

# Shout it from the rooftops

One sentence on page 51 captures the vital purpose of Layard & Clark's new book: 'The scale of mental illness may be mind boggling, but what is really shocking is the lack of help.'

This book presents an erudite, brilliantly evidenced and absorbing case for improving access to psychological therapies. Most of us are nowadays frequently involved in having to make an argument for the services we provide. Most of us were not trained for this and welcome any support. Layard and Clark have now produced a volume filled to the gunwales with brilliantly selected facts of the kind our North American colleagues refer to as 2x4s (as in pieces of wood optimised by its dimensions for hitting people over the head but in this context better thought of as immediately compelling data with the potential to intrigue, disrupt and reorient). For example, 'nearly 80% of morbidity in 15–29 year-olds is due to mental illness'; or 'training therapists in CBT can improve recovery rates from 20% to 65%'; 'Seven weeks of group CBT is almost three times more effective in helping long-term unemployed people back to work as an equal amount of time of generalised social support'; 'CBT implemented in a breathlessness clinic costing £300 can generate savings of £2,600 over a year'.

Layard and Clark have written a book that we all need to read, take careful notes on and, where possible, commit to memory. It is simply the best book around to help psychologists in the increasingly challenging task of ensuring that services for our patients are maintained and increased in the face of the rising levels of demand we all experience.

The book is easy to read but also reflects outstanding scholarship. The facts have been selected with a careful eye to meet the dual criteria of being scientifically robust at the same time as being persuasive. These facts are all around us: Layard and Clark's compilation is such an important contribution because it is finely honed by a decade of debate undertaken on behalf of us all to ensure that resources are made available for the provision of psychological help.

The book takes the reader along a journey covering the epidemiology of mental health, health economics, a brief review of disease mechanisms, a consideration of the nature of psychological therapy, the process of developing new therapies and an overview of their evidence base. The journey is an exciting one, even for someone like the present reader who has been travelling the same landscape for four decades.

The final destination is Improving Access to Psychological Therapies (IAPT) – a unique service of which our profession should feel proud. The book is far from an uncritical endorsement of the model. Rather, it is a balanced appraisal of its achievements alongside a consideration of its limitations and strong suggestions for its improvement; it also lays out the case for expansion into work with children in intervention and prevention. IAPT is an international first in providing an outcome-focused, population-level quality improvement programme for psychological therapies. It is remarkable in its transparency, a point forcefully made in *Thrive*.

To this reader's mind the most important contribution of this book is the link that it makes in its final chapters between the provision of appropriate psychological care and the achievement of parity of esteem for mental and physical health. 'Under-treatment is a gross injustice' (p.252) and is incompatible with *parity of esteem*, however conceived.

Layard and Clark are going into battle not just for psychologists or psychological services but also for the return of human dignity to those with mental illness. These considerations place *Thrive* beyond the petty tribalism which has, at least in the past, at times undermined the progress of psychological therapies in mental health care. We have scientifically evolved and tested effective interventions for the treatment of mental disorder. Let's join Clark and Layard on the rooftops and shout as loud as we are able for the increased availability of evidenced-based psychological therapies.

| Allen Lane, 2014; Hb £20.00

Reviewed by Professor Peter Fonagy who is in the Research Department of Clinical, Educational and Health Psychology, University College London



**Thrive:**  
The Power of  
Evidence-Based  
Psychological  
Therapies

Richard Layard  
& David M. Clark



## Unmemorable

Before I Go to Sleep  
Rowan Joffé (Director)

The novel *Before I Go to Sleep* was written in his spare time by NHS audiologist Steven Watson. It became a bestseller of 2011, and its massive success led to the inevitable knock on the door from Hollywood.

Christine (Nicole Kidman) wakes up every morning without any memory of the day before. She has anterograde amnesia, the result of a head injury some 15 years earlier. Her husband Ben (Colin Firth) patiently has the same conversation with her every morning. After Ben leaves for work, the phone rings. It is Dr Nasch (Mark Strong), who instructs Christine to retrieve the camera in the wardrobe. It's her video diary from the previous day. In it Christine is concerned about whether or not she can trust Ben. But why?

Disbelief has to be suspended in order to gain enjoyment: don't expect Dr Nasch to behave like a real clinical neuropsychologist, or Christine like someone who has anterograde amnesia (or 'atypical neurogenesis amnesia', as the film has it). The transition from book to screen is not entirely successful. The novel played with Christine's status as a self-evidently unreliable narrator, but the film does not deliver the same pleasurable bewilderment to its audience. The tone is more workaday, and the strains in the plotting easily overlooked in the book are stretched to breaking point here.

