

# Birthday honours

Witnessing social deprivation in Los Angeles drove Professor Sir Cary Cooper (Lancaster University) to get involved in social and occupational psychology, with a determination to make an impact on the deprivation he encountered. After a 50-year career in the areas of organisational and workplace psychology, he has written 160 books and been instrumental in changing employment practice and law with extensive evidence-based research that has guided policy decisions.

'When I was at UCLA in California doing my MBA, I spent about a year working as a social worker in the city of Los Angeles, while attending university. I was working with the black community in South West LA and in the middle of the city with the down-and-outs, which had a profound impact on me and made me want to do something to practically change things. The workplace seemed a logical place to start.'

Sir Cary was given a knighthood in

the Queen's Birthday Honours and is now a Professor of Organizational Psychology and Health at Lancaster University, as well as being a Fellow of the BPS, the Royal Society of Arts, the Royal Society of Medicine, the Royal Society of Public Health, and the British Academy of Management, and an Academician (and Chair) of the Academy of Social Sciences.

Sir Cary said his proudest achievement was being made the lead scientist on the Mental Capital and Wellbeing project of the Foresight Programme in the Government Office of Science in 2007, which was set up by the Chief Scientist with the aim of gathering evidence that the government could use to develop policy and practice on enhancing mental well-being in the UK.

He said: 'It was set up because the cost of mental ill health was around £120 billion every year. The lead scientific group of five commissioned over 80 global science reviews to look



into how a person's mental capital is enhanced or depleted throughout the life course, in childhood, education, work, old age, environment, and come up with policies, have these costed and then put forward as a set of recommendations to the cabinet minister responsible for the programme.' One of the recommendations from this work was

## ASSESSING BABIES' RISK OF AUTISM AND ADHD

Researchers at the Babylab at Birkbeck College, University of London, are embarking on the Studying Autism and ADHD Risk in Siblings (STAARS) project, which will map brain development from early infancy to identify the earliest signs of these conditions. The research is connected to the larger EU Aims autism research project, which was launched in 2012, and labs in Utrecht and Nijmegen in the Netherlands, Stockholm and Uppsala in Sweden, Ghent in Belgium, and Cambridge and King's College London are also carrying out research on infants whose older siblings have autism.

The project as a whole will involve more than 400 families from across Europe and the UK. STAARS is the only project that is also looking at ADHD, and aims to build on research published by the Babylab scientists in 2012 which detected signs of autism in babies as young as six months old.

The babies take part in a number of behavioural assessments, interacting with objects and people, as well as eye-tracking games and non-invasive brain-imaging methods, including EEG and near-infrared spectroscopy. Dr Emily Jones, who is leading the research at the Birkbeck Babylab, said although there had been many studies on the younger siblings of children with autism, not so much had been done with the younger siblings of those with ADHD.

She told *The Psychologist*: 'We are beginning to learn more about the early signs and symptoms of autism, as well as the changes in brain activity that preceded the emergence of behavioural signs. However, we know very little about the early development of infants with later ADHD. Indeed, some of the patterns we see in the early stages of development of infants with later autism might actually reflect risk for ADHD. We see

things like slow attention shifting and some early temperamental differences in infants with later autism spectrum disorder. But it is possible that some of those behaviours might actually be related to symptoms of ADHD, because of the high comorbidity and because, of course, ADHD is associated with attention problems. So we are now looking at infants with older siblings with autism and infants with older siblings with ADHD in the same set of tasks so that we can identify common and distinct patterns of early risk for these two conditions.'

The ultimate goal, Dr Jones said, is better identification of ADHD and autism in infancy. She said: 'Infants with parents or siblings with autism or ADHD have a 20 per cent chance of developing the condition themselves. Another 20 per cent of children with a sibling with autism will have social or communication problems, which

aren't necessarily autism. We want to be able to better understand some of the mechanisms through which ADHD and autism emerge. If we do that we may be able to develop more effective support and intervention approaches for infants at the greatest risk.'

Dr Jones is looking for 100 infants, aged 0 to 10 months, who have an older sibling with autism and 100 infants, aged 0 to 10 months, who have an older sibling with ADHD, to further study the early emergence of both conditions. Babies are invited to the Birkbeck Babylab in London at 5 months, 10 months, 14 months, 24 and 36 months, although it is possible for infants to join the study at 10 months old. Families can come from all over the UK; travel and accommodation expenses are paid, and families can be helped with arrangements. **ER**  
**I For information, call 020 7079 0761, visit [www.staars.org](http://www.staars.org) or e-mail [staars@bbk.ac.uk](mailto:staars@bbk.ac.uk)**

recently turned into law – the right to request flexible working for everyone, not just for parents with young children or carers.

Professor Nick Pidgeon (University of Cardiff) is another psychologist to be recognised in the Queen's Birthday Honours, awarded an MBE for his services to climate change awareness and energy security policy. Professor Pidgeon investigates public attitudes towards and engagement with environmental and technological risk issues, including those of climate change, climate engineering, nanotechnologies, and energy systems.

Speaking of the award, he said: 'I was absolutely delighted. But above all this award reflects collaborations with my very many research colleagues and PhD students, who have worked with me both here at the Cardiff School of Psychology and previously when at the University of East Anglia School of Environmental Sciences.'

Professor Pidgeon said his early work was greatly influenced by the pioneering environmental risk perception studies of psychologists Paul Slovic and Baruch Fischhoff in the USA, and the human geographer Roger Kasperson, who pointed out the fact that one cannot divorce risk perceptions from the social and political contexts within which they arise.

