

Do you do voodoo?

They are beloved by prestigious journals and the popular press, but many recent social neuroscience studies are profoundly flawed, according to a devastating critique – ‘Voodoo correlations in social neuroscience’ – in press at *Perspectives on Psychological Science* (<http://tinyurl.com/9n82z4>).

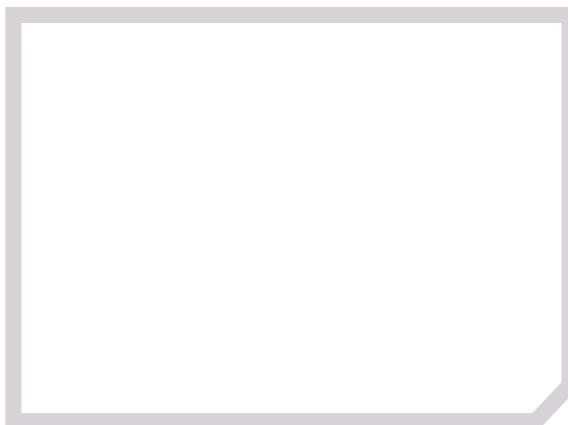
The studies in question have tended to claim astonishingly high correlations between localised areas of brain activity and specific psychological measures. For example, in 2003 Naomi Eisenberger at the University of California and her colleagues published a paper purporting to show that levels of self-reported rejection correlated at $r = .88$ with levels of activity in the anterior cingulate cortex (<http://tinyurl.com/9vm9q7>).

According to Hal Pashler and his band of methodological whistle-blowers, if Eisenberger’s study and others like it were accurate, this ‘would be a milestone in understanding of brain–behaviour linkages, full of promise for potential diagnostic and therapeutic spin-offs’. Unfortunately, Pashler’s group argue that the findings from many of these recent studies are virtually meaningless.

The suspicions of Pashler and his colleagues – Edward Vul, Christine Harris and Piotr Winkielman – were aroused when they realised that many of the cited levels of correlation in social neuroscience were impossibly high given the respective reliability of brain activity measures and measures of psychological factors, such as rejection. To investigate further they conducted a literature search and surveyed the authors of 54 studies claiming significant brain–behaviour correlations. The search wasn’t exhaustive but was thought to be representative, with a slight bias towards higher impact journals.

Pashler and his team found that 54 per cent of the studies had used a seriously biased method of analysis, a problem that probably also undermines the findings of fMRI studies in other fields of psychology. These researchers had identified small areas of brain activity

(called voxels) that varied according to the experimental condition of interest (e.g. being rejected or not), and had then focused on just those voxels that showed a correlation, higher than a given threshold, with the psychological measure of interest (e.g. feeling rejected). Finally, they had arrived at their published brain–behaviour correlation figures by taking the average correlation from among just this select group of



voxels, or in some cases just one ‘peak voxel’. Pashler’s team contend that by following this procedure, it would have been nearly impossible for the studies not to find a significant brain–behaviour correlation.

By analogy with a purely behavioural experiment, imagine the author of a new psychometric measure claiming that their new test correlated with a target psychological construct, when actually they had arrived at this significant correlation only after first identifying and analysing just those items that showed the correlation with the target construct. Indeed, Pashler and his collaborators speculated that the editors and reviewers of mainstream psychology journals would routinely pick up on the kind of flaws seen in imaging-based social neuroscience, but that the novelty and complexity of this new field meant such mistakes have slipped through the net.

‘[I]n half of the studies we surveyed, the reported correlation coefficients mean almost nothing, because they are systematically inflated by the biased analysis,’ Pashler’s team wrote. Perhaps unsurprisingly, among the papers they surveyed, it was the papers that used this flawed approach that tended to have

published the highest correlation figures. ‘[W]e suspect that while in many cases the reported relationships probably reflect some underlying relationship (albeit a much weaker relationship than the numbers in the articles implied), it is quite possible that a considerable number of relationships reported in this literature are entirely illusory.’

On a more positive note, Pashler’s team say there are ways to analyse social neuroscience data without bias and that it should be possible for many of the studies they’ve criticised to re-analyse their data. For example, one approach is to identify voxels of interest by region,

before seeing if their activity levels correlate with a target psychological factor. An alternative approach is to use different sets of data to perform the different steps of analysis used previously. For example, by using one run in the scanner to identify those voxels that correlate with a psychological measure, and then using a second, independent run to assess how highly that subset of voxels correlates with the chosen measure. ‘We urge investigators whose results have been questioned here to perform

such analyses and to correct the record by publishing follow-up errata that provide valid numbers,’ Pashler’s team said.

Matthew Lieberman, a co-author on Eisenberger’s social rejection study, told us that he and his colleagues have drafted a robust reply to these methodological accusations, which will be published in *Perspectives on Psychological Science* alongside the Pashler paper. In particular he stressed that concerns over multiple comparisons in fMRI research are not new, are not specific to social neuroscience, and that the methodological approach of the Pashler group, done correctly, would lead to similar results to those already published. ‘There are numerous errors in their handling of the data that they re-analysed,’ he argued. ‘While trying to recreate their [most damning] Figure 5, we went through and pulled all the correlations from all the papers. We found around 50 correlations that were clearly in the papers Pashler’s team reviewed but were not included in their analyses. Almost all of these overlooked correlations tend to work against their hypotheses.’

