

Concern for psychology as cuts bite

The impact of the government's Comprehensive Spending Review is beginning to bite across the discipline: in teaching, research and practice.

In higher education, the Faculty of Social Sciences at the Open University has announced that it is suspending new admissions to its postgraduate programme from September. A statement on the Faculty's website says the decision is part of a review of postgraduate provision in response to the publication of the Browne Review (an independent review of higher education funding and student finance) and changes to the funding of higher education announced in the coalition's Comprehensive Spending Review. In an e-mailed statement the university told us that a new programme of postgraduate social sciences modules and qualifications has received academic approval by the university but is under review following publication of the Browne report. 'When this review is complete the future of the new postgraduate programme for social sciences will be announced. This is likely to be after April 2011,' they said.

Meanwhile, the Training and Development Agency for Schools has cut PGCE psychology places by 50 per cent

and slashed the bursary to nil. Karen Duffy, a senior lecturer for the Psychology PGCE at Manchester Metropolitan University, said: 'The PGCE community are exceptionally concerned about what impact this will have on the quality of psychology teaching in the future. We as a community fought hard to achieve the status we have currently, only to have this taken away a year later.'

In other disappointing news for psychology, the Biotechnology and Biological Sciences Research Council (BBSRC), one of the UK's seven main Research Councils, announced in January that it is planning to prioritise funding in other areas. 'Grant applications in the area of neuroscience, human psychology and animal behaviour currently account for 13 per cent or more of the demand at most rounds...' a web statement says. 'BBSRC has decided that this represents investment of too great a proportion of its grant funds in one area, and

it will seek to focus its overall grant commitment to neuroscience in the future, through greater concentration of neuroscience funding to the new strategic priority areas: ... [including] health, nutrition and welfare in farm animals (including animal disease); diet, exercise, ageing and other aspects of healthy human function.'

How is the picture looking for practitioners? Peter Kinderman, Chair of



NOT SO SURE START?

Government cuts could see 60,000 families lose their local Sure Start centre, according to a new study by the families charity 4Children and the Daycare Trust.

Around 250 Sure Start centres are expected to close, 2000 will provide a reduced service and 3100 will have a smaller budget. The study came as the government's response to the Fifth Report from the Children, Schools and Families Committee was published (see tinyurl.com/6enaleo). According to the response, 'The Government recognises the importance of children's centres and believes they have huge potential as they bring together services in new and innovative ways.' Directing funding through a new Early Intervention Grant 'will give Local Authorities

greater flexibility to make funding decisions based upon the needs of their communities. We have ensured there is enough money in the Early Intervention Grant to maintain the existing network of Sure Start Children's Centres, accessible to all but identifying and supporting the most vulnerable and disadvantaged families. Important new investment through Department of Health budgets to provide 4,200 extra health visitors, working alongside outreach and family support workers, will enable stronger links with local health services.'

However, Dr Christopher Arnold (Senior Educational Psychologist with Sandwell Inclusion Support Service) told *The Psychologist*: 'Grant funding may not be very successful in building sustainable services. Grants are often time limited and the contracts for staff are for fixed terms. When staff see

a "permanent" post in a different place, they go for it. Grant-funded initiatives may be good for providing posts for temporary staff, but they may not be so attractive for more experienced practitioners.'

Arnold says that 'as an educational psychologist, I have used [Sure Start] Children's Centres to coordinate responses to vulnerable children in a way which would have been impossible a decade ago. They have links with a wide range of professionals in a user-friendly environment allowing quick and easy access to services.'

The anxiety often felt by families around child development centres and hospitals is rare in Children's Centres, according to Arnold. 'Psychologists working with



the Society's Division of Clinical Psychology, told *The Psychologist*: 'The issue of "cuts" in services is an interesting one. On the one hand we've seen the news reports and we've heard the King's Fund forecast. We've heard managers discussing possible cuts and apparent restructuring. On the other hand, we have increased investment in mental health and specifically psychological perspectives.'

However, some have questioned this increased investment, with David Richards (national adviser to the Department of Health's Improving Access to Psychological Therapies programme) sacked in February for questioning in *The Guardian* whether the money was new or came from the existing NHS budget. In a letter to the newspaper following his removal, Richards said his comments and sacking resulted from his frustrated efforts to get

an answer to three important questions. He wanted to know to what extent the money would come from cuts elsewhere in the budget; what mechanisms there were to ensure every penny was spent on training and therapy; and what systems had been put in place to ensure existing funds were not slashed as NHS cuts bit. 'The questions are not a matter of mere detail,' Richards writes, 'but of vital import for the many thousands of people trapped in a cycle of untreated misery and fear.'

In terms of how funding changes are likely to affect service users and the wider public, Kinderman told *The Psychologist*: 'That depends, in part, on your political views. Will it mean radically liberated, effective, efficient new third-sector organisations being commissioned by innovative new commissioners to deliver a cross-agency mental health strategy focusing on a psychosocial approach? Or will it mean that deprived and expired individuals will be thrown to the vagaries of a capitalist healthcare market where medical GPs sequester limited monies away from mental health and the Big Society degenerates into prejudice and isolation?' JS/CJ



CAMPAIGN FOR SOCIAL SCIENCE

The Academy of Social Sciences has launched a 'Campaign for Social Science' to promote UK social science and raise its visibility in the public, media and Parliament. The campaign will also investigate the results of any shrinkage in social science capacity as a result of changes to funding of teaching and research budgets. The stated long-term goal is 'for social science to be widely understood as an essential ingredient of our wellbeing as a society.'

