

TITLE: The influence of delinquent peers on academic achievement: Direct effects or genetic predispositions?

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ABSTRACT: Affiliation with delinquent peers has been associated with negative outcomes in adolescents' academic achievement<sup>1</sup>. Homophilia, a process by which individuals create friendships with peers who share similar characteristics, could partly explain the affiliation with delinquent peers<sup>2</sup>. Moreover, the association between academic achievement and affiliation with delinquent peers could stem from underlying genetic factors involved in homophilia, rather than from an actual effect of peers. The aims of this study were to determine if the academic achievement of adolescents was associated with their affiliation with delinquent peers, and if this association was explained by genetic factors. The sample was drawn from the Quebec Newborn Twin Study, a longitudinal follow-up of a birth cohort of twins ( $n = 421$  pairs of twins)<sup>3</sup>.

Delinquent behaviors and academic achievement were measured when adolescents and their peers were 15 years old. Questionnaires were completed by the twins, their parents, and their peers. Results showed that adolescents' academic achievement was associated with their affiliation with delinquent peers and that this association was completely explained by adolescents' genetic factors. These results suggest that adolescents' academic achievement is explained by their own genetic predispositions rather than influenced by the delinquent behavior of their peers.

<sup>1</sup>Gremmen et al. (2019). *Child Dev*, 90(2), e192–e211.

<sup>2</sup>McPherson et al. (2001). *Annu Rev Sociol*, 27(1), 415-444.

<sup>3</sup>Boivin et al. (2019). *Twin Res Hum Genet*, 22(6), 475-481.

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