



# Is aggression linked with academic performance in young people?

By Dr. Jessica Edwards

A new study published in the *Journal of Child Psychology and Psychiatry* has investigated the association between aggression and academic performance in >27,000 young people enrolled in four twin cohorts comprising the ACTION consortium. These twin studies had collected comprehensive, individual-level data on aggression at ages 7-16 years, based on parental, teacher or self-reports. They also obtained information on academic performance, measured by teacher-rated grades at age 12-14 years or standardized test scores at age 12-16 years. Eero Vuoksima and colleagues analysed this data and performed a meta-analysis to estimate the correlation between aggression and academic achievement.

In their between-family analyses, the researchers found a significant, negative association between aggression and academic performance. That is, young people who were more aggressive had poorer academic performance than those who were less aggressive. This association remained regardless of age, the instrument used to assess aggression, the person rating aggression and the measure of academic performance.

Within-family analyses were also performed. These analyses ask: do more aggressive co-twins have poorer academic performance compared to their less aggressive co-twin? The researchers found a significant correlation within twin pairs, indicating that aggression is associated with academic performance independent of shared environmental and genetic influences. However, this relationship was weaker within monozygotic twin pairs (who share all their segregating genes) than dizygotic twin pairs (who share half their segregating genes), suggesting that the association was partly explained by genetic effects.

Despite each cohort being conducted in different European countries and using different measures of aggression, the results were consistent across cohorts involved in this study. These findings further support the robustness of the negative association between aggression and academic performance. Further studies that also include a measure of childhood cognitive ability are needed to determine whether early cognitive ability might predict academic performance and whether aggression might have any additive or mediating effect on this association.

## Referring to:

Vuoksima, E., Rose, R.J., Pulkkinen, L., Palviainen, T., Rimfeld, K., Lundström, S., Bartels, M., van Beijsterveldt, C., Hendriks, A., de Zeeuw, E.L., Plomin, R., Lichtenstein, P. Boomsma, D.I. & Kaprio, J. (2020), *Higher aggression is related to poorer academic performance in compulsory education. J. Child Psychol. Psychiatr.* doi: 10.1111/jcpp.13273.