'To deliver this Campaign successfully we need to raise funds to cover research and public engagement for a five-year period,' states the campaign website at www.campaignforsocialscience.org.uk. 'To achieve this goal an associated development Appeal will seek to raise £250,000 from the social science community in the initial stages of the Campaign.'

Speaking on the website, Chair of the Academy of Social Sciences and psychologist Professor Cary Cooper said: 'It's important that we protect our social sciences... we need your support, this is a very important campaign. You can make a difference, we can make a difference, we can make a difference to the whole of society.' JS

APA honours UK psychologists

early years professionals value the ease with which most families approach CCs. Their closure would increase the barriers for families to access psychological services, reduce the effectiveness of psychologist's work and increase the difficulty of supporting children in the early years.'

Edward Melhuish, Professor of Human Development at Birkbeck, University of London, and Executive Director for the National Evaluation of Sure Start, told us: 'How closures will work out will depend almost entirely on how local authorities choose to distribute cuts. It is unclear to me what picture is at the moment.' JS

Two British psychologists based at the University of Cambridge have jointly received the 2011 Distinguished Scientific Contribution Award from the American Psychological Association (APA). Professors Trevor Robbins, an Associate Fellow of the British Psychological Society, and Barry Everitt have collaborated since 1980, investigating the neuropsychological mechanisms underlying drug addiction. Current interests of theirs include research on cognitive enhancers (drugs that improve aspects of mental function for healthy people as well as patients), and disrupting maladaptive drug-



related memories as a way to reduce drug seeking and relapse.

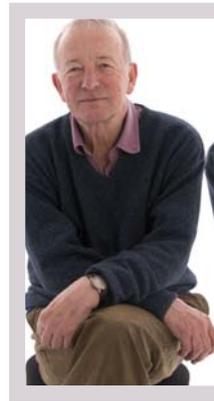
'We are both delighted to have received this prestigious international award, especially as relatively few psychologists from the UK have been previous recipients,' Robbins and Everitt said. 'It perhaps acknowledges some of the strengths of British psychology, particularly in the domains of behavioural and cognitive neuroscience, which we are proud to represent.'

The pair have benefited from Medical Research Council and Wellcome Trust funding, as well as from organisational changes at their

host institution. 'We were originally based in two different university departments,' they explained, 'but a university initiative and developments such as the Behavioural and Clinical Neuroscience Institute as well as more recently, Cambridge Neuroscience, have undoubtedly facilitated this research collaboration.'

Robbins and Everitt will collect their award at the APA's annual convention in August, to be held in Washington DC, where they've also both been invited to deliver plenary lectures. The last British psychologist to win this prestigious award was Professor Alan Baddeley of the University of York in 2001, for his research into human memory. CJ

Adding to the cognitive toolkit



The website Edge.org has posed its latest annual question to the world's intelligentsia. This year, not only did many psychologists provide answers, as typically happens, but a psychologist – Steven Pinker – also posed the question: What scientific concept would improve everybody's cognitive toolkit?

Positive-sum games was Pinker's own answer. This is the game theory concept in which everyone wins, such as when 'herders and farmers exchange wool and milk for grain and fruit.' The opposite, zero-sum games, is when each participant only gains at the expense of another party. Pinker thinks that good can come from people reframing their dealings with others into positive-sum games. He wonders if such a shift has happened on the international stage in recent decades, as wars have become rarer and free trade has increased.

Sadly, contributions from British

psychologists were few and far between. Two exceptions were Nicholas Humphrey at LSE and Sue Blackmore, an Edge regular. Humphrey highlighted the 'multiverse' – the idea that every possible permutation of our own universe exists in parallel with this one. That includes a version in which we live for ever, dodging every bullet and evading every virus. Having got that far, Humphrey asked, should we mourn our alter-egos who fell by the wayside? '...no more than we do now,' he said. 'We are already, as individuals, statistically so improbable as to be a seeming miracle. Having made it so far, shouldn't we look forward to more of the same?'

Among the most high-profile psychologists to contribute were Nobel-winner Daniel Kahneman and Yale psychologist Paul Bloom. Kahneman chose the focusing illusion, the notion that 'nothing in life is as important as

you think it is, while you are thinking about it'.

This cognitive habit explains why paraplegics are not as unhappy as many people expect them to be. 'When we think of what it is like to be a paraplegic, or blind, or a lottery winner, or a resident of California we focus on the distinctive aspects of each of these conditions,' Kahneman explained. 'The mismatch in the allocation of attention between thinking about a life condition and actually living it is the cause of the focusing illusion.'

Meanwhile Bloom chose reason, especially as practised by science. '[S]cience includes procedures,' Bloom said, 'such as replicable experiments and open debate – that cultivate the capacity for human reason.' In defiance of human irrationality and mindbugs, '[s]cientists

Report urges early intervention policies

The Labour MP Graham Allen has delivered his government-commissioned, independent review of early intervention. Early intervention is a preventative philosophy – the idea is to provide infants, young children and their parents with appropriate support, such that social and emotional problems are averted or are dealt with before becoming entrenched.