Since starting work at Cardiff in 2006, Professor Pidgeon has chaired the cross-party parliamentary inquiry on the scope for political consensus on climate change, which recommended the establishment of the UK's Climate Change Committee.

He said that since around 2008 there has been a small decline in concern about climate change, due in part to the recession, as well as the fact there is less political and media attention on the subject. He added: 'Very broadly a majority of people in Britain – about 60 to 70 per cent currently, depending upon the question asked, view climate change as a serious problem that we are responsible for, want action, but often see it as a distant risk which affects other peoples, places and times. He told us that this decline in concern in the UK, as elsewhere internationally, is

something that is 'at odds with the hardening scientific consensus on the anthropogenic causes of climate change'. He noted, however, that 'very recent empirical work we have been doing suggests that recent severe weather events, such as this winter's flooding, may be raising the salience of climate change once again for many in Britain'.

Dr Janet Stockdale (London School of Economics) has also been awarded an MBE for services to higher education. Janet is a senior lecturer in social psychology and Dean of the University of London International Programmes at LSE. She has been a member of the Social Psychology Department there since completing her undergraduate degree and doctorate at University College London. Janet has undertaken a number of School-wide roles including Adviser to Women Students, Dean of Admissions, Dean of Recruitment and Dean of Undergraduate Studies.

She said: 'I am very honoured to have



received this award. However, I think it is important to recognise that much of what I have achieved in my long career at LSE is down to teamwork and I would like to thank all my colleagues for their contribution, both to the welfare of students and to maintaining academic and professional standards.'

Renowned neuroscientist Professor Colin Blakemore has also been knighted, 10 years after being denied the usually automatic knighthood granted to the chief executive of the Medical Research Council. At the time, leaked government documents suggested this was due to his association with animal experiments. Professor Blakemore (University of London School of Advanced Study) was given the knighthood for research in vision and the development of the brain, and for his contribution to scientific policy and outreach. He said: 'The progress of science depends on the confidence of the public and politicians, and I've always believed that scientists have an obligation to share their excitement, their knowledge and also their concerns with the whole of society.' ER



## Mental health manifesto

Mental health charity Mind has launched a manifesto for next year's general election, which calls on the next government to make six commitments to helping people with mental health problems.

The six points Mind is hoping the next government will commit to are: reducing mental health stigma and discrimination; mandating the NHS to offer talking therapies to everyone who needs them within 28 days of referral; ensuring everyone gets crisis care whenever they need it; changing the support for people who are not in work due to their mental health; increasing the NHS mental health budget by a minimum of 10 per cent over five years; and implementing a national strategy that helps everyone take care of their mental wellbeing.

Paul Farmer, Chief Executive of Mind,



said: 'Staying mentally healthy is one of the biggest challenges we all face today. In fact, one in four people experience a mental health problem every year. In England alone, the cost of mental health problems in terms of treatment, loss of earnings and welfare is approximately £105 billion a year.' ER

# Stories of mind and mental health

The popular BBC Radio 4 psychology programme, *All in the Mind*, held an awards evening at the Wellcome Collection in London to celebrate 25 years on the air. Claudia Hammond, presenter of the show, hosted the awards, which celebrated individuals, groups and professionals who had helped those facing mental health challenges. We spoke to the winners.

Nominated in the professional category was clinical psychologist Dr Alan Barrett, who specialises in the care of war veterans in the North West of England. His patient, Tony, who had served in Northern Ireland and later struggled with his mental health, wanted a way to thank his doctor. Dr Barrett said: 'It was really humbling to be nominated and it made me realise how much of an impact you can have on someone's life, the fact that something you do every day can lead a person to say "you saved my life".' The Veterans' Service is hosted by the Pennine Care NHS Foundation Trust from a centre in Manchester and covers the whole of the North West of England; Dr Barrett is the clinical lead for the service. He said: 'About one third of the military personnel we see have trauma problems, including PTSD. The most common problems we see are anxiety and alcohol problems as well as depression.' Tony, who nominated Dr Barrett, said: 'I served in Northern Ireland and left in 1994. I lost my son and I just didn't want to live any more. Now I'm working at a veterans' home helping other people. Alan taught me how to control my mind and my temper. He spoke to the police about my problems and got me to a place where I could build my life back up.'

The winner in the professional category was Pat Rose, nominated by Mike Henderson. Pat works for the Nilaari Agency, a community-based mental health support provider working mainly with black, Asian and minority ethnic adults and young people in Bristol. Mike said Pat and the agency saved his life after multiple incarcerations starting at the age of 14 as well as being introduced to hard drugs at 16, he also struggled with anxiety and depression. Pat began working with Mike in 1995 and continued to do so for more than 15 years through progression and relapse. He said: 'No matter how many times I failed, and other people had given up on me, Pat stuck fast.' Mike is now a Development Officer and Mentor at Lawrence Dallaglio's Rugby for Change. Shropshire clinical psychologist Guy



Holmes and one of the judges for the awards said it was moving to read the many entries BBC Radio 4 received. 'People wrote in a very considered way using ordinary language, it was probably more powerful that way – they talked about ordinary things. I've been very depressed about my own work and what's happening in the NHS, it was really quite an uplifting process, and working through the nominations made me realise that although a lot is happening in services that I find really uncomfortable, lots of people are doing a fantastic job in voluntary and statutory work.'

The winner in the group category of the awards was MindOut, nominated by Sebastian Sandys. The group supports people in the LGBT community in Brighton who have mental health problems. Director of the service Helen Jones said: 'We think nationally there's not enough going on around mental health, there's pockets of local stuff happening in London, Manchester, and so on, but it's all a bit hit and miss, there needs to be more national awareness of LGBT mental health. Research shows a vast proportion of LGBT people suffer from suicidal distress, and that's shocking – we should be doing something about that.'

