## Abstract

To learn to deal with the unexpected is essential to adaptation to a social, therefore often unpredictable environment. Fourteen adults with autism spectrum disorders (ASD) and 15 controls underwent a decision-making task aimed at investigating the influence of either a social or a non-social environment, and its interaction with either a stable (with constant probabilities) or an unstable (with changing probabilities) context on their performance. Participants with ASD presented with difficulties in accessing underlying statistical rules in an unstable context, a deficit especially enhanced in the social environment. These results point out that the difficulties people with ASD encounter in their social life might be caused by impaired social cues processing and by the unpredictability associated with the social world.