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Associations between cooperation, reactive aggression and social impairments among boys with autism spectrum disorder

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Cooperation is a fundamental human ability, which is inversely related to mutual aggression in typical developing children (i.e., high cooperation is associated with low mutual aggression and vice versa). In this study, we aimed to discover whether a similar relationship holds for children with autism spectrum disorders (ASD). We tested the hypothesis that boys with ASD, 7-17 years of age and without intellectual disabilities, would react differently to typically developing boys when engaged in a task that posed a simple dilemma: cooperation with another child might lead to a substantial reward, but acting out of selfinterest could mean they get less in return. Most of the children did not act more selfishly, but neither did they make choices that were self-sacrificing (in which the reward went to their partner). The severity of ASD traits did not influence the children's decision-making, but adolescents tended to be more cooperative than younger boys. We then measured (indirectly) our participants' propensity to react with aggression to another person's provocative behaviour, using a novel computerized task. In this task, the more cooperative boys with ASD were less likely to react aggressively. We speculate that interventions aimed at increasing cooperative and trusting behaviour could help boys with ASD inhibit reactive aggression.