Ed Vul of the Pashler group has defended their analysis online (tinyurl.com/85wcb4). **CJ**

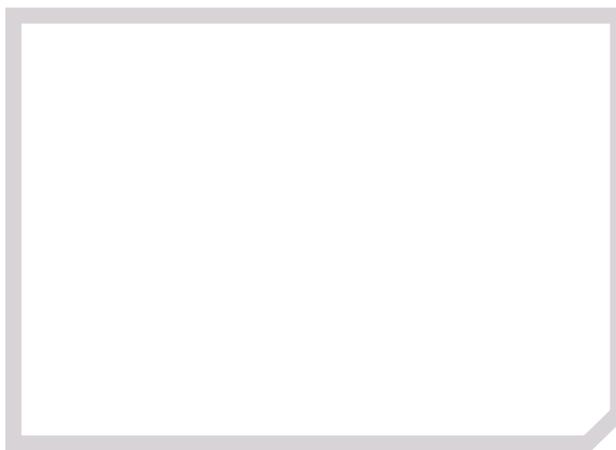
For the latest on statutory regulation, see www.bps.org.uk/statreg and p.135

Report urges 'decarbonising'

Psychological factors feature prominently in the latest report from the UK government's Foresight Programme: 'Powering our Lives: Sustainable Energy Management and the Built Environment' (see <http://tinyurl.com/a34aba>). Given that energy consumption in buildings accounts for half the UK's carbon emissions, this new report aims to advise government on how our built environment can evolve over the next 50 years in a way that will help us secure our energy supplies while helping prevent climate change.

Recognising that 'people, rather than buildings, consume energy services', the report devotes a chapter to the role that human behaviours and values will play in our transition to a lower-carbon economy. For example, while people can be encouraged to install improved insulation and more efficient heating systems, it's possible they may then spend the long-term efficiency savings on energy consumption elsewhere – a phenomenon known as the rebound effect.

A key message from the report is that



over the longer term we need to switch from an emphasis on energy efficiency and energy saving towards explicit decarbonisation. Environmental psychologist Dr Patrick Devine-Wright of Manchester University (see p.116), a lead expert on the report, gave the example of 'smartmetering' technologies. 'These can make carbon emissions "visible" to people in their homes or workplaces,' he explained, 'perhaps linked to a system of

carbon trading at the household or individual level. The implications of this change are profound for our everyday lives, as the current system does not easily enable people to become engaged with the environmental implications of their consumption of energy – bills are quite opaque and meters are ugly boxes hidden under stairs or out the back door!'

Devine-Wright added that there are both personal and professional

implications of the Foresight report for psychologists of every hue. 'The coming decades will reveal our ability to respond effectively to the threat posed by climate change not only to ourselves, but to future generations, and the report's scenarios try to capture possible futures in an imaginative way. I would encourage psychologists to take a look at the report – particularly the chapters on behaviour and scales of energy systems – it might spawn ideas for change in all kinds of ways.' CJ

Happiness is contagious

Happiness spreads through social groups like an emotional virus, according to findings from a social network analysis study (*British Medical Journal*; <http://tinyurl.com/8q6qkq>).

Using longitudinal data collected as part of the Framingham Heart Study in Massachusetts, James Fowler and Nicholas Christakis were able to observe fluctuating happiness levels over time among 12,067 interconnected people. They found that a person's happiness is influenced not only by the happiness of their immediate friends and relations but also by the happiness levels of the friends of friends, and the friends of the friends of friends.

The longitudinal methodology allowed the

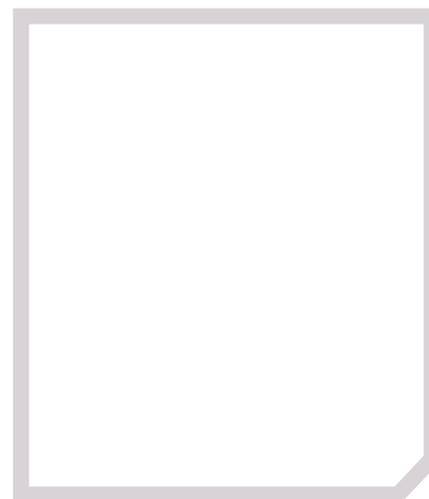
researchers to infer that happiness actually ripples through social groups; it isn't merely the case that happy people tend to congregate together. For example, if a person's friend was happy at one time point, that person's chances of being happy at the next time point were increased.

Other details to emerge were that people at the centre of social networks, with more and better connected relationships, tended to become happier over time. Proximity – spatial and temporal – were also found to influence the flow of happiness. A happy friend, relative or neighbour who lived nearer had a stronger effect on a person's happiness than a friend who lived further

a way, and the impact of a friend or relation's happiness faded over time. Social context too, played a role. The happiness levels of co-workers, for example, was irrelevant.

Fowler and Christakis can't say what causes happiness to spread but possibilities include the contagious nature of emotional expressions, such as laughter and smiles, and the tendency for happier people to act more kindly towards those they have contact with.

'Most important from our perspective is the recognition that people are embedded in social networks and that the health and wellbeing of one person affects the health and wellbeing of others', the



Edward Ward's *The Laughing Audience*

researchers concluded. 'This fundamental fact of existence provides a conceptual justification for the speciality of public health. Human happiness is not merely the province of isolated individuals.' CJ

JAILED FOR DECEPTION

A man who lied about his qualifications to land a job in the NHS has received a three-month prison sentence.

Lee Whitehead had been appointed director of planning and modernisation at Stoke-on-Trent Primary Care Trust after falsely claiming he had a master's in clinical psychology and a PhD in psychology, along with a first class degree in psychology, and that he was a Chartered Psychologist and member of the British Psychological Society. In fact, he had only a second class science degree.