Ultimately, and appropriately given the subject matter, it's all quite forgettable.

I Reviewed by Kate Johnstone who is a postgraduate student at University College London



## 'I have one major problem with the internet: It's full of liars'

Institute of Art and Ideas  
www.iai.tv

As John Lydon (aka Johnny Rotten, erstwhile member of the Sex Pistols), once put it in typically forthright fashion: 'I have one major problem with the internet: It's full of liars.'

So amongst the many websites offering information, discussion and debate on psychology and mental health issues, how do we choose and select? How do we advise colleagues and students where to go to inform themselves best?

To the slight anxiety of some of my colleagues, I do make use of sites such as Wikipedia. I expect people to be critical and sceptical, but, on the whole, information is good.

The Institute of Art and Ideas (www.iai.tv) is an online forum similar to the better-known TED talks (www.ted.com) which describes itself as being 'committed to fostering a progressive and vibrant intellectual culture in the UK... engaged in changing the current cultural landscape through the pursuit and promotion of big

ideas, boundary-pushing thinkers and challenging debates'. They claim to 'bring together world-leading theorists, scientists, politicians, and writers'.

I was given five links from the IAI website to explore and review. The first thing that struck me was that two offerings (involving Lewis Wolpert and Richard Bentall alone) were good, but rather conventional, presentations of important if controversial issues. I (of course) thought that Richard Bentall was excellent – and for these presentations alone, I was impressed by the IAI website.

Where it excelled, however, was in the debates – on the future of mental health, on epigenetics and consciousness. The debate over the dangerousness, inappropriateness and future of psychiatry is obviously close to my heart, as I've written on exactly this issue myself (tinyurl.com/k283ehq). But what

lifted IAI's offering above the mundanity, partiality and mere adequacy of other websites was the managed and structured debate. In my favourite link (<http://iai.tv/video/treating-psychosis>) this was exemplified by a back-and-forth presentation of opinions between two people I'd characterise as friends and colleagues: Richard Bentall (professor of clinical psychology) and Sir Simon Wessely, professor of psychiatry and President of the Royal College of Psychiatrists. This was not, then, a monopoly position, a diatribe or lecture (the natural lair of liars on the internet)... it was a cross-examination, where visitors and viewers would see both sides of the debate. I love this. It's the style of learning I aimed for in my recent online course in exactly this same area (tinyurl.com/n69b8gy).

The same strengths were visible (and audible) in the parallel debate on epigenetics.



Here we saw (and heard) philosopher Julian Baggini, geneticists Caroline Relton and Adrian Bird and neuroscientist Steven Rose debate the science, moral and philosophical implications of the new science of epigenetics.

OK... the internet is still full of liars. But this website does offer what it claims – access to leading thinkers. It also offers something slightly better – the chance to see options tested and challenged. I dislike censorship as much as I dislike dishonesty... so this works well for me.

**I Reviewed by Professor Peter Kinderman** who is Head of Institute of Psychology, Health and Society, University of Liverpool



## Filling a gap

Child Health Psychology: A Biopsychosocial Perspective  
Julie Turner-Cobb

When reading health psychology textbooks at both undergraduate and postgraduate level, I have always identified a focus on adult cognitions and behaviour. This new publication provides a long overdue prioritisation of child and adolescent health psychology, relating this to later functioning in a lifespan perspective. What is also novel about this book is Dr Turner-Cobb's firm interdisciplinary stance. Drawing from her specialism in child psychoendocrinology, she clearly and concisely introduces a range of concepts across the biopsychosocial framework.

The book first provides a clear history of child health psychology and its origins within an interdisciplinary context. A variety of disciplines and their association with the development of child health psychology are discussed, including social, developmental and cognitive psychology, as well as behavioural and psychosomatic medicines and wider social policy. This is followed by alternative approaches to defining health, illness and well-being. An invaluable aspect of this book is its research methods section: providing accessible details on psychobiological assessment, including stress, neurotransmitter and endocrine markers. Experimental, naturalistic and field research methods are also described; however, the focus is really on its unique discussion of biological measurement.