In the individual category the winner was Steve McDonagh, nominated by his employee Andrew King. Andrew has had bipolar disorder and reached a point

where he was cycling between suicidal episodes and manic excesses. When Andrew did seek help, Steve supported him and paid his full salary for a long period of time, through two relapses.

Dorothy Miell, President of the British Psychological Society, was at the ceremony. She said: 'The stories we heard were incredibly inspiring. It's really important for people to understand, not only how prevalent mental health difficulties are, but the importance of how psychologists feed into a wide-ranging community of support for those with mental health challenges.'

Claudia Hammond said: 'The great thing about presenting *All in the Mind* is listening to people tell their stories, knowing that they're sharing those stories with so many listeners who relate to them personally. I started listening to Anthony Clare on *All in the Mind* while I was in the sixth form and never would have guessed that 25 years later I'd be presenting these awards and taking part in the programme, which discusses mental health at length in a way we rarely hear elsewhere. We were staggered to get so many entries all those months ago. Then to be at a ceremony and see so many people in one room who had gone so far above and beyond their duty, whether as a friend or as a professional, transforming the life of another human being was very moving.' **ER**

# Packing up cigarettes

Plain packaging for cigarettes moved a step closer when draft regulations for how it would work in practice were released by ministers in June.

The Department of Health has opened a six-week consultation for interested parties to have their say over the potential new regulations. There will also be some negotiation with the EU, which will take around six months, before plans are put in place in the UK.

We spoke to Chris Armitage, Professor of Health Psychology at the University of Manchester and a member of the British Psychological Society Behaviour Change Advisory Group. He said the change in packaging was unlikely to result in current smokers changing their behaviour, but could dissuade young people from taking up smoking. He said: 'A study published

in 2013 ([tinyurl.com/l57yypm](http://tinyurl.com/l57yypm)) showed that regular smokers were less inclined to quit smoking in response to packaging in 2011 (after graphic images were introduced on packaging) compared with 2008 (before graphic images were introduced on packaging). So plain packaging is unlikely to make much difference to current smokers.'

Regarding young smokers, Professor Armitage said that before advertising bans on smoking, research tended to show that awareness of advertising and motivation to smoke were linked and therefore any reduced exposure to advertising is likely to reduce the chance of smoking uptake. He added: 'One concern for the future is whether e-cigarette advertising and/or e-cigarette uptake ultimately turns out to be a precursor to future cigarette smoking.'

Although nicotine consumption *per se* does not appear to be related to increased risk of cancer, there is some evidence that nicotine disrupts brain reward mechanisms that could increase susceptibility to other drugs.'

When asked whether standardised packaging should be a priority for the government in its attempts to stop people from smoking, Professor Armitage told *The Psychologist*: 'There is a large body of evidence, stretching back quite a few years suggesting that increased taxation will reduce both uptake and consumption of cigarettes. Given that all the regulatory mechanisms are already in place, increased taxation would seem to be a more straightforward way of preventing smoking uptake than developing new rules about packaging.' **ER**

# New RCP president

Professor Sir Simon Wessely, Head of the Department of Psychological Medicine at the Institute of Psychiatry at King's College London, has started his three-year term of office as the new president of the Royal College of Psychiatrists.

Professor Wessely has greater links with psychology than many previous presidents, with his early research focusing on unexplained symptoms and syndromes, most particularly chronic fatigue syndrome. He was the opening keynote speaker at the British Psychological Society's Annual Conference in May this year.

Professor Wessely said: 'These could

potentially be great times for psychiatry.

At last everyone is starting to accept the importance of mental health across the spectrum, and in all areas of medicine. For the first time a majority of junior doctors will now have experience in psychiatry, to equip them with the skills that will make them better doctors, no matter what area of medicine in which they decide to practise. Once again, psychiatry will be at the heart of medicine.'

Professor Simon Wessely succeeds Professor Sue Bailey, who had been president since 2011. **ER**



## DEFEATING DEMENTIA

David Cameron has pledged to speed up the development, and increase the availability, of dementia drugs. At a summit in London, he also suggested it is possible to find a cure.

The Prime Minister, in a speech to 300 experts in dementia and finance, said the disease was one of the 'greatest enemies of humanity'. He added: 'We are renewing our commitment to say by 2025 we want to find a cure for dementia. We should treat this as a disease rather than as some natural part of ageing.'

Cameron said that there were not enough incentives for drug companies to develop drugs for dementia: 'When only three out of 101 dementia drugs developed between 1998 and 2011 have made it to market and when losses by pharmaceutical companies have reached around \$50 billion, I think it's clear that the incentives for dementia research and drug development are not yet right.'

The Prime Minister said the government could learn from the development of drugs for so-called orphan diseases: 'We have these rare diseases like cystic fibrosis, Hunter's syndrome and Pompe's disease which only affect relatively small numbers of people. For a long time no one was prepared to invest in creating drugs to treat them because the risks were so high and the returns were so small. But in the 30 years since the Orphan Drug Act in the United States, more than 400 new orphan drugs have been approved. I think we need to look at dementia in a similar way.'

The Medical Research Council used the event to announce the creation of the world's biggest study group for dementia, involving two million people, alongside a £100 million research pledge from Alzheimer's Research UK.

Meanwhile NICE has released a film (see [tinyurl.com/ma5863s](http://tinyurl.com/ma5863s)) to support its newly released standards for care homes tackling loneliness, depression and low self-esteem in older people. These include the recommendations that older people in care homes are given opportunities to take part in meaningful activities and are encouraged to maintain their own identities.

