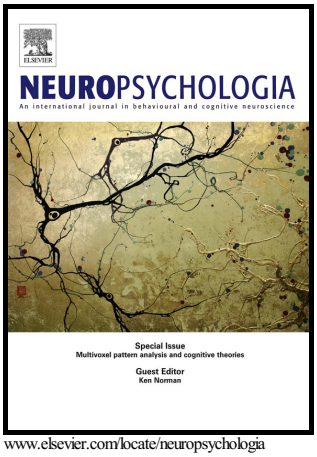

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Behavioral characterization of prediction and internal models in adolescents with autistic spectrum disorders

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Abstract

Autism has been considered as a deficit in prediction of the upcoming event or of the sensory consequences of our own movements. To test this hypothesis, we recorded eye movements from high-functioning autistic adolescent and from age-matched controls during a blanking paradigm. In this paradigm, adolescent were instructed to follow a moving target with their eyes even during its transient disappearance. Given the absence of visual information during the blanking period, eye movements during this period are solely controlled on the basis of the prediction of the ongoing target motion. Typical markers of predictive eye movements such as the number and accuracy of predictive saccades and the predictive reacceleration