Paul Kay, prosecuting for the Department of Work and Pensions, said: 'The post-holder was not required to hold either a master's or a PhD, or be a member of the BPS. But clearly these assisted him in getting the job.'

A spokesman for NHS Stoke-on-Trent said: 'We weren't the first organisation Mr Whitehead made his irresponsible claims to.'

ADDICTION OR NOT?

The founder of Europe's first and only gaming addiction clinic has said that he no longer sees most cases of excessive computer game-playing by young people as an addiction problem. Speaking to BBC news, Keith Bakker noted that 'the more we work with these kids the less I believe we can call this addiction. What many of these kids need is their parents and their school teachers – this is a social problem.' The Smith and Jones clinic, based in the Netherlands, previously sought to reduce people's excessive game playing using an approach resembling the 12-step programme formulated by Alcoholics Anonymous. Despite Bakker's comments to the media, his clinic's website was, at the time of writing, still describing excessive game playing as an addiction: '[F]or some people, games have become an unhealthy obsession. They are addicts.'

TECHNICIAN AWARD

Society member Peter Beaman, who works at Loughborough University as Social Psychology Technician, has been awarded Fellow Status of the Higher Education Academy. Beaman is thought to be the first technician at Loughborough University to receive this recognition. He has worked in the Social Sciences Department since 1988, and in 2007 was awarded the first national Technician Demonstrator Role Award by the Association of Technical Staffs in Psychology for his substantial role in the teaching and learning of students.

What will change everything?

'What will change everything?' is the latest annual question posed by *Edge*, the online intellectual magazine. Psychologists have again contributed many of the answers, and understanding the brain (Irene Pepperberg) and understanding the mind (Mahzarin Banaji) were both proposed. Beyond these, at least two further discernible themes emerged from the psychologists' entries: one related to learning, knowledge and talent, the other to technology and artificial intelligence.

Howard Gardner argued that unlocking the secret of talent will change everything, while Martin Seligman plumed for the teaching of intuition. A sufficient number of simulations of key decision-making scenarios will mean the

'commander or surgeon who when it happens in real life has "seen it before," will recognize it, and take the life saving action at zero cost in blood,' he wrote. Relatedly, Alison Gopnik said that better schooling, gene regulation and understanding of neural plasticity will allow us to extend childlike learning ability into adulthood, bringing benefits in terms of flexibility, but risks in terms of there not being anyone left to play the role of grown up.

John Tooby and Leda Cosmides similarly wrote about the use of technology to speed up teaching and conceptual mastery. 'What if people could spend four months with a specialized AI – something immersive, interactive, all-absorbing and video game-like, and

FROM THE RESEARCH DIGEST...

Broken window on crime

The broken windows theory of crime reduction, made famous by Malcolm Gladwell's bestselling book *The Tipping Point*, has received new robust empirical support from a series of studies by Dutch researchers.

According to the theory, more serious crimes can be averted by reducing low-level crime such as littering and graffiti. Gladwell attributed the dramatic fall in crime in New York in the 1990s to the zero tolerance approach of the police at that time, which effectively put into practice the advice from the broken windows theory.

In the new studies, published in *Science* (see tinyurl.com/8too3o) Kees Keizer and colleagues altered various signs of orderliness in a social scene and then observed whether passers-by conformed to some other social norm, such as not dropping litter. Their main finding throughout was that signs of petty antisocial behaviour really do have a powerful effect on people's tendency to disobey basic rules, even increasing their tendency to steal.

Here's the complete list of effects – bicycle owners in an alley were more than twice as likely to drop litter (a flier attached to their handlebars) if the walls were covered in graffiti; people were more than twice as likely to squeeze through a forbidden entrance to a carpark if nearby bikes were illegally chained to a fence; they were far more likely to litter (a flier attached to their windscreen) if trolleys were not returned to a shop, or if fireworks were illegally set off nearby; and finally, passers-by were far more likely to steal a money-containing envelope protruding from a postbox if litter was on the ground, or graffiti was on the postbox.

'There is a clear message for policymakers and police officers,' the researchers said. 'Early disorder diagnosis and intervention are of vital importance when fighting the spread of disorder. Signs of inappropriate behavior like graffiti or broken windows lead to other inappropriate behaviour (e.g. litter or stealing).'

This item originally appeared in the Society's free Research Digest. For more and to sign up, see www.researchdigest.org.uk/blog

emerge with a comprehensive understanding of physics, or materials science, or evolutionary psychology?' they pondered. For Lera Boroditsky, meanwhile, it is understanding how we know things that will change everything: 'Understanding the building blocks and the limitations of the normal human knowledge building mechanisms will allow us to get beyond them. And what lies beyond is, well, yet unknown...'

Those who focused on technological change included Susan Blackmore, who wrote that technological information – techno-memes – are currently using us to create the machines that allow them to replicate, but that a time will come when we are no longer needed. 'Then we would become dispensable. That really would change everything,' she said. In a similar vein, Sherry Turkle pointed to the 'robotic moment', when we'll see robots as true companions. 'When we connect with the robots of the future we will tell and they will remember. But have they listened?' she asked. 'Have we been "heard" in a way that matters? Will we no longer care?'