The film focuses primarily on an a roundtable event which took place in March 2014 at the Royal Hospital Chelsea, and organisations from the health and social care sector discussing each of the six quality statements published by NICE. **ER**

# The Facebook furore

Our journalist **Ella Rhodes** considers a recent study by the social media giant, and the subsequent fallout.

The social networking site Facebook met with intense criticism in June and July after publishing a scientific study (see [tinyurl.com/fbstudy.pdf](http://tinyurl.com/fbstudy.pdf)). In 2012, the site manipulated its users' News Feeds over a week to assess whether being shown fewer positive or negative stories from friends would affect the emotions of individuals. Did the research reveal anything meaningful, was it ethical, and why have many been 'creeped out' by it?

## What did the study find?

The paper was published in *Proceedings of the National Academy of Sciences*, with Adam Kramer from Facebook's 'Core Data Science Team', as lead author. A huge sample of 689,003 participants was used, and the researchers found that if a user's newsfeed was populated with fewer negative stories that user would be more likely to post positive updates themselves. The opposite effect was seen when the visibility of positive stories was reduced. The researchers concluded that 'social contagion' is possible without the need for non-verbal cues and social interaction.

Professor Peter Totterdell University of Sheffield) told *The Psychologist* that the study has added to our understanding in a number of ways. 'The main claim of the study is that it provides experimental evidence of emotion contagion in a very large social network. The "experimental" part is important here because another paper that was published earlier this year in *PlosOne* [[tinyurl.com/lx42ftl](http://tinyurl.com/lx42ftl)] by Coviello and colleagues – Adam Kramer is an author on both papers – also demonstrated the same phenomenon but it used a naturalistic design to show that the weather affects the emotional content of people's Facebook posts, which in turn affects the emotional content of the friends' posts even when their friends are living in different cities with different weather. The newer study uses an experimental intervention so it can make stronger claims about causality.'

Professor Totterdell, who wrote about emotional contagion in our June 2010 issue ([tinyurl.com/totterd](http://tinyurl.com/totterd)), said the study also showed that emotion contagion can occur non-verbally and does not need expressive mimicry to occur, both of which have been shown in previous studies, that it does not require a social

interaction and that it is sensitive to the amount of emotional content transmitted.

He said: 'For me, this last finding was the most interesting. The authors showed that reducing the emotional content of the events (in this case news events) that people experience made their friends less emotionally expressive. This occurred when both good and bad news was suppressed. It indicates that people's behaviour is very attuned to the emotions of other people in their social world.'

The effects observed, although significant, were small: by the lead author's own admission, 'the result was that people produced an average of one fewer emotional word, per thousand words, over the following week'. But Professor Totterdell said they were still noteworthy: 'Although the effect will be negligible for any individual, it is still reliable when many individuals are involved which means that a societal intervention is possible, and could potentially be enhanced with a stronger manipulation. It does reinforce though that emotion contagion is usually a subtle effect that competes with other influencing factors.'

The study's methodology has also met with some criticism. The software used – the Linguistic Inquiry and Word Count application (LIWC) – works by counting the number of positive or negative words in a status, but cannot pick up negation within a phrase. Therefore, according to John Grohol ([tinyurl.com/kofafzc](http://tinyurl.com/kofafzc)), it would mistakenly rate an update such as 'I am not having a great day' as positive simply because that phrase contains the word 'great'.

But Professor Totterdell feels the methodology is 'crude rather than flawed'. It will misclassify some things and thereby introduce noise into the data, which will also contribute to the small effect size. Sometimes this type of software is supplemented to look for particular word combinations. For

example, when people say "Happy Christmas" it doesn't mean they are happy! I'm sure these techniques will become more sophisticated in future.'

## Was the study ethical?

In response to accusations that Facebook set out to manipulate emotions without specific informed consent from individuals, the social networking site has pointed out that users tick a box on sign-up, which gives permission for Facebook to use their data for 'internal operations', including 'research' (although some have claimed that this clause was only added four months after the study: see [tinyurl.com/ptxoyfk](http://tinyurl.com/ptxoyfk)).

Chair of the British Psychological Society Ethics Committee Professor Kate Bullen (Aberystwyth University) and John Oates, Chair of the Research and Ethics Reference Group, published a letter in *The Guardian* (see [tinyurl.com/ndzbfmc](http://tinyurl.com/ndzbfmc)) which expressed 'serious misgivings' about the study, saying the study

appeared 'to contravene all four principles of research ethics as set out in the Society's code of human research ethics and a recent set of principles agreed by most British learned societies involved in social science research. It infringed the autonomy and dignity of individuals by interfering with the personal decision-making as to the posts that people wished to make to their chosen groups and, most importantly, by failing to gain

valid informed consent from the participants. The scientific value of this study would seem to be low, since there is already a strong body of literature which confirms emotional contagion as a social process. The intervention was socially irresponsible, in that it clandestinely meddled in people's social lives with consequences that are very likely to have had significant negative effects on individuals and groups.'

Some online commentators have pointed out that we are unable to determine whether any minors were included in the study, speculating that this could lead to lawsuits. In addition, the Information Commissioner's Office, a UK regulator, has said it plans to question Facebook over the study. A spokesperson from the office told the *Financial Times* that it was too early to tell what part of the law the social networking site might have infringed.



Leading psychologist Susan Fiske, professor at Princeton University, edited the paper. She told *The Atlantic*: 'It's ethically okay from the regulations perspective, but ethics are kind of social decisions. There's not an absolute answer. And so the level of outrage that appears to be happening suggests that maybe it shouldn't have been done... I'm still thinking about it and I'm a little creeped out too.'