Allen's review draws heavily on social and developmental psychology research,

describing, for example: how an unhappy, unresponsive adult carer can impede an infant's development; that children who develop an insecure attachment style are at increased risk of health and behavioural problems in adulthood, including substance abuse; and that the greatest harm from neglect occurs during the first 18 months of life. 'Unless and until we recognise the way major problems are formed early in people's lives,' the review says, 'no amount of well-intentioned policy or initiatives will succeed in reducing them.'

The review's main recommendation is for the establishment of an independent Early Intervention Foundation to oversee and source funding for the roll-out of evidence-based policies and practices among an initial 15 'Early Intervention Places' – these are local authorities that have shown themselves to be best placed in terms of experience and innovation to promote early intervention in their locality. Examples cited in the review include the Family Recovery Programme in Westminster, and the early intervention approaches in Nottingham and Melton, Leicestershire.

Another of the review's chapters lists 72 specific early intervention programmes

according to the levels of evidence supporting their effectiveness. Of these, 19 make a top list (to which more can be added as evidence is accrued), including: Curiosity for All; Incredible Years; Nurse Family Partnership; Ready, Set, Leap!; and Safer Choices.

A further proposal in the review, which may prove more controversial, is for school 'year groups' and assessments to begin from pregnancy onwards, rather than starting at school. 'To support this recommendation,' the review says, 'it is important that everyone with responsibilities for child development, particularly parents, understands how the 0–18 health and educational cycle is continuous from birth and does not start on entry to primary school.'

Responding to the review, Sarah Teather, the children's minister, restated the government's commitment to improving support for families from all backgrounds. 'I will work with my colleagues across government to consider Graham's findings,' she said. Shadow education secretary Andy Burnham told the media that he welcomed the review, but he raised concerns about cuts to existing services. **CJ**

I Read the review at tinyurl.com/649yhcf

CAFÉ PSYCHOLOGIQUE

The country's first regular Café Psychologique, held in Leeds in January, was a sell-out. The Seven Arts venue in Chapel Allerton hosted 127 people for an evening of discussion about relationships, adolescence and financial advisers. Special guest was Dr Mark Willis, family therapist.

According to its Facebook page (tinyurl.com/6c9tsum), 'Café Psychologique allows you to think about life from a psychological and therapeutic perspective in good company, in an everyday environment'. The Leeds Café Psychologique is hosted by Chris Powell, a group analyst. There is a small admittance fee.



Nicholas Humphrey and the multiverse

can reject common wisdom, they can be persuaded by data and argument to change their mind'. In our struggle with moral, political and social problems it is science itself, therefore, that people need to add to their cognitive toolkit, Bloom argued.

This was a theme picked up by Mark Henderson, science editor of *The Times*, one of several non-psychologist British contributors (others included Richard Dawkins and Roger Highfield, editor of

New Scientist). Science, Henderson explained, is more than an accumulation of knowledge and the technology that flows from that, it is also way of thinking: 'the best approach yet devised (if still an imperfect one) to discovering progressively better approximations of how things really are.'

Politicians and civil servants could benefit from deploying the tools of science in the design of effective policies, Henderson argued. Educators, courts and probation services could improve their methods if they drew on that mainstay of science – the randomised controlled trial. 'The scientific method and the approach to critical thinking it promotes are too useful to be kept back for "science" alone,' Henderson said. **CJ**

ECT risk reconsidered

The United States Food and Drug Administration (FDA) was due to hold an advisory committee meeting in January, to consider downgrading the risk category for electroconvulsive therapy (ECT). The procedure involves an anaesthetised patient receiving an electric current through their brain, which induces a seizure. Despite opposition from patient advocacy groups and some psychologists, the procedure remains popular among US psychiatrists, especially for patients with severe depression or schizophrenia who have shown no benefit from other treatments.

The American Psychiatric Association (APA) is lobbying for the risk level to be relaxed. 'The safety of ECT when properly administered is well documented in the scientific literature and its

effectiveness in treating severe mental illnesses is recognized by the American Psychiatric Association, the American Medical Association, and others in the United States and many other countries,' the organisation claimed in an earlier statement. The *New York Times* reported in January that APA medical director and chief executive James Scully Jr. had also written personally to the FDA, claiming that ECT is effective 80 per cent of the time, and that there's no evidence that it causes brain damage.

This view runs entirely contrary to evidence published in timely fashion by two clinical psychologists late last year in the journal *Epidemiologia e Psichiatria Sociale* (tinyurl.com/5tktsgh), and submitted to the FDA hearing. British Psychological Society Fellow Richard Bentall of

the University of Bangor and John Read of the University of Auckland reviewed the findings from all studies over the last 60 years that compared ECT for depression or schizophrenia against a placebo control procedure. From the eight meta-analyses they located, Bentall and Read concluded that the benefits of ECT, in the rare cases they arise, are minimal, short-lived and come with the significant risk of memory impairment and a slight risk of death.

