

## Highlights of this issue

By Derek K. Tracy

### I tripped on a cloud and fell eight miles high

*Sapiens* is a social animal, and disorders of interpersonal interactions are key features of many psychiatric and neurodevelopmental conditions. However, much work has focused on the individual in such instances rather than the dyad of the interaction. Leong & Schilbach's editorial (pp. 636–638) notes advances in interaction-based 'sociometrics', or 'two-person neuroscience'. It gives a fascinating overview of how this can occur, including potential child developmental clinics where both the young person and therapist have a range of physiological markers tracked as they interact with each other.

Even to non-genetics folk like me, the importance of the 22q11.2 deletion is clear, and it is associated with a range of psychiatric sequelae. It occurs about once in every 2000–4000 births, and can present with quite variable phenotypic expression. Given the dopaminergic changes and higher rates of psychosis commonly seen, links with substance use might be expected. Vingerhoets *et al* (pp. 661–667) test this, with a cross-sectional study of 434 patients with this deletion, patients without this deletion but with psychosis and healthy controls. Interestingly, those with the deletion were far less likely to have substance use disorders, despite their increased risk of psychosis; indeed, they showed a twentyfold reduction compared with healthy controls. The mechanisms underpinning this have yet to be elucidated but offer the promise of better understanding of the neurobiology of addiction.

### I tore my mind on a jagged sky

Lots on cognitive deficits in this month's *BJPsych*. Two papers explore the impact of affective disorders. John *et al* (pp. 675–682) explored longitudinal data from the National Child Development Study, with affective symptoms measured in individuals' twenties, thirties, forties and fifties. Nearly 10 000 completed a battery of psychometric tests at this last time point, and these individuals were included in the analysis. Timing of illness episodes was less of an issue than their accumulation. Repeated affective symptoms were associated with poorer immediate memory, delayed memory and information-processing accuracy, with changes often seen by midlife. Cullen *et al* take a different approach (pp. 683–690) with a large cross-sectional study of the UK biobank covering over 50 000 individuals with either unipolar or bipolar depressive disorders and 100 000 controls. Both illness groups showed poorer performance on visuospatial memory, but not other tests. Regression analyses estimated that a quarter of the effect in the bipolar affective disorder cohort was mediated by medication, but no evidence of any association with cardiometabolic disease was found.

Forlenza *et al* (pp. 668–674) test for cognitive deterioration prevented by medication, looking at the effect of lithium in adults with amnesic mild cognitive impairment (MCI). Most data on this topic have been basic science neurotrophic studies or epidemiological work that cannot test causality. In this study 61 older adults with MCI were randomised in a double-blinded manner to receive either sub-therapeutic lithium (0.25–0.5 mEq/L) or placebo over a 2-year period, with a further 2-year follow-up. Those in the active arm remained relatively stable, whereas those on placebo showed significant further decline in their MCI, although the magnitude of difference between the two groups was small. Interestingly, the lithium

group also had significant subsequent increases in cerebrospinal fluid amyloid-beta peptide, an Alzheimer's disease biomarker.

Ioannidis *et al* (pp. 639–646) tackle a different type of cognitive decline: that purported to come from problematic internet use (PIU). The authors define this as 'compulsive online buying, gambling, cybersex, as well as excessive use of online streaming and social media that have addictive, impulsive and/or compulsive elements'. The concept remains controversial, although I am certainly aware of the mind-numbing properties that evenings spent scrolling through Twitter has on my brain. This meta-analysis pooled 40 studies and almost 3000 participants. Those with PIU showed a range of deficits, including in attentional inhibition, motor inhibition, decision-making and working memory. Gender, geography and comorbidities did not have an impact on outcomes; perhaps of interest to *BJPsych* readers, older age and the absence of gaming as the predominant activity did not matter. Perhaps time to put down your phone, folks. Matthew Kube-Clare from Oxleas NHS Foundation Trust expands on this in this month's Mental Elf blog: <https://elfi.sh/bjp-me19>.

### I just dropped in to see what condition my condition was in

In the UK, analogous to what has happened with attention-deficit hyperactivity disorder (ADHD), recent years have seen a growth in services for adults with suspected autism spectrum disorders (ASD). Again parallel to ADHD, the question has arisen as to whether this diagnosed-in-adulthood cohort is fundamentally different to those picked up at a younger age. Underwood *et al* (pp. 647–653) investigated demographics, social, mental and physical health histories, and genotypes of over 100 such individuals. The 3:1 male:female typically seen in younger cohorts was replicated in this ASD group. Compared with matched controls they had very high rates of psychiatric and neurological comorbidities – with almost 90% having at least one other psychiatric condition – as well as fewer social supports. High rates of alcohol misuse and unemployment were particularly notable. It reminds us that there is much work to do in adult ASD services beyond 'just' diagnosis.

Schofield *et al* (pp. 654–660) try to map the socioeconomic costs of ASD and intellectual disability for individuals, families and society. Rather than simply multiply time lost through reduced workforce participation against average hourly salary, their micro-simulation model incorporated carer gender, age and education level. This estimated that in 2015 informal carers of those with ASD or intellectual disability in Australia lost income of AU\$254 million through reduced workforce participation. The follow-on were national losses of taxation of AU\$100 million and increased welfare payments of AU\$204 million. The figures are large but projected to proportionately increase in the future as welfare payment gains fail to match salary increases. They rightfully call for strategic policies to support informal carers returning to work, including more affordable child care and better flexible working arrangements. Changes in the 2007 Mental Health Act in the UK meant an individual could not be involuntarily detained for having an intellectual disability, except for the caveat if it was 'associated with abnormally aggressive or seriously irresponsible conduct'. Hollins *et al* (pp. 633–635) argue that this is discriminatory, as no other group of people can be so detained. Perhaps more problematically, it lends itself to lazy diagnostic overshadowing and poor practice that may fail to seek any underlying causes for such behaviour.

Finally, Kaleidoscope (pp. 693–694) reports changing suicide rates following the Netflix show *13 Reasons Why* and tackles the old chestnut of whether narcissists go for promotions, or promotion creates narcissists: thinking about your own line managers, what is your gut feeling on this (before you turn to confirm or refute your biases)?