### Facebook is not your friend

So why do many commentators appear to share Professor Fiske's 'creeped out' feeling? Why has the response from Facebook users tended to be one of shock and anger?

New Zealand-based Sarah Gumbley is in the final stages of her PhD researching our relationships with corporations online. Gumbley, who spent a year looking at the Facebook pages of a bank, an airline and a telecommunications company, told BBC Radio 4 programme *The Digital Human* in May (see [tinyurl.com/m2tr9sd](http://tinyurl.com/m2tr9sd)) that many corporations try to echo friendship norms to their users, therefore increasing disappointment when they act in a way users and customers don't expect. 'It's maybe tying in to what Sherry Turkle was talking about when she was writing that people are expecting more from technology and less from their friends.'

Gumbley said that one of the things that surprised her while doing her research was how angry people became with corporations who did not provide them with a good deal or tailored response to their comments: 'People were really angry with the corporate because they felt like they had been betrayed because they saw it as a friend, and when they didn't get a good deal or felt like they were being ripped off they felt like they were being ripped off by a friend.'

Psychologist Dr Ciarán McMahon, Research and Development Co-ordinator at the Royal College of Surgeons in Ireland, told us that one concept at play in the public feeling betrayed by Facebook is what is known as 'telepresence' – which refers to web designers' and developers' efforts to hide the mechanics of the site's delivery from the public. 'They basically aim to engineer our experience of the site to be so flawless that when we interact with it, we psychologically feel like we are in a different place entirely, along with all of our friends and connections. What this research shows is that Facebook is not a neutral, passive or value-free conveyor of information – the wool has been removed

from our eyes about what actually goes on in Facebook.'

Dr McMahon added that he thinks we react with sites such as Facebook in a state of denial or dissonance. He said: 'We know that we have given up a lot of our personal identity to Facebook, but our relationship with it is now so deep and ongoing that if we stopped to think about it for a few minutes, we would be immediately uncomfortable.'

'This is what this study has done – it has forced us to think about how much of our personally identifiable information we have given away, and that makes us feel incompetent in our self-protection. Hence, we repress and deny – in fact, in much of the commentary on this story I have seen lots of projection in statements like "Of course this is happening, how could you not know Facebook is experimenting?".'

### The fallout continues

In an official statement, Facebook said: 'This research was conducted for a single week in 2012 and none of the data used was associated with a specific person's Facebook account. We do research to improve our services and to make the content people see on Facebook as relevant and engaging as possible. A big part of this is understanding how people respond to different types of content, whether it's positive or negative in tone, news from friends, or information from pages they follow. There is no unnecessary collection of people's data in connection with these research initiatives and all data is stored securely.'

Sheryl Sandberg, Facebook's chief operating officer, described the study as 'poorly communicated, and for that communication we apologise. We never meant to upset you.' The journal itself has issued an 'editorial expression of concern'.

As we went to press, the reaction continued (the Society's own Research Digest has collated more links at [tinyurl.com/itea7lc](http://tinyurl.com/itea7lc)), with some psychologists coming to Facebook's defence. For example, in *New Scientist*, Tal Yarkoni wrote: 'If you were to construct a scale of possible motives for manipulating user behaviour – with the global betterment of society at one end, and something really bad at the other end – I submit that conducting basic scientific research would almost certainly be much closer to the former than other standard motives we find on the web... If the idea that Facebook would actively try to manipulate your behaviour bothers you, you should probably stop reading this right now and go and close your account.'

## FUNDING NEWS

The **Medical Research Council** invites applications from neuropsychologists for its new investigator research grants in neurosciences and mental health. These provide support for clinical and non-clinical researchers while they are establishing themselves as independent principal investigators. Applicants must hold a PhD, DPhil or an MD, have between three and ten years postdoctoral research experience and should be in their first lecturer appointment, hold a junior fellowship or be in a senior postdoctoral position. Closing date: 1 October 2014.

| [tinyurl.com/mwo3n55](http://tinyurl.com/mwo3n55)

The **Leverhulme Trust** invites proposals for its research programme grant on innovation for sustainable living, which includes psychology and determining the drivers of behaviour change. Applications are invited from UK universities, other institutions of higher and further education and registered charities. The scheme is also open to institutions of similar status in countries where the provision of research funding is seriously limited. Closing date: 3 October 2014.

| [tinyurl.com/35dhttl](http://tinyurl.com/35dhttl)

The **British Federation of Women Graduates** invites applications for its emergency grants. These aim to support female graduate students who are faced with unforeseen financial circumstances that might prevent the completion of their year's work. Grants are one-off payments and are unlikely to exceed £2500. Closing date: 6 October 2014.

| [www.fwfg.org.uk](http://www.fwfg.org.uk)

The **Feminist Review Trust** invites applications for its research grants from feminist scholars. The award is designed to support activities such as hard-to-fund projects; pump-priming activities; interventionist projects that support feminist values; training and development projects and one-off events. The Trust is normally unable to support MA, MSc or PhD students, with the exception of scholars from developing economies in exceptional circumstances. The maximum award amount is £10,000. Deadline for the next round of applications: 30 September 2014.

| [tinyurl.com/cgs68v](http://tinyurl.com/cgs68v)

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For BPS awards and grant schemes, see [www.bps.org.uk/awards&grants](http://www.bps.org.uk/awards&grants). Funding bodies should e-mail news to Emma Smith on [emma.smith@bps.org.uk](mailto:emma.smith@bps.org.uk) for possible inclusion.

# Recognising the lawbreakers

A University of Greenwich psychologist who identified police officers with a special talent for face recognition (see 'I never forget a face', October 2013) is now hoping to develop a more effective 'super-recogniser' test.