Peter Kinderman, chair of the Society's Division of Clinical Psychology, welcomed the review. 'Psychologists have long expressed serious reservations about the use of ECT, and this paper supports that position. People have a fundamental right to be protected from inhumane or degrading treatment.' **CJ**

FUNDING NEWS

Application forms will be available from 1 March for the **NIHR Applied Health Research on Dementia** call. This call supports the NIHR response to the 'Living Well with Dementia – A National Dementia Strategy' and also supports the work of the Ministerial Advisory Group on Dementia Research (MAGDR). Applications should be made considering the reports of the MAGDR subgroups (available in late March), particularly in relation to topic priorities and better ways of working. Funding will be provided by seven of the NIHR research programmes. Multidisciplinary and cross-professional collaborations are particularly encouraged. Closing date is 20 May 2011. **| tinyurl.com/66k6r7x**

Marie Curie Cancer Care Research Programme provides funding for high-quality research with the potential to **improve end-of-life care**, in the following areas:

- | exploring the variation of care at the end of life across the UK
 - | measuring outcomes
 - | controlling symptoms in the last year of life.
- Closing date for applications is 8 April 2011. **| <http://bit.ly/ePLtTB>**

The NETSCC Public Health Research Programme has calls for proposals on **health promotion programmes delivered by, or in association with, professional football clubs, outdoor community activity programmes, and parenting support programmes**. The closing date for applications is 3 May 2011. **| <http://bit.ly/4TE1y6>**

The AXA Research Fund project themes for 2011 are **life risks** – including addictions and at-risk behaviour, **socio-economic risks** – including corporate risks and **environmental risks** – including climate change. Innovative applications are being sought. The closing date for applications is 23 May 2011. **| <http://tinyurl.com/5r9w95h>**

The British Academy and the Royal Society are offering **Newton International Fellowships**, offering **international researchers funding to work for two years within a UK research institution**. They provide grants of £24,000 per annum to cover subsistence and £8000 to cover research expenses. Closing date is 4 April 2011. **| www.newtonfellowships.org**

info

For more, see **www.bps.org.uk/funds**
Funding bodies should e-mail news to Elizabeth Beech on **elibee@bps.org.uk** for possible inclusion

IN BRIEF FROM THE DIVISION OF OCCUPATIONAL PSYCHOLOGY

Speaking in the Professional Forum 'Dons and suits: The relationship between science and practice, and why it really matters to the future of occupational psychology', Fiona Patterson (Work Psychology Group Ltd) described the 'science-practice divide' as 'non-existent, an absolute red herring'. She did, however, see differences between occupational psychology and medicine in how the two disciplines managed the relationship between science and practice. She pointed to medics' hunger for knowledge acquisition and sharing; the fact that clinicians seek to publish in top journals, which are read by the whole community; less focus on competition for business; more prestige of the Royal Colleges; and a major emphasis on CPD and revalidation.

Amid much talk of the science-practice divide in the main rooms, it was heartening to hear plenty of concrete examples of industry-university research linkages in the fringe sessions. For example, Jan Francis-Smythe's team from the University of Worcester spoke of formal, structured partnerships with Hereford and Worcester Fire and Police Services, stretching back to 1997. Memoranda of understanding, core groups of senior personnel, scheduled regular meets and annual student prizes have all served to ensure regular outputs and good publicity for both sides. Practical outcomes include changes to the training of special constables.

As budgets tighten, an increasingly popular organisational strategy is to outsource staff to a third-party provider. For workers this means a compulsory switch to a new employer, often whilst working in the same building. Stephanie Morgan (see also p.182) and Lindsey Symes discussed semi-structured interviews they've conducted with people who've experienced this first hand, many of whom described a feeling of violation, a sense that their psychological contract with their employer had been breached. Others felt alienated, belonging neither to their old or new employers. Symes and Morgan said such reactions will doubtless affect staff performance and well-being.

An intense two-day intervention designed for the senior team at the UK's Joint Helicopter Command (JHC) demonstrated the feasibility and benefit of drawing on multiple occupational psychologists whose work is grounded in different theoretical orientations. The programme, said Wing Commander Martin Horton of the UK's Defence Academy, involved collaboration between internal and external consultants and drew on social identity theory, social network analysis (using sociomapping), personality psychology and theories relevant to structural dynamics and creative tension. The main remit was to help the JHC senior command prepare for the upheaval likely to emerge from the Strategic Defence Review.

The high-street fashion chain New Look has come to recognise the hugely important role played by front-end sales staff in presenting the New Look brand to the buying public. What the expanding company needs is a sifting tool to filter the thousands of applicants to this role. Amanda Callen (New Look) and Laura Hedley (OPC Assessment Ltd) described their efforts developing a tailored 66-item form that will save store managers' time, improve role fit and increase customers' experience of the company's brand values. Initial trials show that existing employees' scores on the form correlate with managers' ratings of their role fit. New Look plan to roll the sifting form out globally.

Judging our capacity to change

Organisational psychology is labouring under the illusion that people can be changed easily. That was Timothy Judge's (University of Notre Dame) message in a polemical keynote at the Division of Occupational Psychology's Annual Conference in Stratford, in which he argued the case for the power of nature over nurture.

