



Low empathy in adolescent boys predicts violent behaviour in adulthood

Low empathy and low resting heart rate are established, independent risk factors of antisocial behaviour^{1, 2}. Now, researchers from the University of Pittsburgh have studied whether an interaction between these two factors during adolescence might mediate violent behaviour in early adulthood. The longitudinal study included 160 boys from low-income backgrounds. At age 12, the boys completed questionnaires to assess their disposition, empathy and pro-sociality (using the Children and Adolescent Dispositional Scale) and underwent electrocardiography to measure their resting heart rate.

At ages 17-20 years, the young men were assessed for characteristics of violent behaviour (using the Self-Report of Delinquency Questionnaire) and moral disengagement (using the Mechanisms of Moral Disengagement Scale). These measures were combined with juvenile court records collected between ages 15 and 18 years. Empathy alone negatively correlated with violent court petitions and moral disengagement whereas resting heart rate alone at age 12 was unrelated to all measures of violent behaviour. When testing for interactions between empathy and resting heart rate, however, the researchers found that low empathy

predicted greater violence at age 20 only in men with a low resting heart rate. These findings suggest that resting heart rate and empathy interact in early adolescence to mediate violent behaviour later in life. The researchers propose that improving empathic skills in adolescents at risk for violent behaviour may be an effective preventative measure.

Referring to:

Galán, C.A., Choe, D.E., Forbes, E.E. & Shaw, D.S. (2017), Interactions between empathy and resting heart rate in early adolescence predict violent behaviour in late adolescence and early adulthood. *J Child Psychol Psychiatr.* 58: 1370-1380. doi:10.1111/jcpp.12771

Further reading:

¹Latvala, A., et al. (2015) A longitudinal study of resting heart rate and violent criminality in more than 700,000 men. *JAMA Psychiatry*, 72: 971-978.

²Knafo, A., et al. (2008) The developmental origins of a disposition toward empathy: genetic and environmental contributions. *Emotion*, 8: 737.