The endeavour is part of the €8.5 million Large Scale Information Exploitation of Forensic Data project, which will also see the development of software, in conjunction with the Metropolitan Police, to automate the process of analysing CCTV, giving police the ability to track suspects across multiple video feeds after a crime has been committed. Once the software and super-recogniser tests are complete it could be rolled out to other forces in the UK as a complete package.

The 'super-recogniser' programme was developed after Dr Josh Davis identified that many officers who were making multiple identifications from CCTV possessed exceptional face-recognition talents and advised the Metropolitan Police that there were probably up to 200 additional, but at the time unidentified officers also possessing this level of ability.

Dr Davis, a senior lecturer in the university's Department of Psychology, Social Work and Counselling, helped the police

identify a team of officers whose face-recognition abilities were far more accurate than controls, who then reviewed over 200,000 hours of footage from CCTV and other cameras taken during the 2011 London riots.

Dr Davis said: 'Out of approximately 5000 published images of the riots, the Met super-recognisers were responsible for identifying one third of the offenders. One super-recogniser Met officer identified 180 people who were subsequently arrested and charged – a tremendous success rate.'

As part of the LASIE project, Dr Davis is now creating in-depth tests which will identify super-recognisers among new police recruits. 'There are clinical tests for assessing people who have poor face-recognition abilities – prosopagnosia or face blindness – which is often the result of a brain injury. I am building on these tests, so that the Met can grade the face recognition skills of new officers,' he said.

'It is not something people can be taught – although we do



# Evaluating nudge techniques

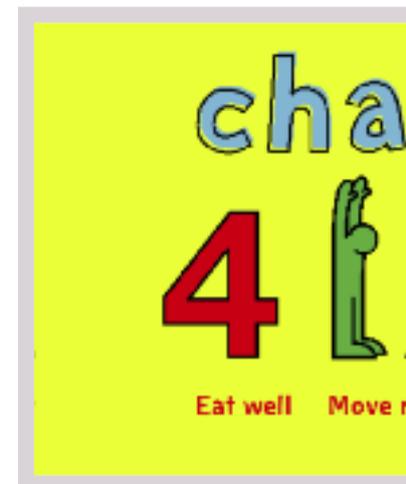
The House of Lords Science and Technology Committee has held sessions of evidence to hear follow-up information to the 2011 Behaviour Change Inquiry. The original inquiry looked into how policy interventions and 'nudge' techniques could affect change

among the population (the Society contributed: see [tinyurl.com/o8q9tzw](http://tinyurl.com/o8q9tzw)).

Oliver Letwin MP, Minister for Government Policy, was among those to speak about the effectiveness of the work of government so far. He told the select committee that

behaviour change had become one of the best-evaluated sectors in government, and that although they were at 'a low point in the foothills of trying to evaluate the effectiveness of any government action... the behavioural change programme is much better evaluated and much better documented and analysed than any other'.

Owain Service, Managing Director of the Behavioural Insights Team, said they had pioneered the use of randomised control trials to test the efficacy of new interventions. He gave some examples of departments where nudge techniques had been used: 'We have now run tens of different randomised control trials to test the efficacy of using, for example, different messages in letters,' he said. 'HMRC estimates now that these trials alone in one area of HMRC have helped to bring forward about £200 million in revenue to the Exchequer. They include things like using social norms



to encourage people to pay their tax on time. So we now know for example that telling people that nine out of ten people pay their tax on time encourages more people to pay their tax on time.'

Behaviour change departments have also been involved with attempting to encourage people to eat more healthily in the face of high levels of obesity in the UK. In one session of evidence it emerged that the Change4Life initiative, which was aimed at encouraging families to eat more healthily and exercise more, had been effective in increasing awareness of such

## NEUROSCIENCE PRIZE

The 2014 Kavli Prize in Neuroscience, awarded by the Norwegian Academy of Science and Letters, has been jointly won by scientists from the UK, Canada and the USA.

John O'Keefe (UCL) and Brenda Milner (McGill University, Montreal), who are both Fellows of the Royal Society, and Marcus E. Raichle (Washington University, St Louis, Missouri) have been awarded the prize for 'the discovery of specialized brain networks for memory and cognition'.

Brenda Milner, famous for her research with amnesic

patient HM, researches cognitive function in the frontal and temporal lobes of humans and uses MRI to identify the brain regions involved in language processing. John O'Keefe's research focuses on the neural basis of cognition and memory and the function of the hippocampus and related temporal lobe structures in the human brain. Marcus Raichle is well known for his pioneering work in the use of functional imaging techniques.

The prize includes an award of \$1 million shared between the three joint winners. **ER**



hope that further research will identify the parts of the brain that are active in face recognition, which will contribute to our understanding of the cognitive processes involved.'

Dr Davis said the availability and quantity of CCTV and video evidence from scenes of crime is growing rapidly and is now an essential source of evidence for police officers seeking to track down offenders in large-scale events. People

arrested on suspicion of committing an offence are highly likely to admit their guilt after seeing themselves on video.

'An important part of LASIE is seeing how far analysis of film and images, often of very variable quality and from many different angles, can be automated,' he added. 'There is facial recognition software available but currently it has to have a receptive, non-moving participant, in a set position in a dedicated environment, for a certain period of time. That is not what happens in real-life situations and at large-scale, fast-moving crime scenes.' **ER**



issues but not changing behaviour in a majority of families.

Lord Krebs, chairman of the committee, said in terms of obesity, there were gaps in the evaluation of behaviour change techniques that had been used. In response to this criticism, Jamie Rentoul, Director of Health and Wellbeing, at the Department of Health, said: 'It is a question of the time some of these take to have effect. There is an information, education and awareness issue, and a willingness to change behaviour issue.'