A large amount of this book explores the theories and cognitions

underlying acute and chronic child illness. Discussion is highlighted throughout by helpful figures charting biological aspects that many psychologists may be new to, such as the biological life cycle of stress, as well as complex theories and cognitions, such as young children's experiences of pain. Epidemiological findings give a clearer picture of incidence and survival. Further reading is suggested in each chapter, drawn from a range of books, cohort and experimental research. The author ends with some hopes and concerns for the future of child health psychology, such as proposed transformations in health care and technological advances. This provided food for thought for me as an early-career researcher.



Taking an interdisciplinary stance to a textbook can be a difficult task. However, despite introducing a variety of concepts, this text is very accessible and a joy to read. A use of both old and new case studies and examples helps to chart the progress in the field. This textbook would be an excellent book for health psychology modules and postgraduate teaching, providing an introduction to both child-focused research and biological measurements.

**I Sage; 2013; Pb £28.99**

**Reviewed by Emma Norris** who is a PhD student at University College London and Associate Editor (Reviews)



## An uncomfortable watch

Storyville: Web Junkies – China's Addicted Teens  
BBC Four

China is the first country in the world to declare internet addiction as a clinical disorder, claiming it as the number one public health threat to its teenage population. This documentary observes life at Daxing Bootcamp for Internet Addicts in a suburb of Beijing: one of over 400 prison-like rehabilitation centres built by Chinese government. These aim to 'deprogram' teens (mostly boys) who inhabit virtual reality for extensive periods of time, mostly in online video games such as World of Warcraft. This addiction is depicted here to lead to a negation of school and real-life social relationships, as well as extreme insomnia, poor diet, excessive online spending and, tragically, even suicide. Treatment featuring family therapy and military-based physical activity usually lasts three months and claims a national 70 per cent success rate.

The programme is distressing from the outset. A newly admitted boy cries for medicine and describes how he was admitted by his father and brought to the centre by multiple staff with his hands tied. This seems echoed by many other patients, with stories of 'tricking' and abuse from fathers evidently common. Patients openly discuss with pride their longest periods of gaming, with one describing a 15-day stint,

gaming 24 hours a day with only brief napping.

Although much time in the programme is spent discussing the experiences of 'electronic heroin' in patients, little is shown of the actual therapy used or its effectiveness. Parents are requested to live in the centre, in special quarters with regular access to their children via group therapy. However, there are no evident individualised interventions. Instead a 'one size fits all' approach is deployed, seemingly seeking to get patients to renounce their previous gaming addiction and apologise to their parents. The context of China's One Child Policy is vital to consider here. In spending excessive times in virtual worlds at the cost of school and career; patients are seen to disrespect their parents. However, it can also be seen that the policy is actually at the heart of the addiction aetiology. If children had regular access to siblings and peers, would the need for social interaction via gaming be so strong?

The programme is an immersive experience, combining a prison-type environment with subtitles and a lack of English narrator. It is also a very uncomfortable watch. There is no talk of



BBC PICTURES

'success' rates in the centre, nor any clear criteria for discharge. This lack of clarity seems evident to the teens themselves: with many showing hopelessness and complete exhaustion. Immense guilt is bestowed on the patients at their addiction, with little consideration by the workers of pressures on patients bestowed by China's wider social structures. One teen is seen to leave at the show's conclusion after apologising to his father following 10 days of solitary confinement. However, it is hard to see how he has gained anything from this traumatic experience except self-blame. Given the emerging scale of this addiction in China, this programme shows evident need for improved treatment, care and understanding for patients in this cultural context.

**I Reviewed by Emma Norris** who is a PhD student at University College London and Associate Editor (Reviews)



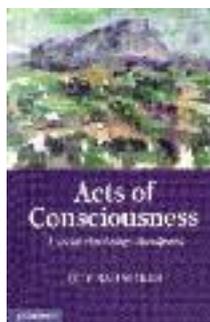
## Consciousness, captivity and Cubism

Acts of Consciousness: A Social Psychology Standpoint  
Guy Saunders

In *Acts of Consciousness* Guy Saunders offers a fascinating and refreshing account of conscious experience. He presents some selected thought experiments that will be familiar to readers of other works on consciousness but, instead of simply reprising them, Saunders introduces variations to illustrate his 'Cubist psychology'. This is an approach that emphasises the polyphonic character of self and conscious experience and that stands as an alternative to assumptions that consciousness is singular. As in Cubist artwork, Cubist psychology recognises that multiple standpoints on the same subject are adopted simultaneously despite their contradictions and paradoxes.