Whether it's rates of desirable behaviours, like eating a healthy diet, or frowned-upon activities, like drug use and crime, Judge said dozens of studies featuring tens of thousands of twin pairs had shown the dominant influence of genetic inheritance over environmental factors.

Take people's body-mass index (BMI): a 2008 study of 10,556 Finnish twins found that shared genes accounted for 81 per cent of the variance in BMI, compared with just 5.5 per cent of shared environmental factors. Or consider aggressive antisocial behaviour: a Swedish study of 1480 twin pairs found that shared genes accounted for 60 per cent of the variance in these behaviours compared with a 15 per cent contribution from shared environmental factors.

'The ratio of genes explaining behaviour to the environment explaining behaviour isn't just somewhat stronger, it's overwhelmingly stronger,' Judge said. He then turned to three momentous life events to show that these too have a limited effect on people's mood and behaviour: the experience of sexual abuse in childhood, winning the lottery and marriage. To take the first, Judge said a meta-analysis in 1998 had shown that this ordeal has only small effects on anxiety and depression and other negative outcomes later in life. 'You may say that this is insane, that it doesn't make sense,' Judge said. 'I'll give you that it doesn't match our prior

expectations. But what you have to ask yourself is – if these facts are true, then why?'

The evidence for winning the lottery and marriage is in the same mould, Judge said. Happiness is left unchanged by a big win, and whilst newly married couples enjoy a large blip in their happiness, this tails off over the years. Widowhood makes an even larger impact on (un)happiness, but again, recovery takes place nearly back to baseline.

If the psychological effects of profound experiences are limited, Judge asked, then what about the impact of occupational psychology interventions? A 2007 test of an intervention for burn-out found a short-term benefit, but by the study end the difference between the treatment group and controls was actually smaller than it had been at the study start. Or consider a 2004 study by Judge and a colleague that looked at a self-efficacy intervention – again, there was a benefit at first, but three months later 'virtually nothing', even though ongoing booster interventions had been used.

Judge said his message has profound implications for management practice. 'Too often we standardise,' he said. 'But everyone isn't alike and it's not as easy for all of us to change as our policies and practices assume.' One answer, Judge said, is to invest more in selection, and to do so with a more long-term view of whether the type of job and organisational culture fits who candidates are. Alternatively, consider altering the job to fit the person, and recognise the importance of a focus on people's strengths, in the vein of positive psychology. 'Maybe we should accept people better for who they are,' Judge concluded, 'and think a little bit less about changing them.' CJ
I tinyurl.com/judgetalk

NOT BLACK AND WHITE

The use of intelligence tests to justify prejudice is one of the uglier patches on psychology's history. Steve Woods of Aston Business School discussed a meta-analysis he's conducted which tested the idea that average differences in IQ between black and white people are caused by shifting sociocultural factors, rather than a reflection of inherent differences between the groups (as some psychologists claim).

The combined results from 91 samples, involving over a million participants

across four decades (the 1960s to the 1990s) conveyed a positive message, Woods said, as they showed that black-white differences in average IQ rose from the 1960s to the 70s but then dropped through the 90s.

An additional detail was that the meta-analysis distinguished between so-called 'selective' and 'non-selective' samples – an example of the former would be employees and the latter would be job applicants; or in an educational context, high-school versus university

samples. Results here showed that the narrowing in average IQ differences between black and white people was speeding up for selective samples but slowing down for non-selective.

'The headline is that the difference between black and white test takers appears to be eroding over time,' Woods said. 'Importantly our findings change the question from "if" these differences between ethnic groups are due to cultural/developmental factors to "how much?":' CJ

MENTAL HEALTH AND THE WORKPLACE

'I'm the Neil Diamond of occupational psychology' Cary Cooper (Lancaster University) quipped after being introduced as so famous that even former BPS Practitioner of the Year award-winner Anna Koczwara's mother knows who he is. Jokes aside, Cooper used his keynote to highlight the rising financial and human cost of stress and mental ill health in the workplace, a topic he investigated in-depth in 2008 for the UK government's Foresight programme (see tinyurl.com/6c2fdt and News, December 2008).

Cooper said the scale of the problem was made apparent by a Sainsbury Centre for Mental Health report published in 2007, which estimated that mental ill health in the workplace was costing UK employers £25.9 billion a year. Cooper said this is caused less by absenteeism and more by 'presenteeism' – people turning up for work and performing sub-optimally because of stress. Given the current financial climate, Cooper thinks this will only get worse because people will be reluctant to take time off work for fear of being laid off.

A major cause of stress at work is poor management. 'Management style is fundamental to a person's health and well-being,' Cooper said. 'In fact, on the door of an office building it should say "Your boss is potentially dangerous to your health" because the evidence is clear that bad management can be harmful... and it can be the opposite when done well, it can motivate and energise.' The answer, Cooper argued, is better management training and, even more important, better selection – hiring managers not just for their business nous but also for their interpersonal skills.

Another priority is to do something about over-long work hours. Not including our comparatively generous holiday time, Cooper said here in the UK we now work longer hours Monday to Friday than any other country in the world. Flexible working is the answer and plenty of research has shown its benefits.