In the original inquiry the

committee asked how the government might encourage the population to shift their forms of transport from cars towards cycling, walking or using public transport. Deirdre O'Reilly Head of Social Research and Evaluation at the Department for Transport said over the last three years there had not been much change in the public's transport choices. 'We would not expect to be able to see at the national level a big change in modal shift because quite a lot of the interventions and investments have been small and/or; very targeted at local areas.'

At this year's Annual Conference the British Psychological Society's Behaviour Change Advisory Group launched a range of briefing documents on what psychology can offer to the field, including around the topics of school attendance, personal debt, tax compliance and engaging in more exercise (see [www.bps.org.uk/behaviourchange](http://www.bps.org.uk/behaviourchange)). **ER**

## Impacting on crowd control

Dr Clifford Stott (University of Leeds) has been given a Celebrating Impact award by the Economic and Social Research Council (ESRC) for the influence his research has had on how the police deal with crowds.

Building on his initial ESRC-funded PhD research, Dr Stott and his colleagues developed a model of crowd conflict, which police forces in the UK used to reform their strategy and practices with the aim of reducing clashes within crowds.

His research showed that heavy-handed policing could actually provoke crowd conflict, but there was initially some resistance in policy circles to the idea that police were in some way responsible for the production of disorder.

Dr Stott's research provided evidence that crowds can be managed more effectively when the police concentrate on enabling lawful behaviour – such as protests – rather than merely trying to control criminal behaviour through fear and force.

His ideas now permeate police training and policy, and have led to the recent introduction of new police liaison units designed to avoid conflict through dialogue. **ER**



## How to learn

Developments in neuroscience should be used to inform education and the understanding of learning and teaching, according to Learnus, a new think tank for learning skills research.

Learnus has called for a better approach in developing educational neuroscience in the UK with the eventual aim of creating a UK-wide network of educational neuroscience. In a pamphlet, it cited the recommendations of previous inquiries in the area, including the 2011 Brain Waves report published by the Royal Society, which pointed out the potential for neuroscience in guiding public policy. Learnus suggested that research and evidence published in journals should be translated to improve educational practices and that, similarly, research should be better informed by practice itself.

Chris Green, chair of

Learning Skills Research, the charity that set up Learnus, said, 'We have a simple dictum, *how* to learn is every bit as important as *what* to learn. We believe that it is important to understand the underlying processes of how brains encode learning of new information and concepts. Given an appropriate choice of learning techniques, every child could and should enjoy greater success in the learning environment and go on to lead a fuller life and make a more valuable contribution to our society. The government has recently announced that it is committed to raising the standards of literacy and mathematics amongst primary school leavers. If this is to be achieved, it is absolutely vital that it understands that children learn in different ways and that our education system must accommodate this fact.' **ER**

# How burnt-out students could be skewing research

It's well known that psychology research relies too heavily on student volunteers. So many findings are assumed to apply to people in general, when they could be a quirk unique to undergraduates. Now Michael Nicholls and his colleagues have drawn attention to another problem with relying on student participants – those who volunteer late in their university term or semester lack

motivation and tend to perform worse than those who volunteer early.

A little background about student research participants. Psychology students often volunteer for numerous studies throughout a semester [see [tinyurl.com/qfs7ojr](http://tinyurl.com/qfs7ojr) and [tinyurl.com/prb7m6g](http://tinyurl.com/prb7m6g)]. Usually, they're compelled to do this at least once in return for course credits that count towards their degree. Other times they receive cash or other forms of compensation. When in the semester they opt to volunteer for course credit is usually down to their discretion. To over-generalise, conscientious students tend to volunteer early in semester, whereas less disciplined students leave it until last minute, when time is short and deadlines are pressing.

Nicholls team first recruited 40 student participants (18 men) at Flinders University during the third week of a 14-week semester. Half of them were first years who'd chosen to volunteer early in return for course credits. The other half of the participants, who hailed from various year groups, had chosen the option to receive \$10 compensation. The challenge for both groups of students was the same – to perform 360 trials of a sustained attention task. Each trial they had to press a button as fast as possible if they saw any number between 1 and 9, except for the number 3, in which case they were to withhold responding.

At this early stage of the semester there was no difference in the performance (based on speed and accuracy) of the students who volunteered for course credit or for money.

There was also no difference in their motivation levels, as revealed in a questionnaire.

Later in the semester, between weeks 9 to 12, the researchers repeated the exercise, with 20 more students who had enrolled for course credit and 20 more who had applied to participate in return for cash compensation. Now the researchers found a difference between the groups. Those participants receiving financial payment outperformed those who had volunteered in return for course credit. The latter group also showed more variability in their performance than their course-credit counterparts had done at the start of the semester, and they reported having lower motivation.

These results suggest that students who wait to volunteer for course credit until late in the semester lack motivation and their performance suffers as a result. Nicholls and his colleagues explained that their findings have serious implications for experimental design. 'A lack of motivation and/or poorer performance may introduce noise into the data and obscure effects that may have been significant otherwise. Such effects become particularly problematic when experiments are conducted at different times of semester and the results are compared.'

One possible solution for researchers planning to compare findings across experiments conducted at different ends of a semester, is to ensure that they only test paid participants. Unlike participants who are volunteering for course credit, those who are paid seem to have consistent performance and motivation across the semester.