Other contributors brought the blue sky thinking back down to earth. Robert Provine said we're unlikely to notice events that will change everything because they happen too slowly. 'Did the Renaissance, Reformation, industrial revolution, or computer revolution, have ordinary people amazed at the changes in their lives?' he asked. Nicholas Humphrey, meanwhile, argued that nothing changes everything. Romans, he said, might be amazed at our technological prowess, but they 'would soon discover that beneath the modern wrapping it is business as usual. Politics, crime, love, religion, heroism... The stuff of human biography. The more it changes, the more it's the same thing.'

Other psychologists who contributed included Steve Pinker on personal genomics, John Gottman on lab earth colonies, Brian Knutson on targeted neurophenomics, Roger Schank on wisdom, Marc Hauser on the unimaginable, Jesse Bering on God, Jamshed Bharucha on synchronising brains, Irene Pepperberg on understanding the brain, Jonathan Haidt on growing ethnic differences, David Myers on interactive e-textbooks, Mihaly Csikszentmihalyi on the end of analytic science, Stephen Kosslyn on leveraging individual differences, David Buss on hiding our weaknesses and Daniel Goleman on rendering environmental and societal harms more transparent. **CJ**

I For the full-range of answers see www.edge.org/q2009/q09_print.html

Hands-free not risk-free

Hands-free mobile phone use while driving – currently legal in the UK – is more detrimental to driver performance than conversing with a passenger, according to new research (*Journal of Experimental Psychology: Applied*; <http://tinyurl.com/8pw85q>).

Frank Drews and colleagues at the University of Utah asked participants

driving in a simulator to talk to a friend about a time their life had been endangered. Compared with participants who chatted to a passenger sitting next to them in the simulator, those participants who conversed via a hands-free phone (with a friend located elsewhere) were less able to maintain their lane positioning, drove a greater distance from the car in front and were four times more likely to miss the motorway exit they were supposed to take. By contrast, driver performance when chatting with a passenger was barely affected compared with a control condition that didn't involve any conversation. Speech analysis showed that on-board passengers more often referred to traffic situations in their conversation and helped drivers notice the appropriate exit.

In a separate but related development, researchers at the University of Warwick showed that conducting a hands-free telephone conversation slowed

participants' reaction times in a visual computer task by an average of 212 milliseconds – the equivalent of an extra five metres braking distance in a car travelling at 60 miles per hour (*Psychonomic Bulletin & Review*; <http://tinyurl.com/84xbkt>).

This slowing effect was increased if the conversation was of greater

complexity, akin to making a business decision. By contrast, listening to a narrated chapter from Bram Stoker's *Dracula* prior to a brief test on the content – intended to simulate the effects of listening to talk radio – had little effect on reaction times.

Lead researcher Melina Kunar said: 'Our research shows that simply using phones hands-free is not enough to eliminate significant impacts on a driver's visual attention. Generating responses for a conversation competes for the brain's resources with other activities which simply cannot run in parallel.' **CJ**

DARWIN'S GIFT TO YOU

The Lancet has published a special issue, *Darwin's Gift*, celebrating the bicentennial of Charles Darwin's birth. There are essays about Darwin's life and work, and the enduring legacy of his theory of evolution. What's more, the whole issue is available at <http://mag.digitalpc.co.uk/fvx/lancet/darwingsgifts/>.

The Psychologist intends to publish a special issue in November, to mark the 150th anniversary of the publication of *On the Origin of Species*. If you are interested in writing a 'Looking back' piece on the man himself and his views on human nature, please contact the editor on jon.sutton@bps.org.uk. **JS**

LONDON LECTURES

Simon Bignell reports from December's Society event for students

The use of PowerPoint presentations and overhead projector slides is a major contributor to boredom in university lectures. In fact, nearly a third of students find lectures boring most of the time, according to Dr Sandi Mann (University of Central Lancashire). Fortunately for the 800 students and others gathered at Kensington Town Hall, Mann and the four other psychologists speaking here were passionate about their subjects, ranging from internet dating and subliminal messages in rock music through to Barbie dolls.

The media and popular culture, a topic close to the hearts of many in the audience, featured prominently in the day. First up, Professor Adrian North (Heriot-Watt) argued that – despite becoming particular targets for the censors – aggressive or antisocial music tends not to have a negative influence on young people. Teenagers often incorrectly interpret or ignore lyrics, and more often we use music to influence our moods (see www.bps.org.uk/north).

Another traditional target, the internet and video games, were the subject of a six-month government commissioned review led by Professor Tanya Byron. Her findings are helping to inform future policy on the potential harms to children from inappropriate material (www.dcsf.gov.uk/byronreview). Byron gave an open and at times candid talk about her media and clinical career and work with children, young people and their families.

The media also has an impact on young people through the 3000 or so advertising images we are bombarded with each day. Many of these feature excessively thin or muscular models, and Dr Helga Dittmar (University of Sussex) presented research to suggest they construct a false reality that can lead to body anxiety. Dittmar suggests the claim by advertisers that 'thin sells' is false and has recently found evidence that average-sized models are just as effective, without leading to the negative body image.

If any of the audience were flagging at this point, Sandi Mann had the answers. Boredom is an emotion that results when none of the things that a person can realistically do appeals to them (see www.bps.org.uk/bore). It helps us deal with situations we do not understand, avoid knowledge overload and communicate our values. Mann showed that boredom is strongly linked to poor academic achievement and attendance, and school dissatisfaction. In classrooms, lack of structure and engagement contribute to being listless, demotivated and unable to concentrate. At university, students blame boredom on their lecturers simply 'reading out the material' – the traditional notion of the 'University Lecturer' does not help. However, Mann suggests that students are often happy to be passively 'spoon-fed' information to pass exams.