Saunders aims to highlight and explore this 'miscellaneous character' of conscious experience, not to tidy it up.

He underpins his position with insightful and, at times, moving references to his own research involving captives. Accounts of confinement and isolation are examined to show how our personhood is held together by our relationships with other people and how these have continuance in a virtual subjective world even if we are in captivity and deprived of 'real' social interactions. Saunders



notes the irony that although the self is routinely taken to be private and internal its strong interpersonal foundation is revealed most starkly when people are socially isolated. Examples are also drawn from the arts, film and television, which are stimulating and entertaining in equal measure.

His clear and direct writing style makes some complex ideas accessible without going into too much detail. There is helpful signposting to further reading for those seeking such detail. As a result, this is an excellent introduction to some

important concepts in the psychology of consciousness and philosophy of mind and will encourage those who are new to the field or who have been deterred by previous encounters with less welcoming texts. This is not a book solely for novices though: the emphasis placed on social psychological processes and the polyphony of experience makes it essential reading for scholars in the field of consciousness studies, and it is also recommended for those with an interest in the social psychology of the self.

**I Cambridge University Press;** 2014; Pb £19.99  
**Reviewed by Andrew Hart** who is a lecturer at the University of Bradford



## Unlocking the positives through schools

Handbook of Positive Psychology in Schools (2nd edn)  
Michael J. Furlong, Richard Gilman & E. Scott Huebner (Eds.)

Raising achievement and promoting children's social, emotional and mental health in schools is a cross-government priority and is reflected in guidance issued by the Department for Education and the Department of Health in the UK and internationally. The editors of this edition of the *Handbook of Positive Psychology in Schools* have used contributions from across the globe to provide a stimulating and focused account of factors and activities that can assist with this.

There is a central theme to shift the focus away from individual deficits to identifying strengths in children and young people, and supplementing these by optimising the whole school environment to promoting emotional well-being and the development of resilience in young people.

The editors briefly describe their conceptual model of positive psychology based around Bronfenbrenner's ecological model, using three positive psychological constructs (physical, socio-emotional, and cognitive strengths), and in the context of three research models.

Included are research reports on commonly understood concepts of hope, optimism, gratitude, empathy, prosocial behaviour, emotional regulation, self-efficacy, achievement emotions, achievement goal orientations, to name a few! Activities and programmes that promote emotional well-being are

referenced, many of which originate in the USA with some currently being used in the UK. Among those featured include: Building Hope for the Future, Celebrating Strengths, School-Wide Positive Behavioural Interventions and Support (SWPBIS), Positive Discipline (PD), Reducing Bullying in the Urban School District Project (RBUSD), the Resilience and Youth Development Module (RYDM), Strengths Gym, Values in Action.

I found the 31 chapters well titled and organised, allowing one to skim through the contents and home in quickly on a topic of interest for an immediate read! One chapter of particular interest introduces recent conceptual developments, such as the *covitality* construct for adolescents which suggests that 12 traits contribute to four core constructs referred to as *positive mental health domains*.

Anyone who invests in this handbook, especially frontline practitioners, team leaders and educational policy makers will find themselves constantly taking it off the shelf to further investigate in detail its many informative articles and the suggested additional reading to see what makes a difference.

| Routledge; 2014; Hb £185.00

Reviewed by Davinder Singh Dhesi who is Senior Educational Psychologist, Leicester City Psychology Service



## Deserves investigation

Riveted: The Science of Why Jokes Make Us Laugh, Movies Make Us Cry, and Religion Makes Us Feel at One with the Universe  
Jim Davies

This was a compelling read. The book drew me in to exploring why certain things command our attention – horror films, quiz machines, and group-dancing, to name but a few. In the book's seven chapters, Davies explores some well-selected topics to this end: how we are hardwired for socialisation; our thrill at discovering patterns (and exceptions); incongruity and our desire to comprehend; and our biological and psychological biases. Davies concludes with a chapter on *why* we get riveted.

Davies skillfully weaves together theory, research and popular knowledge from social and cognitive psychology, biology, evolutionary studies, culture and religion. Packed with references to science and theory, the book succeeds in being highly accessible, engaging and informative

at the same time. What I particularly liked was that it refreshed my memory of certain aspects of psychology theory from my undergraduate days while offering new insights and food for thought.