In the *Quarterly Journal of Experimental Psychology*



## Trusting to the letter

In the *British Journal of Developmental Psychology*

As adults, we've learned that simple text-based instructions are usually trustworthy. If a stranger tells us to turn next left for London, but we see a street sign that states the opposite, most of us would assume the stranger had made a mistake, and we'd follow the sign. Now researchers led by Kathleen Corriveau have investigated children's trust in instructions delivered orally, versus those originating in written text. Their finding is that as soon as children have rudimentary reading skills, they trust written text over spoken instruction.

The research involved two differently coloured tubes leading to a cup beneath. One tube was always blocked. Dozens of children aged three to six had to decide in which tube to place a marble, in the hope it would reach the cup beneath, so that they would earn a sticker.

To help them, the children received instructions from two puppets. On each trial, one puppet simply spoke their instruction (e.g. 'I say blue. Choose the blue tube') whereas the other puppet opened an envelope in which was written the colour of the other tube (e.g. 'This says red. Choose the red one'). The children didn't get feedback on their performance until the end of the study, so they couldn't use results to judge which puppet to trust.

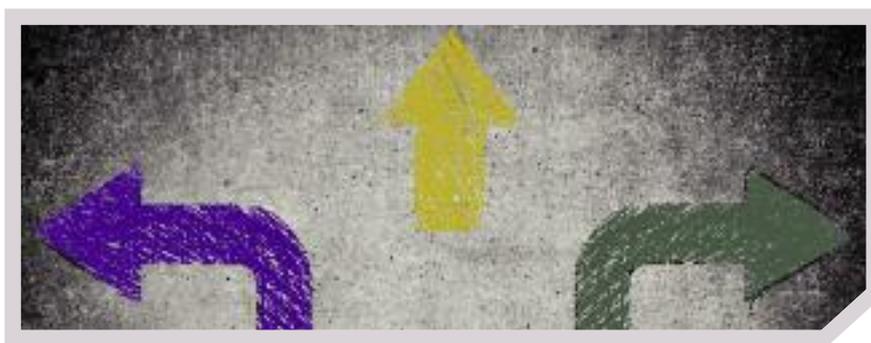
Regardless of age, the children who couldn't yet read were indiscriminate in whether they chose to trust the purely oral advice, or whether to trust



the puppet who read the text instruction. By contrast, the children with some reading ability showed a clear preference to trust the puppet who read from the envelope, choosing the tube they recommended over 75 per cent of the time.

Two further studies cleared up some ambiguities. For instance, it was found that young readers prefer to trust a puppet who reads the instruction from text, than oral advice from a puppet who gets their information from a whisper in the ear: the young readers weren't simply swayed by the fact the text puppet was drawing on a secondary source. Young readers also trusted instruction from written text over information conveyed in a coloured symbol. This shows they're specifically trusting of written text, not just any form of permanent, external information.

Corriveau's team said their results showed that once children learn to read, 'they rapidly come to regard the written word as a particularly authoritative source of information about how to act in the world'. They added that in some ways this result is difficult to explain. Young readers are exposed to a good deal of fantasy and fiction in written form, so why should they be so trusting of written instruction? Perhaps they are used to seeing adults act on the basis of written information – such as maps, menus and recipes – but then again, pre-readers will also have had such experiences. Is there something special about the process of learning to read that leads children to perceive written instruction as authoritative?



## Who will benefit from cognitive behavioural therapy?

*In the Journal of Clinical Psychology*

The rise of CBT has been welcomed by many as a safe, effective alternative to drug treatments for mental illness. However, there are also fears that CBT has crowded out other less structured, more time-consuming forms of psychotherapy.

The fact is, CBT doesn't work for everyone. Precious resources could be better managed, and alternative approaches sensibly considered, if there were a way to predict in advance those patients who are likely to benefit from CBT, and those who are not.

Jesse Renaud and her colleagues administered a 10-item scale – the Suitability for Short-term Cognitive Therapy, first devised in the 1990s – to patients who underwent CBT for depression or anxiety at the McGill University Health Centre between 2001 and 2011. The researchers focused their analysis on the 256 patients (88 men) who completed their course of therapy, which lasted an average of 19 sessions.

Renaud's team looked for correlations between patients' answers to the Suitability scale and found that the scale was really tapping two main factors – the patients' capacity for participation in the CBT process, and their attitudes towards CBT.

The first factor includes a patient's insight into thoughts that pop into their heads (so-called 'automatic thoughts'); their ability to identify and distinguish their emotions; and their use of safety behaviours to cope with their problems (e.g.

avoiding parties to cope with social anxiety). In other words, the researchers explained, this is the patient's 'ability to identify thoughts and feelings, and share them in a non-defensive, focused way'. The second 'attitudes' factor refers to, among other things, the patient's optimism about the outcome of therapy, and their acceptance that they must take responsibility for change.

The higher patients' scored on the first factor (their capacity for participation in CBT), the greater reduction they tended to show in their illness symptoms, based on measures taken before and after the course of CBT. Attitudes towards therapy were not correlated with symptom reductions, but we should bear in mind that this may be because the research focused only on those patients who completed therapy. Also, it may be useful in future to measure how patients' attitudes change during therapy.

There are other reasons for caution. The amount of variance in symptom change explained by both suitability factors combined was statistically significant, but tiny – just .07 per cent. Also, the therapists who administered the therapy also recorded their patients' improvements, so there was scope for bias. Finally, more research is needed on different forms of mental illness besides depression and anxiety. Nonetheless, this study makes a constructive contribution to a neglected area.

'Given that the patient's capacity provides important information about whether or not a patient will derive benefit from CBT, clinicians who are concerned about limited resources and long wait lists are encouraged to undertake a suitability assessment prior to therapy,' the researchers said, 'to identify patients low in their General Capacity to Participate... and consider making referrals to alternative treatments.'



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