

**Article:** Systematic Review of the effects of Interventions to Promote Peer Interactions for Children who use Aided AAC

**Title:** Interventions to Promote Peer Interactions with Aided AAC

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### **Introduction:**

Most evidenced based articles include multicomponent interventions to promote peer socialization but some studies still focus on single component interventions. A multicomponent intervention, which considers the individual child, the communication partner and where the communication exchange occurs, is more likely to have success than a single component intervention. In today's blog we highlight two articles that show success in interventions supporting development of social relationships and friendships for children who use aided AAC.

### **Remember to Explore the Evidence**

In this systematic review by Therrien, Light, and Pope 2016, the evidence-based literature assessed was used support the need for multicomponent interventions to promote peer interactions in children who use aided AAC. A parent or clinician implementing a this type of intervention must consider the cognitive effort of the individual with the AAC device and the challenge the communication partner faces of attending to both the device and the individual. Since, it is noted that individuals with complex communication needs are more likely to be at risk for social isolation from their peers, it is necessary to use evidence-based interventions in practice to improve social relationships.

Therrian et al. 2016, analyzed 19 intervention studies and concluded that 2 studies provided high quality interventions, which evidenced an increase in peer interaction for children who use aided assistive augmentative communication. The authors reviewed these 19 intervention studies by assessing the types of interventions: child-specific, peer-mediated, and environmental arrangement. Most of the studies included used a combination of the components but best results were reported with intervention studies that used all components or types. Among the studies, which showed the best outcomes, were Cosbey and Johnston 2006 and Hughes et al. 2000.

Cosbey and Johnston 2006, conducted a study that measured requests access to preferred items and/or peers during play with the use of a voice output communication aid. Participants were three severely disabled school-aged children diagnosed with cerebral palsy and Pierre-Robin syndrome. After the use of full physical prompt in the first intervention phase and no prompt in the second intervention phase, the results showed the three children saw increases in unprompted use of the voice output communication aid in play activities with peers. Moreover, as part of the intervention study the peers in the participants classroom received training from the teacher. The peers were told that their friends were allowed to ask to play with their toy and they take turns with the toy requested. Therrian et al. (2016) found this study to be of high quality because it utilized all three components and specifically utilized the importance of a peer-mediated intervention to improve socialization.

The second study Therrian et al, 2016, evidenced to produce good outcomes was conducted by Hughes et al. 2000. This intervention study by Hughes et al. 2000, measured the effects of self-prompted communication book training by the participant's peers. Participants for this study were four high-school students diagnosed with severe speech-language impairments and autistic-like behaviors. Communication of the students ranged from non-verbal and gestures to those using short phrases and sentences. Researchers looked at the rate with which the participant initiated conversation, the frequency of conversation topics discussed by participant, and the percentage of appropriately or inappropriately initiated conversations by the participant. Four peer participants were trained to engage in socialization with the participants using the communication book. The peer participants were involved training sessions, which reviewed a training script, composed of steps to follow for teaching self-prompted communication book use. In addition, the peer participants discussed the participant's goals and modeled the use of the book. Research measured various aspects of using a self-prompted communication book with a trained communication partner. The results of the study show a decrease in inappropriate conversation initiations with increase appropriate initiations. The outcomes from this study are promising and show the importance of a multicomponent intervention, particularly one that fully utilizes the use of peer-mediation and training.

The intervention studies conducted by Hughes et al. 2000 and Cosbey and Johnston 2006 provide the highest quality of evidence to support increased peer socialization among aided AAC users. The successful communication outcomes and results of these studies help to form a more clear direction for future research and clinical application. Therrian et al. 2016 states that once the literature on AAC peer interactions is well established only then can one investigate the connections to friendship development and social competence.

## **Key Point**

Using a multicomponent intervention requires consideration to the child's communication needs, the communication partner, and the environment in which the communication occurs. Therrian et al, 2016 found that multicomponent interventions targeted to improve peer socialization in children with complex communication needs will have better outcomes than single component interventions.

## **References**

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