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Evidence for specific neuropsychological impairments in children and adolescents with severe antisocial behaviour

S.H.M. van Goozen, G. Fairchild, S. Kine and I. Goodyer



Deficits in executive functioning are thought to have a predisposing influence on impulsive or aggressive behaviour. In two separate studies, we tested the hypothesis that child psychiatric patients with Disruptive Behavior Disorder (DBD) and adolescents with conduct disorder (CD) would have problems in executive functioning. All participants had a normal IQ and completed a range of neuropsychological measures of executive functioning. Some of the tasks involved the possibility of monetary rewards with a view to testing the prediction of a specific motivational inhibitory deficit. In the first study involving children, the findings did not support the hypothesis that DBD involves a general deficit in executive inhibitory control; rather, the results showed that DBD children had problems in regulating their behaviour under motivational inhibitory conditions (Van Goozen et al., 2004). The second study aimed to replicate and extend these findings in adolescents screened for CD in the community. According to Moffitt's (1993) theory, early-onset antisocial behaviour differs from adolescent-onset antisocial behaviour in terms of its neuropsychological and neurobiological underpinnings. We screened teenagers for CD and determined whether their behavioural problems started in childhood or in adolescence. Both groups, together with matched healthy controls, were tested on a range of neuropsychological tasks, involving, for example, emotion recognition, executive functioning, risk taking, gambling behavior, and fear conditioning. Preliminary results of this study will be presented. The implications of the findings with respect to the role of neuropsychological functioning in the modulation of antisocial behaviour will be discussed.