

# **Delay of gratification in preschoolers with and without autism spectrum disorder: Individual differences and links to executive function, emotion regulation, and joint attention**

**Laudan B Jahromi, Yanru Chen, Andrew J Dakopolos and Alice Chorneau**

Delay of gratification refers to a child's ability to wait for a more desirable reward rather than get a more immediate, but smaller, reward. Children's behaviors during the wait have been found to be associated with other social-emotional behaviors, such as prosocial interactions with peers. Recent research has found that elementary-aged (6- to 7-year-old) children with Autism Spectrum Disorder (ASD) show challenges on delay of gratification tasks. In this study, we extend this work to a younger sample of children with ASD to understand if these difficulties emerge by the preschool years. Moreover, we assessed whether preschoolers' other key self-regulatory capacities (e.g., regulation of emotions, executive function (higher-order thinking skills that support inhibition), and joint attention (the coordination of attention with a social partner) were related to delay of gratification. Findings revealed that preschoolers with ASD waited for a shorter duration, demonstrated more temptation-focused behaviors (i.e., looking at and speaking about the temptation), and expressed less positive emotions than their typical peers during the delay of gratification task. When examining both groups of children together we found that children's temptation-focused behaviors were related to children's executive function, joint attention, and parents' ratings of the child's ability to regulate their emotions. For typically-developing children, there was a positive association between temptation-focused behaviors and emotion regulation, but this association was not found for the children with ASD.