Overall, it proved a most interesting read, a book that I would happily revisit. My one criticism concerns the book's somewhat peculiar closing. Davies's concluding chapter on why we get riveted is dominated by a discussion of religion, rather at the expense of bringing together and commenting on the book's key themes. That said, *Riveted* has potential for widespread appeal and deserves investigation.

| Palgrave Macmillan; 2014; Hb £16.99

Reviewed by Dr Patsy Holly, a Consultant Clinical Psychologist in Oxfordshire

## Essential resource



Neurofeedback in the Treatment of Developmental Trauma: Calming the Fear-driven Brain  
Sebern F. Fisher

Fisher successfully guides the reader through the underlying theories of mind and brain development in relation to trauma, introduces the origins and development of neurofeedback along with elegantly detailing the complexities of practising neurofeedback (whilst highlighting how to introduce to patients, protocols to consider and integration with psychotherapy). Woven into the text are fascinating case studies and detailed diagrammatical representations of complex mechanisms. However, a real gem is the author's personal accounts of receiving and experiencing neurofeedback, which provides the reader with a truly expert viewpoint.

Although initially a little daunted upon receiving such a potentially complex, jargon-heavy and complicated read, I was pleasantly surprised. Fisher's thoughtful conversational writing style and simplified (yet not simple) approach to the topic puts the reader at ease within the first chapter. Equally, the clear and structured format supports the reader in their learning by providing the opportunity to dip into chapters or explore theories individually.

I do, however, have two small quibbles, although they are both very much due to personal preference and learning style. First, and because of the complex nature of neurology, more diagrammatic representations would have provided a little more clarity in places. Second, at numerous points within the body of the text the author refers to previous and/or forthcoming chapters such as 'see in chapter X' or 'I explain further in chapter Y', which at times caused more of a distraction than a means of enabling flow and demonstrating conjoined writing.

In agreement with multiple internet accolades (e.g. 'groundbreaking' and a 'masterpiece') and with Bessel van der Kolk, MD (trauma expert), I believe this book to be an essential resource for those interested in human brain development and the physiological consequences of trauma but of particular value for professionals working within mental health with children and young people.

| Norton; 2014; Pb £25.99

Reviewed by Dr Hannah Butler who is a Clinical Psychologist, CAMHS Tier 4 Inpatient Services, The Junction, Lancaster



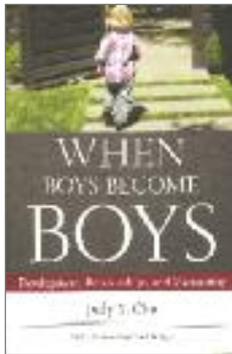
## Joining the 'Mean Team'



**When Boys Become Boys: Development, Relationships, and Masculinity**  
Judy Y. Chu

To what extent are 'masculine' qualities innate? This is just one of the questions that Judy Y. Chu sets out to answer in her book *When Boys Become Boys*, based on a two-year study in which she observed a group of six boys from pre-kindergarten to grade one (age four to six) at a US school.

Although boys appear initially attuned to others' emotions and able to articulate their own feelings adeptly, Chu notices a shift midway through their pre-kindergarten year. As the group begins to conform to cultural norms of masculinity – learned from parents, siblings, teachers and the media – they lose their 'feminine' qualities and become more 'stoic, competitive and aggressive'.



This transition occurs at a time when peer influence is particularly powerful with the boys 'performing' masculine acts to gain social approval and bond with their age-mates. Chu discovers that those most skilled at masculine posturing are able to achieve a higher status within the group. This desire for acceptance is embodied in the Mean Team, a club created by the boys that encourages 'bad' behaviour in contrast to the 'good' girls in their class.

Chu recounts her observations in painstaking detail, interspersing the text with case studies of each of the six boys. Although this approach gives the reader a thorough insight into their development, the book would benefit from more analysis throughout rather than just at the end. Ultimately, *When Boys Become Boys* is not a critique of prevailing masculine ideals but a plea for adults to help boys resist societal pressures so that they 'do not feel compelled to censor, distort or misrepresent themselves in order to accommodate these externally imposed standards'.

**I** *New York University Press; 2014; Pb £14.85*  
**Reviewed by Maryam Omid** who is a journalist studying for an MSc in psychology at the University of East London



## 'Doolally'? Or man with a message?

**Little Stories of Life and Death @NHSWhistleblowr**  
David Drew

Dr Drew starts by saying he loves the NHS. Yet, vocal as he is as Twitter's @NHSWhistleblowr, one knows this tale will not end well.