Eschewing boredom, the audience cheered loudly in response to Dr Monica Whitty (Nottingham Trent University) recounting the recent case of a real-life divorce that was a result of a 'virtual' online affair between two avatars in the online virtual world Second Life. Whitty explained how the lack of 'social presence' within online chat rooms and discussion groups leads to a high level of disclosure: people can feel 'hyper-personal' online. Comparing different types of online dating sites, Whitty offered numerous insights into the tactics used by advertisers, including white lies and omissions. For many, the first date serves the purpose of simply seeing how close the person is to their profile! Whitty also cautioned that many online dating sites match people to each other using a formula that has been derived from couples who have been married for several years – not necessarily appropriate for singletons.

RAE results out

The results of the latest Research Assessment Exercise (RAE) are in, and they show that 11 per cent of the UK's psychological research, as submitted by 76 universities, was judged to be of the highest 'world leading' 4* standard. Considering the top two grades – '4* world leading' and '3* internationally excellent' – 45 per cent of psychology research achieved this level.

The results are a sensitive issue because they affect how much research funding departments will receive in the future from funding bodies – with higher-rated institutions due to be awarded more money. Interpreting the results requires caution, especially when comparing departments: the exercise allowed institutions to choose how many of their staff to submit to scrutiny, and figures on the proportion of eligible staff who were submitted from each department have not been published.

It should also be noted that clinical psychology had the option of being assessed separately from the rest of psychology, in a grouping with psychiatry and neuroscience. Just 17 institutions submitted research to the exercise under this subject heading, with 57 per cent of research in this area judged to be of 'world leading' or 'internationally excellent' standard. **CJ**

I The full results and detail on how the exercise was conducted are available at the RAE website: www.rae.ac.uk

Remember HM

Amnesic patient HM, the subject of hundreds of studies on memory, died aged 82 in December. HM, whose real name is now revealed to be Henry Molaison, suffered profound anterograde amnesia after a surgeon removed tissue slices from both his hippocampi in an attempt to reduce his seizures.

'HM is arguably the most important single patient in terms of his influence on neuroscience,' said Professor Alan Baddeley, a pioneer in the field of working memory, based at the University of York. 'He is important for two reasons. At a clinical level he demonstrates the potential danger of surgery to relieve epilepsy. The method certainly works and it continues to be widely used, but it is clearly important to ensure that any brain tissue removed is not essential for adequate cognitive functioning. Secondly, HM was important in demonstrating a very severe but pure amnesia in which episodic memory, the capacity to remember new experiences, is grossly impaired,

while other aspects of memory are preserved.'

Indeed, studies led by British-born psychologist Brenda Milner, now at McGill University in Canada, revealed Molaison's continued ability to learn new skills, such as mirror drawing, and showed that his short-term, working memory was also intact.

'This had a major impact on the question of whether memory should be regarded as a unitary function or as comprising a range of separable memory systems,' Baddeley said. Today we recognise that there are at least two types of long-term memory – procedural memories, such as those that allow people to remember how to ride a bike, and declarative memories, which allow us to recall facts and experiences.

According to an obituary in the *New York Times* (tinyurl.com/684tgo), scientists took extensive MRI scans of Henry Molaison's brain on the night of his death and his brain will now be preserved for future study. **CJ**

Better behaviour in class

Primary school pupils in Britain are better behaved than ever before, in terms of time spent on-task in class. That's according to research conducted by a team of over 71 educational psychologists led by Brian Apter (Wolverhampton City Council), Christopher Arnold (Sandwell District Council) and Jeremy Swinson (Witherslack Group).

In the largest-ever study of its kind, the psychologists observed the behaviour of pupils in 141 schools across the country and found that they spent an average of 85 per cent of the time on-task. This is significantly higher than rates of on-task behaviour reported in studies published in 1987, 1992 and 2005.

The psychologists observed and recorded the behaviour of a small sample of pupils in each classroom during one- to two-minute cycles for 20 minutes. The teachers' verbal behaviours were also analysed, and it was found that they were providing positive verbal feedback three times as often as in earlier studies. Moreover, higher rates of positive feedback from teachers and higher rates of neutral speech were associated with more on-task pupil behaviour.

The benefits of positive feedback from teachers is easy to understand, but it's perhaps less clear why more neutral speech is beneficial. 'Neutral teacher talk is often the most skilled and subtly adaptive mode of conversational delivery employed by teachers,' Apter explained. 'They are scanning the group, engaging individual students forcefully with eye-contact, and emphasising parts of the verbal content of the lesson to particular students. Some teachers use very little verbal praise but can make students feel

wonderful by voice and physical presence, individualised prosody, timbre and eye-contact.'

Neither class size, the number of adults in class nor the number of children receiving free school meals (a proxy for socio-economic status) affected the amount of teacher verbalisations or pupils' amount of on-task behaviour. Although teachers who were following National Literacy and Numeracy Strategy lessons talked more to their pupils, this wasn't associated with more on-task behaviour, probably because of ceiling effects.

'Primarily, the study has shown that there is an important link between the verbal energy and skill of teachers and the frequency with which they verbally interact with the class; and on-task behaviour,' the researchers wrote. 'Effective teachers appear to be those that engage in frequent verbal interactions with their students to provide them with positive recognition of their efforts and frequent work-related expositions, directions and commentaries.'