How can employers be persuaded to take workplace mental health seriously? 'You have to show them it hits the bottom line,' Cooper said. 'The evidence from major studies in the area is that it does. We need to get this message out from the journals, which the public don't see, into the public arena – that's our job.' CJ

Adapting to climate threat

How can countries and organisations plan for and help mitigate all that climate change might entail, in terms of energy security, flooding, deforestation and other threats? According to David Ballard (of Alexander Ballard Ltd), this is a fascinating, complex field to which organisational psychologists have much to offer. The bad news is that the running of most UK industries is predicated on cost saving in the context of stable weather.

To gauge an organisation's level of preparedness and awareness, Ballard and his colleagues have created a tool called PACT, which is based on a six-stage developmental framework from Response Level 1 (core business focused) all the way up to Response Level 5 (strategic resilience) and, rarely reached, 6 (champion organisation). The first describes organisations that are only interested in money and what they can get away with, the penultimate is when climate change preparation has become a core concern.

According to Ballard, The Netherlands is a world leader in this area. They have a National Adaptation Strategy and they've earmarked €50 million for the



The running of most UK industries is predicated on cost saving in the context of stable weather

Knowledge of Climate Change programme, which aims to make eight vulnerable areas safer. What's more, they don't just help themselves, they lend their expertise to others, including New Orleans and Chichester Harbour.

Ballard has worked with some of the senior people involved in the Dutch programme and he recalls one of them telling him that they have an unshakeable determination to protect the Dutch people. 'I have to say, I don't see that kind of statement very often in the English/British civil service,' Ballard said. 'Although in the Scottish, I do rather more.' CJ

TV dinner problem

Besides how hungry we feel, all sorts of other factors also affect how much we eat, including portion size and social convention. Another factor is memory for how much we've already eaten. The much-studied amnesic HM readily sat down to eat a second meal having just finished one, presumably because he'd forgotten he'd already eaten. Now Dolly Mittal and her team have shown that snacking while watching TV, as opposed to snacking while not watching TV, can lead us (well, women at least) to eat more later on, partly because the effect of the TV is to affect our memory for how much we snacked on earlier.

Thirty-two non-dieting women of unexceptional weight spent 20 minutes in the morning consuming as much snack food as they could, including chocolate balls, crisps and coke/orange squash. Half of them did this while watching *Friends* or *Seinfeld*, the others while sitting quietly. There was no difference in the amount of snack food the two groups consumed. Approximately an hour later, the women sat down to eat a lunch of sandwiches, biscuits, crackers and dip. The key finding is that the women who'd earlier snacked while watching TV ate significantly more of this later meal, than did the women

who'd earlier snacked without TV. What's more, the TV group were also less accurate at recalling how much they snacked on in the morning. The implication seems to be that watching TV while snacking affects our memory for how much we've snacked on, thereby leading us to eat more later on.

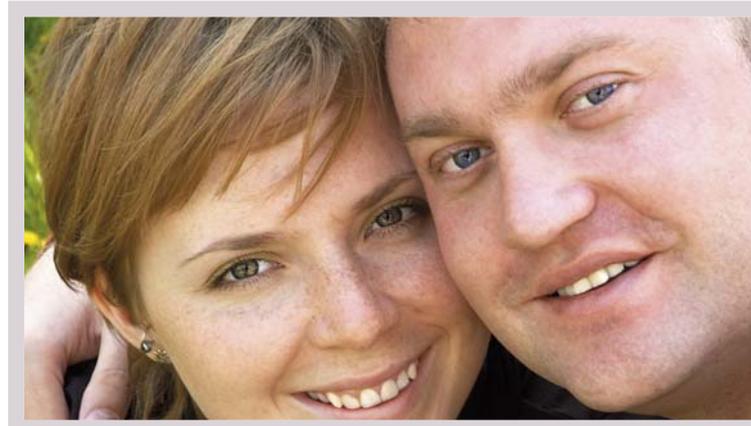
A follow-up study was similar to the first except the researchers investigated the effects of different types of TV show – boring TV (a lawn bowling contest – apologies to bowling fans), sad TV (a scene from the film *Dead Poets Society*), and funny TV (a *Friends* episode).

The main finding from the first experiment was replicated as regards snacking whilst watching TV leading to more eating later on, but the specific type of TV show made no difference.

An anomaly in the results is that TV versus no TV had a larger effect on the amount eaten later on compared with its effect on recall memory. This suggests that TV has some other effect besides impairing memory for snack consumption, or else it affects memory in more ways than just impairing recall. Another issue is that the effect has so far only been demonstrated for women. When a pilot study was attempted with men, Mittal's team explained, they 'treated the experiment as an opportunity to consume as much food as possible, so the design may not be optimal for this group'. '[O]ur data suggest that TV probably exerts some as yet unspecified effect on participants' ability to recall earlier bouts of food consumption, leading to over-consumption on a later TV free test meal,' the researchers said. 'As TV viewing is associated with eating in so many different ways, and as overconsumption of food is a major problem in most industrialised nations, it would seem important to study exactly how this occurs.'



In *Applied Cognitive Psychology*



Behind the scenes of life

In the December issue of *Personality and Social Psychology Bulletin*

Have you ever had the feeling that everyone else seems so sorted, so at ease? According to Alexander Jordan and colleagues, most of us have such a tendency to underestimate other people's experience of negative emotion. In turn the researchers think this skewed perception perpetuates a collective delusion in which we all strive to present an unrealistically happy front because we think that's the norm.