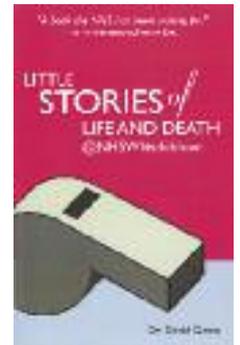
Drew's recount of med-school resounds in this doctor's head like Dahl's voice when I read *Boy* as a schoolgirl. In an unusual departure from the treadmill of training, he travels, family in tow, to Thailand then Nigeria. On returning to the NHS, Drew feels deskilled. Asking seniors for advice, 'No one seemed remotely interested... And it wasn't in my interest to make too much of it.'

After a bucolic introduction, things turn bad. Trainees' and nurses' complaints about training and bullying are swept under the carpet. He speaks up and is ignored, or worse. Told that the Chief Executive

is the 'most important person', he observes that patient safety requires flat hierarchies.

He documents incidents pedantically and continues to report to the management. This reads like the child that cried 'The Emperor has no clothes', but also like so much common sense that is now being taught as human factors. Facing a brick wall and a medical director's report he sees as wholly false, he approaches the BBC. The Trust's response is 'no harm, no foul'. Drew sees this as a 'we got away with it' approach to clinical incidents. A press officer attempts to discredit him as 'doolally'.

Drew was eventually dismissed on a charge related to his religion, but one feels that this – inevitably one-sided – account is given without



artifice and that if Dr Drew is a zealot, it is as an advocate for his patients. A recurring theme is the accusation of psychiatric illness; whilst this is unfounded, I hear Steve Jobs's voice: 'Here's to the crazy ones, the misfits, the rebels, the troublemakers... because the ones who are crazy enough to think that they can change the world, are the ones who do.'

**I** *Matador; 2014; Pb £10.99*  
**Reviewed by Sally-Ann S. Price** who is Neurosurgery Senior Registrar, Brunel Building, Southmead, Bristol



## First of a series

**Reward and Punishment in Social Dilemmas**  
Paul A.M. Van Lange, Bettina Rockenbach & Toshio Yamagishi (Eds.)

At 256 pages, this is slim volume with a considerable brief: aiming to provide a detailed picture of the current state of understanding of reward and punishment in social dilemmas. Given that social dilemmas occur where there is a need for group cooperation but group members experience a conflict between personal and group interests, this is quite a timely book. Recent headlines regarding tax avoidance and MPs' expenses spring immediately to mind.

The book is split into three sections covering the workings, organisation and application of reward and punishment, with each chapter by different authors, drawn from disciplines including psychology, anthropology and economics.

It therefore targets a wide audience, something that has been borne in mind, using mostly straightforward language. The earlier sections include detailed research, and it is good to see that this includes field as well as laboratory studies and includes participants drawn from multiple countries

and cultures.

The final section includes case studies and real-world applications. The three sections together, along with a detailed introduction, really bring the book together to provide an overall picture of this field.

The book provides some intriguing findings, but the contributors are keen to point out that, despite significant advancements, this is an area where there is still a great deal of work to be done. They include numerous suggestions for future research.

This is the first in series of books on human cooperation, and based on this I would be interested to read future volumes.

**I** *Oxford University Press; 2014; Pb £38.99*  
**Reviewed by Louise Beaton** who is a psychology graduate living in Gloucestershire





## More questions than answers

Horizon: Is Your Brain Male or Female?  
BBC 2

Are the differences between male and female behaviour the result of innate brain differences or a product of the social environment around us? This was the question that BBC's *Horizon* documentary delved into. Taking different sides of the fence, presenter Dr Michael Mosley argued that just like our bodies, our brains are formed by exposure to hormones in the womb. Professor Alice Roberts, on the other hand, contended that the observed gender differences between males and females are the result of social and cultural pressures. Providing empirical evidence to elucidate these claims, the presenters replicated numerous experiments, which can be critically analysed through the lens of a biological or social psychological perspective.

