(DRD2) affect mRNA stability and synthesis of the receptor. Hum Mol Genet 2003; 12: 205–16.

- 5 Neville MJ, Johnstone EC, Walton RT. Identification and characterization of ANKK1: a novel kinase gene closely linked to DRD2 on chromosome band 11q23.1. Human Mutation 2004; 23: 540–5.
- 6 Laakso A, Pohjalainen T, Bergman J, Kajander J, Haaparante M, Solin O, Syvälahti E, Hietala J. The A1 allele of the human D2 dopamine receptor gene is associated with increased activity of striatal L-amino acid decarboxylase in healthy subjects. *Pharmacogenet Genomics* 2005; 15: 387–91.
- 7 Ponce G, Jimenez-Arriero MA, Rubio G, Hoenicka J, Ampuero I, Ramon JA, Palomo T. The A1 allele of the *DRD2* gene (*Taq*I A polymorphisms) is associated with antisocial personality in a sample of alcohol-dependent patients. *Eur Psychiatry* 2003; **18**: 356–60.
- 8 Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, Judd LL, Goodwin FK Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study. JAMA 1990; 264: 2511–8.
- 9 Helzer JE, Pryzbeck TR. The co-occurrence of alcoholism with other psychiatric disorders in the general population and its impact on treatment. J Stud Alcohol 1988; 49: 219–24.
- 10 Hare RD The Hare Psychopathy Checklist–Revised. Multi-Health Systems, 1991.
- 11 Cleckley H. The Mask of Sanity (5th edn). Mosby, 1976.
- 12 American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (4th ed) (DSM–IV). APA, 1994.
- 13 First MB, Spitzer RL, Gibbon M, Williams JBW. Structured Clinical Interview for DSM–IV Axis I Disorders, Clinical Version (SCID–CV). American Psychiatric Press, 1996.
- 14 Arnaiz-Villena A, Martinez-Laso J, Alonso-Garcia J. Iberia: population genetics, anthropology, and linguistics. *Hum Biol* 1999; 71: 725–43.
- 15 Hoenicka J, Ponce G, Jiménez-Arriero MA, Ampuero I, Rodriguez-Jiménez R, Rubio G, Aragüés M, Ramos JA, Palomo T. Association in alcoholic patients between psychopathic traits and the additive effect of allelic forms of the CNR1 and FAAH endocannabinoid genes, and the 3' region of the DRD2 gene. Neurotox Res 2007; 11: 51–60.
- 16 Moltó J, Poy R, Torrubia R. Standardization of the Hare Psychopathy Checklist–Revised in A Spanish prison sample. J Personal Disord 2000; 14: 84–96.
- 17 Reardon ML, Lang AR, Patrick CJ. An evaluation of relations among antisocial behavior, psychopathic traits, and alcohol problems in incarcerated men. *Alcohol Clin Exp Res* 2002; 26: 1188–97.
- 18 World Health Organization. International Classification of Diseases and Related Health Problems (10th edn) (ICD–10). WHO, 1990.
- 19 Hare RD, Clark D, Grann M. Psychopathy and the predictive validity of the PCL-R: an international perspective. *Behav Sci Law* 2000; 18: 623–45.

- 20 Loranger A, Janca A, Sartorius N. Assessment and Diagnosis of Personality Disorders: The ICD-10 International Personality Disorders Examination (IPDE). Cambridge University Press, 1997.
- 21 Blum K, Noble EP, Sheridan PJ, Montgomery A, Ritchie T, Jagadeeswaran P, Nogami H, Briggs AH, Cohn JB. Allelic association of human dopamine D2 receptor gene in alcoholism. *JAMA* 1990; 263: 2055–60.
- 22 Cadore, RJ, Yates WR, Troughton E, Woodworth G, Stewart MA. Geneticenvironmental interaction in the genesis of aggressivity and conduct disorders. Arch Gen Psychiatry 1995; 52: 916–24.
- 23 Deeley Q, Daly E, Surguladze S, Tunstall N, Mezey G, Beer D, Ambikapathy A, Robertson D, Giampietro V, Brammer MJ, Clarke A, Dowsett J, Fahy T, Phillips ML, Murphy DG. Facial emotion processing in criminal psychopathy. Preliminary functional magnetic resonance imaging study. *Br J Psychiatry* 2006; **189**: 533–9.
- 24 Birbaumer N, Veit R, Lotze M, Erb M, Hermann C, Grodd W, Flor H. Deficient fear conditioning in psychopathy: a functional magnetic resonance imaging study. Arch Gen Psychiatry 2005; 62: 799–805.
- 25 Viding E, Blair RJ, Moffitt TE, Plomin R. Evidence for substantial genetic risk for psychopathy in 7-year-olds. J Child Psychol Psychiatry 2005; 46: 592–7.
- 26 Blair RJR. Neurobiological basis of psychopathy *Br J Psychiatry* 2003; 182: 5–7.
- 27 Newman JP, Kosson DS, Patterson CM. Delay of gratification in psychopathic and nonpsychopathic offenders. J Abnorm Psychol 1992; 101: 630–6.
- 28 Di Chiara G, Imperato A. Drugs abused by humans preferentially increase synaptic dopamine concentrations in the mesolimbic system of freely moving rats. Proc Natl Acad Sci USA 1998; 85: 5274–8.
- 29 Yang BZ, Kranzler HR, Zhao H, Gruen JR, Luo X, Gelernter J. Association of haplotypic variants in DRD2, ANKK1, TTC12 and NCAM1 to alcohol dependence in independent case control and family samples. *Hum Mol Genet* 2007; 16: 2844–53.
- 30 Dick DM, Wang JC, Plunkett J, Aliev F, Hinrichs A, Bertelsen S, Budde JP, Goldstein EL, Kaplan D, Edenberg HJ, Nurnberger J Jr, Hesselbrock V, Schuckit M, Kuperman S, Tischfield J, Porjesz B, Begleiter H, Bierut LJ, Goate A. Family-based association analyses of alcohol dependence phenotypes across DRD2 and neighboring gene ANKK1. *Alcohol Clin Exp Res* 2007; 31: 1645–53.
- **31** McDermott PA, Alterman AI, Caccioca JS. Generality of Psychopathy Checklist – Revised factors over substance dependent patients. *J Consult Clinl Psychol* 2000; **68**: 181–6.
- 32 Cooke DJ, Michie C, Skeem J. Understanding the structure of the Psychopathy Checklist–Revised. An exploration of methodological confusion. Br J Psychiatry 2007; 190 (suppl 49): s39–50.
- 33 Johansson P, Andershed H, Kerr M, Levander S. On the operationalization of psychopathy: further support for a three-faceted personality oriented model. *Acta Psychiatr Scand* 2002; 106 (suppl 412): 81–5.



Mentalisation: a key skill for psychiatrists and their patients

Jeremy Holmes

Mentalisation: 'mind-mindedness', the ability to see ourselves as others see us, and others as they see themselves; to appreciate that all human experience is filtered through the mind and therefore that all perceptions, desires and theories are necessarily provisional. Psychotherapy, whether cognitive or psychoanalytic, aims to enhance mentalisation skills and to identify situations in which mentalisation is impaired. Mentalisation and arousal are inimical – stress interferes with the ability to mentalise effectively. Stressed non-mentalising psychiatrists and their patients, especially those with borderline personality disorder, are less likely to make good decisions than their mentalising counterparts. Training helps overcome this.

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