Jordan's team began their investigation by asking 63 undergrads to describe recent negative and positive emotional experiences they'd had. As expected, the negative examples (e.g. had an argument; was rejected by a boy/girl), more than the positive examples (e.g. attended a fun party; had a great meal), tended to occur in private and to provoke emotions that the students had attempted to suppress.

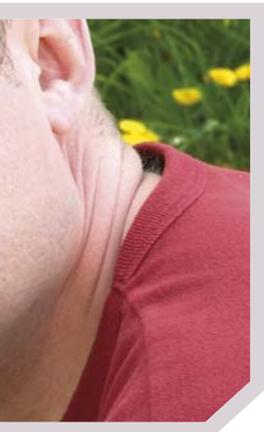
The most frequently cited of these experiences were then put to a separate set of 80 students whose task was to say how many times in the last two weeks they had lived through something similar, and to estimate how often their peers had. The students consistently underestimated their peers' experience of negative events (by an average of 17 per cent) whilst slightly overestimating their peers' experience of positive situations (by 5.6 per cent).

What about close friends – surely we have a more accurate sense of their emotional lives?

A third study was based on emotional weekly blogs kept by over 200 students, which they used to rate their experience of various positive and negative emotions over the course of a term. Each blog student then nominated a close friend or romantic partner who had to estimate the range of emotions the blogger had experienced that term. Consistent with the study's main message, close friends and partners tended to underestimate the bloggers' experiences of negative emotions and to overestimate their experiences of positive emotions. A deeper analysis suggested the underestimation of negative emotion was partly mediated by the bloggers' deliberate suppression of their negative emotions.

A final study showed that students with a greater tendency to underestimate their peers' negative emotions also tended to feel more lonely, less satisfied with life and to ruminate more, thus suggesting that underestimating others' misery could be harmful to our own well-being. Of course the researchers acknowledge that the causal direction could run the other way (i.e. being lonely and discontented could predispose us to think everyone else is happier than they are), or both ways.

An enduring mystery is why we continue to underestimate other people's misery whilst knowing full well that most of our own negative experiences happen in private, and that we frequently put on a brave, happy



Stressful meeting? Have a coffee, if you're female

In the December issue of the *Journal of Applied Social Psychology*

face when socialising. Why don't we reason that other people do the same? Jordan and his colleagues point to 'the fundamental attribution error' – people downplay the role of the situation when assessing other people's behaviour compared with their own.

This research could perhaps help explain the popularity of tragic art, be that in drama, music or books. 'In fictional tragedy, people are given the opportunity to witness "the terrible things in life" that are ordinarily "played out behind the scenes"', the researchers said (quoting Chekhov), 'which may help to depathologise people's own negative emotional experiences.'

If a meeting becomes stressful, does it help, or make things worse, if team members drink lots of coffee? A study by Lindsay St. Claire and colleagues that set out to answer this question has uncovered an unexpected sex difference. For two men collaborating or negotiating under stressful circumstances, caffeine consumption was bad news, undermining their performance and confidence. By contrast, for pairs of women, drinking caffeine often had a beneficial effect on these same factors. The researchers can't be sure, but they think the differential effect of caffeine on men and women may have to do with the fact that women tend to

respond to stress in a collaborative, mutually protective style (known as 'tend and befriend') whereas men usually exhibit a fight or flight response.

The study involved 64 male and female participants (coffee drinkers at the University of Bristol with an average age of 22) completing various construction puzzles, negotiation and collaborative memory tasks in same-sex pairs. They did this after drinking decaffeinated coffee, which either had or hadn't been spiked covertly with caffeine (the equivalent of about three cups' worth of coffee). Stress was elevated for some of the pairs by telling them they would shortly

have to give a public presentation, and by warning them that their participation fee would be performance-dependent.

How large were the caffeine effects? The men's memory performance under stressful conditions with caffeine was described by the researchers as 'greatly impaired' whereas caffeine didn't affect women in the same situation. For the construction puzzles, caffeine under high-stress conditions led men to take an average of 20 seconds longer (compared with no caffeine) whereas it led women to solve the puzzles 100 seconds faster.

A shortcoming, acknowledged by the researchers, was that there were overall few effects of stress on the participants' performance, no doubt in part because they'd been told they could bail out any time they liked (although none of them did). Further research is clearly needed to replicate the findings and explore the possible underlying mechanisms. Such work is urgent, the researchers concluded, 'because many...meetings, including those at which military and other decisions of great importance are made, are likely to be male-dominated. Our research suggests that men's effectiveness is particularly likely to be compromised. Because caffeine is the most widely consumed drug in the world, it follows that the global implications are potentially staggering.'



The material in this section is taken from the Society's Research Digest blog at www.researchdigest.org.uk/blog.

The Research Digest is proud to announce the birth of an offspring title – the Occupational Digest. The Occupational Digest is a new blog and e-mail produced by the British Psychological Society, reporting on psychology in the workplace. Building on the successes of the main Digest, it is funded by the Division of Occupational Psychology and aims to reach occupational psychology practitioners together with a wider audience who care about putting psychology to work, including HR professionals, managers, and anyone with an interest in the field. It is edited by Chartered Psychologist Dr Alex Fradera.