The researchers think teachers are probably providing more positive and neutral verbal feedback to students than ever before because of anxiety about the national test results upon which their performance is judged by OFSTED and revealed in league tables. 'They know that they cannot browbeat modern rights-aware students into learning by submission. They have to engage students,' Apter said. 'We do not think these narrow test outcomes are particularly useful or telling. But we acknowledge that they are very compelling for teachers.' CJ

FUNDING NEWS

The **National Institute for Health Research** (NIHR) is offering funding of between £20k and £100k to enable a research team to develop and refine its research ideas to allow them to develop a successful application for a Programme Grant. Deadline for the first competition is 30 March 2009; a second competition will also be offered in 2009, launching in mid-July with a submission deadline of 27 November.

http://tinyurl.com/7wsd8g

The James S. McDonnell Foundation is offering awards for **studying complex systems or brain cancer research**. Projects should be at an early, even preliminary stage of development. Funding of up to \$450,000 is available and UK researchers can apply. The closing date is 17 March 2009.

www.jsmf.org/apply/research/index.htm

The Fyssen Foundation has postdoctoral study grants available to support training into **cognitive mechanisms that underlie animal and human behaviours**. They particularly wish to support researchers working in ethology-psychology and neurobiology. Study grants of up to 25,000 euros are available: closing date 31 March.

www.fondation-fyssen.org/bourseUS.html

The Royal National Institute for the Deaf (RNID) has a grant scheme to support small-scale activities such as lab visits, workshops and pilot experiments that will benefit people with **hearing loss or tinnitus**. The next closing date is 3 March 2009.

http://tinyurl.com/8kkaf7

The National Institutes of Health (NIH) have a call out for research in the area of the **treatment of Type 1 diabetes**. The deadline for receipt of letters of intent is 19 February.

http://tinyurl.com/8mh7m4

The Nuffield Foundation accepts research proposals for projects that meet their wider interest – 'the **advancement of social well-being**'. Current topics include the financial circumstances of older people and economic planning for later life, including pensions and employers' perspectives of the ageing workforce; and the intergenerational transmission of wealth and life chances. Submissions can be made at any time.

http://tinyurl.com/22nu8w

info

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

IN BRIEF

From the Division of Clinical Psychology Annual Conference. Jon Sutton reports.

Delivering a formidable account of her work within the media, Dr Tanya Byron expressed her annoyance at so many 'unqualified people representing and demeaning our profession'. She called on psychologists to be more confident in their dealings with the media: 'Don't let them say "this is how it's going to be".' Byron gave some strong examples of this from her own career – she doesn't take a breath at points where she doesn't want her speech to be edited; she warns broadcasters that she will write in the newspapers about anything broadcast without her agreement; she writes into contracts that there are interventions she has to see the first broadcast of; and if she gets direction in her earpiece to 'do that again, slower', she tends to ignore it! Byron has also had important issues of informed consent written into the BBC charter. She urged the audience to hold their noses and jump in, to stop treating the profession like a delicate family in crisis. Finally there was a call for the Society to be more proactive. Although the activity surrounding conferences was recognised – 'they do one bit really well' – there is 'a huge swathe of other things we could be doing' (such as attending commissioning rounds).

Chronic pain interrupts the moment-by-moment flux of experience; it interferes with behavioural tasks and the performance of social roles; and it has an insidious impact on a person's identity. In a fascinating M.B. Shapiro Award Lecture, Professor Stephen Morley (University of Leeds), one of Shapiro's former students and colleagues, looked at the research and practice surrounding these effects. Morley reported how the presence of a supportive spouse can actually lead to lower pain tolerance in a treadmill task. 'If you work in a medical environment,' said Morley, 'this is gobsmacking news.' In interviews with chronic pain sufferers, themes of identity cropped up regularly – people reported feeling suspended, trapped in their self. Themes of pain, illness and the self – usually overlapping slightly as in a standard Venn diagram – can become fully overlapping and enmeshed. Behavioural interventions offer considerable hope, but according to Morley the real challenge is quality-controlling the treatments as delivered.

A pilot study at London's Maudsley Hospital has tested the effectiveness of delivering cognitive behaviour therapy (CBT) to 10 young people suffering from obsessive compulsive disorder (OCD) over the telephone. Lead researcher on the study, Dr Cynthia Turner, said: 'We saw a significant reduction of young sufferers' OCD symptoms after they completed the course of telephone CBT, and this improvement remained at six- and 12-month follow-ups. Seven of these young people's symptoms were reduced to a level that meant they were no longer diagnosable as suffering from OCD.' The team has received funding from the Department of Health's Research for Patient Benefit scheme to undertake a larger trial.

Professor Adrian Taylor (University of Essex) reported that 'results across 20 studies show that exercise reduces cigarette cravings, and we are starting to learn more about how. Based on these findings we have recently completed a two-year study "Walk-2-Quit" in which exercise is used as a smoking cessation intervention. It is designed to help smokers self-regulate their cravings and withdrawal symptoms. The most important finding from our research is that exercise does not have to be hard or long lasting to have these effects, even brief bouts of physical activity can be an effective aid for smokers wishing to quit.'

A coming of age

Philip Johnson reports from December's inaugural conference of the Division of Sport and Exercise Psychology

The success of the Division's first-ever conference was evident even before it started, with applications oversubscribed by 50 places! Chair of the Division, Dr Joanne Thatcher, opened the event by describing it as a 'coming of age for sport and exercise psychology'. The successes of Team GB in the Beijing Olympic and Paralympic Games and preparation for the forthcoming London 2012 Olympics have increased awareness of the relevance of psychology in the sport performance context.

