

Aim:

Over 53% of children with autism spectrum disorders do not develop functional speech (Wodka, Mathy, & Kalb, 2013) and could benefit from interventions designed to increase receptive and expressive communication, including the use of AAC. In addition, children who have complex communication needs often have less access to shared reading and other early literacy activities and lower expectations of success in those activities (Light & McNaughton, 1993; Light & Smith, 1993; Koppenhaver, Hendrix, & Williams, 2007).

Dialogic reading, a type of shared reading, is an early literacy intervention that has been effective in increasing expressive and receptive language skills for children with typical development and children with speech and language disorders (Whitehurst & Lonigan, 1998; Crain-Thoreson & Dale, 1999). During dialogic reading (Zvenburgen & Whithurst, 2003), an adult reads a text to a child while asking questions about the text and encouraging the child to ask their own questions and make comments. Although dialogic reading was originally developed for children with typical speech, researchers have suggested adaptations to shared reading (which includes dialogic reading) for children with complex communication needs that included the use of AAC (Light, Binger, & Smith 1994; Light & Kent-Walsh, 2003). For example, Koppenhaver, Erickson, & Skotko (2001) used shared reading in conjunction with AAC to promote communication between four mothers and their daughters with Rett Syndrome.

Additionally, there has been increasing interest in adapting dialogic reading specifically for children with autism spectrum disorders. As children with autism spectrum disorders often also have complex communication needs, adapting dialogic reading for these participants may include the use of AAC. The aim of our research was thus to investigate dialogic reading interventions for children with autism spectrum disorders in order to learn about the participants, the effects, and the role of AAC in such interventions.

Method:

A systematic review was completed to find both published articles and dissertations on the use of dialogic reading for children with autism spectrum disorders. Studies were coded for participants' ages and communication skills and the use of AAC within the dialogic reading interventions. Effect sizes were calculated for receptive and expressive communication.

Results:

Participants' ages ranged between 2 and 12 years old. 84% were described as having complex communication needs. However, only 13% of participants were described as already having access to AAC systems. The majority of dialogic reading interventions (87%) provided means for participants to respond to comprehension questions using AAC (e.g., a choice board or speech-generating device) as well as with speech. However, only one intervention allowed participants to use AAC to support their expressive communication (e.g., ask questions, comment). Instead, most participants were

required to use speech for their expressive communication acts. Although dialogic reading had large positive effects on the receptive communication of these children with autism, there was only moderate positive effects on expressive communication. The larger effects observed for receptive communication may be related to the expanded use of AAC to support demonstration of comprehension (receptive communication) in the dialogic reading interventions.

Conclusion:

Dialogic reading interventions that incorporate the use of AAC are likely to have positive effects on the comprehension performance (i.e., receptive communication) of children with autism who have complex communication needs. However, further research is needed to adapt dialogic reading interventions to support the use of expressive communication for children with autism, which may include broadening the role of AAC in the interventions to include expressive as well as receptive communication acts.

Declaration of Interest Statement:

The authors disclose they have no financial or other interest in objects or entities mentioned in this paper.