ASSOCIATIONS BETWEEN AGE, ANXIETY, COGNITIVE FUNCTIONING, AND SOCIAL IMPAIRMENT WITH AGGRESSION IN YOUTH WITH AUTISM

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**Objectives:** Aggression has been observed as a common an impairing behaviour in youth with a diagnosis of autism spectrum disorder. Previous research has indicated that aggression in children with autism is associated with cognitive functioning, age, anxiety, and social functioning, although most samples only include parent-report measures and participants without intellectual disability. Furthermore, there is a lack of research investigating how different aspects of social impairment are associated with aggressive behaviour in youth with autism while anxiety is included in the analyses. The aim of this study was to clarify the relationships of these variables with aggression in a large sample, diverse in age and cognitive level (including youth with intellectual disability), using both parent- and teacher-report measures.

**Method:** Participants were 1179 youth (age 4-18) with a diagnosis of autism spectrum disorder, with their data coming from the Simons Simplex Collection database that was assembled by the Simons Foundation Autism Research Initiative. Parent- and teacher-report measures were obtained for aggression, anxiety, and social impairment. Univariate statistics were calculated to determine how each variable was associated with aggression and hierarchical regressions were conducted with all variables together to determine which were most predictive of aggression. The hierarchical regressions used measures of IQ, age, social communication, social awareness, social motivation, social cognition, and restricted/repetitive behaviours.

**Results:** Both parent- and teacher-report measures indicated that anxiety and impairment in social communication were associated with higher levels of aggression while impairment in social motivation was associated with less aggression. Age, IQ, social awareness, social cognition, and restricted/repetitive behaviours all had small or nonsignificant effects depending on whether they were measured by parents or teachers.

**Discussion/Conclusions:** The findings that social communication impairment and anxiety are more predictive of aggression than the other variables may be explained by a combination of problems engaging in positive social interactions and the distress associated with social situations resulting in aggressive behaviour. It is possible this also explains why social motivation impairment was associated with less aggression, as a decreased tendency to approach others may result in a lower likelihood to aggress towards them as well. These results indicate the importance of anxiety and social problems, particularly in social communication and motivation, when studying and treating aggression in youth with autism. This should be explored in the context of providing individual therapy as well as creating environments that youth with autism are comfortable in and result in positive social interactions with their peers. Future research should also focus on creating measures of aggression that are more appropriate for use with youth with autism and intellectual disability, and should aim to incorporate more data from self-report measures when possible.