASD to help generalize learnings (Debodinance et al., 2017). In the field of Alternative and Augmentative Communication (AAC) interventions, a meta-analysis reported the high effectiveness of communication partner training on a range of outcomes measures: frequency of communicative acts, social interactions, communicative initiations, etc. (Kent-Walsh et al., 2015). However, parents were only included in 4 on 30 AAC interventions for children with ASD reviewed (Logan et al., 2017). Authors reported that parents are usually solicited only to identify preferred items to increase the motivation towards communication.

Objective. This work aims to 1) document parents’ needs for AAC interventions and 2) measure the impact of including parents as communication partners within an AAC intervention for children with ASD.

Method

We conduct a technology-based AAC intervention inspired by the PECS protocol similarly to King et al. (2014), in a changing criterion single-case experimental design. We added measures for parents to the original protocol followed by the children. Participants. 7 families and their child with ASD, from two geographical sites: a medico-educational institute in Saint-Malo (France) and in an area around Liège (Belgium).

Material. A technology-based solution – named Tiwouh - has been used to support the present intervention. This tablet application proposes pictogram-based communication boards enhanced with speech-generation.

Intervention. After a brief training, parents were to take the role of alternatively communication partner and physical guide during each session.

Support Needs for AAC Intervention

(jDevice, Meder, 2012)

Self-efficacy

(Sense of Competence Questionnaire, Jansen et al., 2007)

Implementation fidelity

(video-recording of every session)

Generalization

(Untrained items and communication partner)

Parents

• Parents need support from trained professionals for both choosing appropriate tools and conducting intervention at home.
• Good self-efficacy reported for parents
• Good implementation fidelity of parents for the early phases
• Generalization achieved on untrained materials and communication partners for children

Children

Early results

Parent and child using AAC application Tiwouh at home

Conclusion - Take home message

Including parents within AAC interventions can be successfully achieved with a quick training to extend the AAC intervention to home. Moreover, the very early results of this ongoing study suggest that it could increase outcomes of interventions for children with ASD, especially regarding the generalization toward untrained pictograms and communication partners. Therefore, this work urges professionals to support parents of children with ASD, instead of just identifying preferred items, to choose appropriate tools and conduct the intervention to be successfully implemented at home.

References