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The history and future of mind control

Kirsten V. Smith on *The Brain: A Secret History*

The December edition of *The Psychologist* celebrated 150 years of experimental psychology and was devoted to the pioneers that first investigated the mind-body connection. On 6 January BBC4 hosted the first in a series of three programmes dedicated to the darker side of experimental psychology.

The Brain: A Secret History, presented by Dr Michael Mosely, probed the ways in which scientists have endeavoured to manipulate thoughts and behaviours. It was only a matter of minutes before the shocking extent to which early pioneers had gone to advance science was illustrated. I am sure that most of us are aware of Ivan Pavlov and his canine experiments that were the basis for classical conditioning and learning theory – pair the sound and the food and eventually the dog will salivate to the sound alone. Less well known is the salivary fistulas implanted into the cheeks of children to demonstrate the same conditioned response seen in dogs. The footage of a young boy with a metal pipe attached to a glass test tube, collecting saliva, protruding from his face prompted a gasp of horror and a quick rallying of my house-mates to see if any of them had heard of such experiments... Nope, no mention of this in A-level psychology.

A subsequent PsycINFO search followed by a Google search resulted in no reference to Pavlov's children, either by him in his early work or by others in their dissemination of his findings. Given the vilification of Watson and Rayner (1920) for their infamous 'Little Albert' experiment I was surprised that Pavlov's ethical misdemeanours have gone largely unnoticed.

Not short on shock factor, the programme then introduced the viewer to the work of Dr William Sargant, a British psychiatrist, whose clinical work was based on Pavlov's early experiments. The

rationale was fairly simple. By forcing the human brain into a state of 'break-down' all conditioned responses, behaviours, and thoughts would be subsequently lost therefore allowing 'disturbed' individuals to form new 'healthy' brain connections.

Sargant used a combination of drug-induced comas (sometimes lasting as long as three months), copious amounts of medication, and electric shock therapy to break these pre-existing neural connections and 'wipe the slate clean'. Treatments were often administered without the patients' knowledge or consent, and Sargant described the protocol of administering other treatments while the patients slept as 'an exciting beginning in psychiatry' by which a patients' resistance and refusal could be bypassed.

These uncomfortable segments of scientific history were thankfully balanced out by showcasing some current innovative research investigating manipulation of the mind. Professor David Nutt presented his work looking at the neurological effects and clinical implications of the active ingredient for magic mushrooms – psilocybin.

I spoke to Professor Nutt and he described how, contrary to what had been expected, psilocybin actually dampened down neural activity in the brain and particularly the thalamus, the posterior cingulate cortex, and the anterior cingulate cortex (ACC). These three regions of the brain are key structures in a brain system known as the default mode network (DMN). The DMN displays increased activation when there is no sensory interruption from the outside

world. Increased DMN activity can be seen when we are daydreaming, remembering an event from the past or planning an event in the future, and is thought to underpin our sense of self.

The posterior cingulate cortex is thought to be responsible for coordinating input from different sensations and awareness of the body. A common experience resulting from psilocybin is a disconnect between the sense of self and the body. Professor Nutt hypothesised that these psychedelic and pleasurable effects may be a result of a dampening down of DMN.

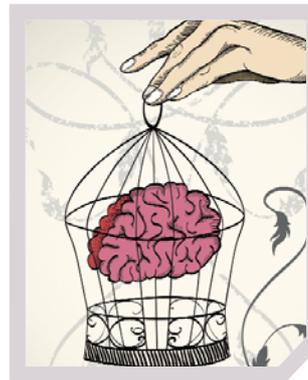
This work is now being linked to clinical populations as a way of understanding thought patterns in depression. Common clinical observations in depression include a 'rigidity in thinking' or a 'stuck mindset'. Professor Nutt conceptualises this 'treadmill of negative thinking' as being driven by an over-activation in parts of the ACC.

Previous research has found that depressed people find it very difficult to access any positive memories. Professor Nutt and his team are testing the idea that the ACC may be a potential mediator in the emotional feedback accessed when exploring memories.

His team have demonstrated that through the use of psilocybin depressed patients experience an increase in emotional pleasure when accessing autobiographical memories. 'We thought that if we could turn down the ACC then we could allow people to access a normal emotional response and get back into the right frame of mind.' He hypothesised that this may only need to be done a couple of times within a psychotherapy setting to demonstrate an effect.

The long-term effects of this have yet to be demonstrated, however this research may shed some light on the concept of a biological basis for a 'stuck mindset' and how this impacts on recovery.

Whilst the discipline of psychopharmacology is in its infancy more is being discovered about the utility of combining psychological models of mental health problems with advances in pharmacological understanding. Let us hope that in 50 years this process of discovery can be disseminated without prompting gasps of horror.



contribute

The Media page is coordinated by the Society's Media and Press Committee, with the aim of

promoting and discussing psychology in the media. If you would like to contribute, please contact the 'Media'

page coordinating editor, Fiona Jones (Chair, Media and Press Committee), on f.a.jones@beds.ac.uk