It was therefore fitting that one of the most experienced sport psychologists in the UK and former Performance Director of UK Athletics, Professor Dave Collins, presented the opening keynote. Collins considered that the science of psychology has transferability across disciplines and has over the last three decades or so been applied to both sport and exercise contexts. He talked about the motivational orientation and intensity of those individuals seeking performance excellence in sport, and noted that geographical centralisation of high performance sport training venues and associated support services resulted in outstanding results in Beijing, notably in cycling, rowing and yachting. He acknowledged that in other sports, such as athletics, current geographical and organisational constraints render such centralised provision less feasible.

Collins suggested that concentrating on academic rigour in research, and then seeking to apply this to practice with elite athletes, is unlikely to be successful. He proposed that sport psychologists in practice must serve their own 'apprenticeship' and develop the skills, knowledge and experience to become an 'elite' applied sport psychologist to work with 'elite' athletes. (This apprenticeship notion would be consistent with the launch

of Stage 2 accreditation in applied practice through the Division). The sport psychologist should be 'embedded' in the culture of the sport and the support

team. He said that

'there are not enough practitioners fully engaged in applied sport psychology': the profession has the opportunity to become a 'service industry' to sport. On the other hand he feels that the field of exercise psychology has clearly developed their practice (and research) well over recent years. He attributed these developments to the establishment and prioritisation of client's needs and effective engagement with central funding agencies.

Professor Bonnie Berger from Bowling Green State University, Ohio, focused on the role exercise played in the quality of life. Crucially she suggests that habitual participation in exercise can result in psychological 'elevation' and the enhancement of personal strengths, happiness, health and the 'good life'. She also



made reference to 'peak' moments and 'peak' experiences as well as touching on the 'darker' side of exercise, reflected in the distinct states of exercise dependence, staleness, burnout and overuse injuries. Berger made reference to her work in the development of an exercise 'taxonomy', which identifies factors in the exercise experience considered to promote psychological well-being. Finally, Berger concluded that the personal meaning of the exercise experience is vital for sticking at it, and for the individual's identity and sense of engagement with cultural values.

In the final keynote, sponsored by the British Association of Sport and Exercise Sciences, Professor Craig Mahoney gave an entertaining and provocative presentation in which he considered the 'collective self esteem arising from team settings', but argued that as a nation of 60 million people we continue to underachieve in sport. Discussion on what role central government might

play took place. One issue was the apparent lack of systemic coordination of talent identification and succession planning throughout UK sport, tools that are typical of nations and teams committed to sustain success, the 'one true measure of elite performance'.

An excellent array of oral and poster presentations accompanied the keynotes. Themes that caught my attention were athlete welfare, including work by Abbe Brady (University of Gloucestershire) and K. Davies (University of Wolverhampton). Issues of alcohol abuse within sport were also considered, giving a clinical and subclinical theme to issues that can be overlooked in the sporting context and that offer opportunities for psychologists to provide important assessment and intervention.

At the conference reception, retired Chair of the Division Dr Barry Cripps was presented with the Division's first Lifetime Achievement Award.

New year honours

Two psychologists have been recognised in the Queen's New Year Honours list. Dr Stephen Davis at UCL was appointed OBE for services to children with communication difficulties and Yvonne Millar of Islington PCT was appointed MBE for services to children and families.

Dr Davis's award comes after a decade of work by the Speech Research Team to investigate the causes and development of stuttering. 'We've established that children who stutter are more likely to be victims of bullying at school than their non-stuttering peers,' Davis told us, 'and that bilingual children who learn two languages in early childhood are more likely to develop stuttering

than those who speak another language in the home and do not learn English until they attend school.' The team are now using functional imaging to examine the structure and function of the motor and language brain areas of young people who stutter.

Ms Millar told us that as a clinician and manager of a dynamic Community Child and Adolescent Psychology Service in Islington, she had decided to accept her MBE on behalf of her team and all they work with in integrated services. She also thanked Professor Alan Clarke, who 'was most influential in setting me on the professional path I have taken, believing passionately in the role of early intervention.' CJ

A team from the University of Sussex has discovered that anxious parents extend their fears about their own world into their children's world, perhaps giving an insight into the transmission of anxiety. Parents who interpreted ambiguous sentences (e.g. 'At the party the strength of the punch takes you by surprise') as threatening were more likely to interpret ambiguous sentences involving their children (e.g. 'The teacher tells you your child was responsible') as threatening. Lead researcher Dr Andy Field said: 'This tells us that anxious parents extend their own fears about the world into their children's world, which supports the idea that parents transmit their fears to their children by training them to interpret any ambiguous situations they face in a negative way.'

During a session on progress with Improving Access to Psychological Therapies (IAPT), Professor Malcolm Adams (University of East Anglia) pointed out many challenges inherent in quickly training a large number of workers to deliver the programme. These included the availability of qualified supervisors, demands on markers, and the potential impact on ClinPsyD courses. However, he said that despite variability in the quality of relationships between secondary health authorities and the universities, there is evidence of close partnership working and information beginning to flow in a more timely way. In a useful update on competence frameworks, Dr Tony Roth (University College London) attempted to dispel the notion that there are 'NHS thought police that are going to come down hard on those who don't practice in the way competence frameworks dictate'. He encouraged all to take a look at progress themselves, at www.ucl.ac.uk/CORE.

