A Longitudinal Study of Social Engagement in Classroom in Children with Autism Spectrum Disorder

Authors : Cecile Garry, Katia Rovira, Julie Brisson

Abstract : Autism Spectrum Disorder (ASD) is defined by a qualitative and quantitative impairment of social interaction. Indeed early intervention programs, such as the Early Start Denver Model (ESDM), aimed at encouraging the development of social skills. In classroom, the children need to be socially engaged to learn. Early intervention programs can thus be implemented in kindergarten schools. In these schools, ASD children have more opportunities to interact with their peers or adults than in elementary schools. However, the preschool children with ASD are less socially engaged than their typically developing peers in the classroom. They initiate, respond and maintain less the social interactions. In addition, they produce more responses than initiations. When they interact, the non verbal communication is more used than verbal or symbolic communication forms and they are more engaged with adults than with peers. Nevertheless, communicative patterns may vary according to the clinical profiles of ASD children. Indeed, the ASD children with better cognitive skills interact more with their peers and use more symbolic communication than the ASD children with a low cognitive level. ASD children with the less severe symptoms use more the verbal communication than ASD children with the more severe symptoms. Small groups and structured activities encourage coordinated joint engagement episodes in ASD children. Our goal is to evaluate ASD children's social engagement development in class, with their peers or adults, during dyadic or group activities. Participants were 19 preschool children with ASD aged from 3 to 6 years old that benefited of an early intervention in special kindergarten schools. Severity of ASD symptoms was measured with the CARS at the beginning of the follow-up. Classroom situations of interaction were recorded during 10 minutes (5 minutes of dyadic interaction and 5 minutes of a group activity), every 2 months, during 10 months. Social engagement behaviors of children, including initiations, responses and imitation, directed to a peer or an adult, were then coded. The Observer software (Noldus) that allows to annotate behaviors was the coding system used. A double coding was conducted and revealed a good inter judges fidelity. Results show that ASD children were more often and longer socially engaged in dyadic than in groups situations. They were also more engaged with adults than with peers. Children with the less severe symptoms of ASD were more socially engaged in groups situations than children with the more severe symptoms of ASD. Then, ASD children with the less severe symptoms of ASD were more engaged with their peers than ASD children with the more severe symptoms of ASD. However, the engagement frequency increased during the 10 month of followup but only for ASD children with the more severe symptoms at the beginning. To conclude, these results highlighted the necessity of individualizing early intervention programs according to the clinical profile of the child.

Keywords : autism spectrum disorder, preschool children, developmental psychology, early interventions, social interactions **Conference Title :** ICA 2018 : International Conference on Autism

1

Conference Location : London, United Kingdom **Conference Dates :** September 27-28, 2018