Results from Experiment 1 revealed that males significantly outperformed females on a test of spatial rotation, a skill in which males are suggested to have an innate advantage. Results from Experiment 2 showed that, on an emotional intelligence test, females were more empathetic than males. This observation was surmised to suggest that the brains of males are structured to facilitate connectivity between perception and coordinated action, whereas female brains are designed to facilitate communication between analytical and intuitive processing nodes. However, as a stereotype threat researcher (e.g. see Steele & Aronson, 1995), I was sceptical of these claims. For example, both males and females were tested in the same environment. As such, contextual cues and the implicit salience of stereotypes (i.e. males are analytical; females are empathetic) may have created a threatening predicament whereby participants believed their performance was under evaluative threat.

Experiment 3 presented a naturalistic observation in which non-socialised female and male monkeys were given gender-stereotypical toys to play with. Here, it was found that male monkeys were twice as likely to play with cars, whereas female monkeys played more frequently with dolls. These toy preferences were surmised to reflect sex differences between the male and female brain. This further provoked my critical social psychological mindset. First, it could be argued that female monkeys have an innate maternal instinct, which may have influenced them to investigate the dolls more than male monkeys. Do these differences not, therefore, reflect hormonally influenced behavioural and cognitive biases,

which are shaped by social context? Second, these two toys are not aesthetically the same. Would there have been a difference if monkeys were presented with, for example, gender-based toys such as cars and prams? The way in which these results were conveyed is somewhat unsettling: any layperson watching this programme may have been led to believe that our social behaviour reflects the inherent structure of the brain. What this experiment really shows is the interplay between nature and nurture.

Up to this point, the documentary extensively investigated experiments that support the innate gender-brain divide. Following this trend, Dr Ragini Verma presented results of over 900 brain scans to explain how maps of neural circuitry show stark differences between the sexes (see Ingalhalikar et al., 2013). Specifically, results showed that women's brains were highly connected across the left and right hemispheres, in contrast to men's brains, where connections were typically stronger between the front and back regions. However, a pivotal finding revealed that these differences were not apparent in the brains of children. This research therefore demonstrates the brain's fascinating ability to adapt throughout an individual's lifespan. Yet, a question that could not be answered was: Does this plasticity result from our hormones, or from the influence of cultural stereotypes?

Supporting the nurture side of debate, Professor Gina Rippon disputed that the brain differences between males and females are smaller than brain differences within females and males. Here, she presented research which indicated that when a task of spatial ability is later presented as a perspective task, females perform significantly better. Accordingly, she stated that many results are spurious; dependent on the way in which tests are carried out and how they are presented to participants.

In sum, this documentary provided a thought-provoking insight into the extraordinary, vast ability of the human brain. But are men really from Mars and women from Venus? Even as a social psychologist, I conform to Simon-Baron Cohen's (2010) view that sex differences are the result of both social and biological influences, and I think that this is the viewpoint that we have to subscribe to. A perfect experiment would examine the



differences between male and females in a realm where only biological or environmental influences existed. What does strike me, however, is the fact that we still live in a society where the gender divide exists. As Professor Roberts stated: 'We live in a country where fewer than three out of ten physics A-levels are taken by girls, where just 7 per cent of engineers are women, and where men still earn 20 per cent more than their female colleagues.' Thus, it seems more needs to be done to ameliorate the gender-performance divide, to eradicate the effects of pernicious stereotypes on performance and to widen participation.

**I Reviewed by Charlotte R. Pennington** who is a PhD candidate at Edge Hill University

### References

- Baron-Cohen, S. (2010). Delusions of gender – 'neurosexism', biology and politics [Review of the book *The gender delusion* by C. Fine]. *The Psychologist*, 23, 904–905.
- Ingalhalikar, M., Smith, A., Parker, D. ...Verma, R. (2014). Sex differences in the structural connectome of the human brain. *Proceedings of the National Academy of Sciences of the United States of America*, 111, 823–828.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797–811.

contribute

Sample titles just in:  
**Melancholia: The Western Malady** Matthew Bell  
**Race, Gender and the Activism of Black Feminist Theory** Surya Nayak  
**Psychology After the Unconscious** Ian Parker

**For a full list of books for review and info on reviewing for us, see [www.bps.org.uk/books](http://www.bps.org.uk/books). Send books for potential review to The Psychologist, 48 Princess Road East, Leicester LE1 7DR**

**Of course, 'Reviews' now covers more than books. If you have seen a film, play, exhibition, website, app, album etc which you would like to review, get in touch on [jon.sutton@bps.org.uk](mailto:jon.sutton@bps.org.uk) or follow us on Twitter @psychmag for calls to contribute.**