People who claim to have experienced extraterrestrial contact have different psychological profiles compared with control participants, according to new research from Professor Chris French (Goldsmiths, University of London) and colleagues. The team found higher levels of dissociativity, absorption, paranormal belief, self-reported psychic ability, fantasy proneness, tendency to hallucinate, and self-reported incidence of sleep paralysis (a phenomenon that researchers believe could be at the root of many such claims). However, in contrast to previous research, there were no significant differences between the groups in terms of susceptibility to false memories.

People who experience anxious or ambiguous relationships with their parents in childhood fear rejection and abandonment in later life, so they habitually adapt their personality to fit in to social situations as adults. This way they feel accepted and minimise the chance of rejection. That's the conclusion of Dr Oliver Robinson (University of Greenwich) following a questionnaire study of more than 300 participants.

Previous studies of amputees have focused on adjustment in negative terms, using ratings of pain and depression. Now Dr Jen Unwin (University of Liverpool) has carried out a study of nearly a hundred amputees in conjunction with the specialist nurses at Lancashire Teaching Hospitals Specialist Mobility and Rehabilitation Centre. They found that amputees who were more hopeful and had good social support at the start of rehabilitation experienced more positive emotions and rated themselves as more adjusted to the amputation after six months than those who scored low on those factors. Dr Unwin explained: 'A focus on well-being will allow services to build on those factors – for example, by providing patients with "buddies" who are coping well, or by helping people achieve valued goals.'

The crunch – time for psychology

Gail Kinman on media coverage of the economic crisis

Thousands of column inches have recently been devoted to the 'credit crunch' and what is sometimes predicted to become the worst recession in living memory. Over the last few months, the Society's press office has received many media requests for psychologists to comment on public reactions to the crisis. Psychologists and experts from a wide range of other disciplines have commented on the causes of the crisis and its likely impact on both the economy and the well-being of the nation.

Reflecting the often expressed opinion that the media have exacerbated the impact of the global recession by engendering financial anxiety and fuelling loss of confidence, organisational psychologist Mike West observed in the *Birmingham Post* that we are actually 'talking ourselves into a deeper crisis' by convincing ourselves that things are worse than they really are. He argued that worries about savings and pensions are understandable, we need to think positively in order to overcome economic woes and aid financial recovery. West also proposes that we see the recession as a blessing in disguise that will, in the long run, make businesses more efficient.

In the *Daily Telegraph*, Cary Cooper warned that the economic downturn is likely to lead to a more robust management style and an increase in bullying in the workplace. Nonetheless, he also emphasised the need for business to adopt an optimistic perspective, as managers will have to work harder to motivate their employees through these challenging times.

Other commentators urge more realism, suggesting that encouraging optimism may in fact be damaging. American behavioural finance professor Hersh Shefrin argued in *The Guardian* that

the crisis was caused by unrealistic optimism and over-confidence on the part of traders and investors. He commented that many people have been living beyond their financial means and have

become overly confident about an ever-rising housing market. People then anticipate a rosy economic future and make financial decisions based on this bias. Shefrin blames the delayed reaction from the financial market on this irrational behaviour, but warns that we are now seeing an equally irrational overreaction.

Concerns that the credit crunch will have a negative impact on the nation's well-being have been widely communicated. Newspapers reported the results of a survey conducted by Friends Provident and the Blood Pressure Association

indicating that concerns about the economy, rising food and fuel prices, and the impact of the credit crunch have led to 37 per cent of people worrying more. The findings also indicated increased alcohol use and smoking. Many people reported

cutting back on gym membership and buying cheaper, less nutritious food due to financial constraints. It might be noted, however, that others have argued that a tighter budget can lead to a healthier diet; child psychologist Pat Spungin observed that families are eating fewer sweets, snacks and processed, ready-meals.

It has also been predicted that the economic crisis will trigger a rise in mental health problems. Compared to the general population, people in debt have two to three times the rate of depression, three times the rate of psychosis, double the rate of alcohol dependence and four times the rate of drug dependence.

Establishing cause and effect is, of course, complex – mental health problems and addiction are likely to lead to financial difficulties. Nonetheless, economists predict that the number of people out of work in the UK could reach three million by 2010. Research conducted in the USA suggests that each percentage point rise in unemployment produces a 7 per cent increase in non-psychotic mental health disorders. Mind's chief executive Paul Farmer has called for greater investment in mental health services to deal with this expected increased demand.

Also widely reported in the media were the findings of a study commissioned by Sainsbury's, suggesting that concerns about the impact of the financial crisis are not restricted to adults. One in three 10- and 11-year-olds and some eight-year-olds worried about the credit crunch. A quarter of the young respondents said their parents did not understand their concerns. Commenting on these findings in the *Daily Record*, psychologist Aric Sigman highlighted the dangers of 'grown-up' worries placing

a considerable burden on children. He warned that children are often over-exposed to adult-orientated information.

A trawl of the internet reveals some less doom-laden press coverage of the psychological aspects of the economic crisis. Based on research into the colours, sounds and scents

associated with relaxation, University of Hertfordshire

psychologist Richard Wiseman has designed 'the world's most relaxing room' to help people cope with financial stress and escape the relentless pace of modern life. Visiting journalists appeared to view the experience favourably, and Wiseman anticipates that organisations could create similar environments to combat stress-related absenteeism and related problems.

Finally, *The Guardian* provided a light-hearted discussion of the best degree course to take in order to 'recession proof' your life. They concluded that psychology was a good option as 'somebody is going to have to talk all those bankers down off their window ledges'!

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