

# Social sciences 'riding high'

The British Academy has published a working party report highlighting the importance of social science to policy making in relation to families. Chaired by Sir Michael Rutter of the Institute of Psychiatry, the working party was dominated by psychologists: Professor Jay Belsky of Birkbeck, University of London; Professor Judith Dunn of the Institute of Psychiatry; Dr Brian D'Onofrio at Indiana University; Professor Terrie Moffitt of Duke University and the Institute of Psychiatry; and Professor Frances Gardner of the University of Oxford. Other members had expertise in economics and law.

Entitled *Social Science and Family Policies*, the 184-page report provides an authoritative, up-to-date overview of research in several areas, including: the effects of family break-up; abuse and neglect; resilience; non-parental child care; institutional deprivation; interventions such as Sure Start; the effects of drugs and alcohol; and the roles of communities.

The tone is upbeat. The 'social/behavioural sciences are now riding high with a range of most ingenious techniques available to tackle complex and difficult questions,' the report says. Interventions such as parenting programmes can be beneficial, it argues, but common sense isn't a good enough guide to what works. Well-intentioned

programmes can be ineffective or even harmful, as in the case of the Cambridge-Somerville delinquency intervention. 'Policy-makers need to appreciate that there is no disgrace in having an intervention that does not work,' the report says. '...What is a disgrace is to persist with interventions that have been shown to be ineffective or even harmful.'

While recognising that it is for policy makers to choose which values to champion and which problems to prioritise, the report illustrates why

policy makers need social science – for example, to demonstrate when the same factors can have different effects on different people; to provide evidence on the likely effectiveness of policy choices; to help distinguish between cause and correlation, and to identify bi-directional causal relationships.

Elsewhere, the report highlights the importance of replicating findings and drawing on multiple methodologies. The Dunedin study in particular has shown the benefits of a multidisciplinary approach in relation to gene–environment interactions and resilience.

Maltreatment can lead to increased risk for antisocial

behaviour and depression, but the level of risk depends on a child's genotype. And the effects are highly specific. Different genes are implicated for depression and for antisocial behaviour. 'Social and behavioural scientists must be prepared to collaborate with biological scientists in order to examine key questions,' the report says.

Whilst 'policy-makers need social sciences', the social sciences in turn depend on funding. 'Good commissioning requires an understanding of multiple methods of analysis ... particularly on a topic as complex as the way in which parenting works,' the report says. 'Progress often means addressing enduring social problems by means of interventions that take time to establish and evaluate.' The report also warns against investing exclusively in tried and tested methodologies. 'What is needed,' the report concludes, 'is a balanced portfolio of low, medium and high risk research. With respect to the last, we wish to emphasise the need to reward creative, innovative thinking if it carries the potential for moving things forward in a dramatic way.'

Sir Michael Rutter, a Fellow of the British Academy, said: 'Social scientists and politicians have distinct, but equally important roles. This new report sets out what those are and examines how these two professions can work together to create successful policies for families and young people.' **CJ**

**I** Download the report: <http://bit.ly/9aPPZs>

## WILEY PRIZE WINNER

Dr Essi Viding, a developmental psychologist from University College London, has been named by the British Academy and Wiley-Blackwell as the winner of the 2010 Wiley Prize.

The Academy's Wiley Prize in Psychology, worth £5000, was created in 2009 as an annual award to recognise outstanding contributions in a field of psychology. The prize alternates annually between 'lifetime achievement' and 'outstanding promise', and for the first time this year it

rewards research by a UK-based psychologist within five years of receipt of doctorate whose research and achievements show exceptional promise.

Dr Viding's work brings together genetics, social development and cognitive neuroscience in innovative ways to explore the causes of violent antisocial behaviour in young people. She was appointed Reader in Developmental Psychopathology at UCL in 2008 and is heavily committed to translating her basic science findings into

practice with advisory roles for school-based interventions and government policy.

On receiving the award, Dr Viding said: 'It is a great honour that the British Academy and Wiley-Blackwell have recognised the research I conduct with my team and collaborators. I have been fortunate that UCL have strongly supported my early career development. This prize is also a testament to the wonderful mentoring I have been lucky to receive throughout my career.' **JS**

# New child development unit

The Psychology Department at the University of Kent has launched a new Child Development Unit jointly headed up by the psychologists Dr Kirsten Abbot-Smith, Professor Adam Rutland and Dr Erika Nurmsoo. The unit will run experiments on children aged between 12 months and 10

years, with a particular focus on language, cognitive development and group behaviour. Other unit members include Dr Lindsey Cameron and BPS members Professor Dominic Abrams and Dr Mike Forrester.

Key questions the unit aims to answer include: How do children learn their first

language? How do children decide who to learn from? Why and when do they learn from their peers? and How do young children learn conversational conventions?

The department has created a new child-friendly entrance, waiting area and testing rooms for the Unit. Abbot-Smith (pictured) and

Nurmsoo, both of whom have experience of research with pre-school age children, are newly recruited and two new Tobii eye-trackers, one for use in the Unit and one for use in schools, have been purchased.

'The main advantage to having a dedicated child unit,' Abbot-Smith told us, 'is that a researcher can test children in the lab, rather than in schools or nurseries. Our lab testing environment is quiet, which cannot be said of

most schools and certainly not of nurseries! Lastly, when using certain types of equipment, such as eye-trackers, it is really a lot easier to keep the equipment in place, using particular settings, than to have to drag it all over town.'

The most difficult challenge for a new child development unit, Abbot-Smith said, is recruitment of children. 'The most effective methods we've found are speaking to parents one-to-one in situations where they are not stressed out, so avoid parent-toddler groups. Examples include approaching parents in queues for the National Childcare Trust Nearly New Sales (held twice a year in most English towns), and having a stall in the town centre. Both of the latter involve having at least three "recruiters" present – also to help carry all the leaflets etc down – so that usually means me going as well. When in the town centre, one of us wears a rabbit costume so that toddlers drag their parents over to us.' CJ

! [www.kent.ac.uk/psychology/childdevelopmentunit](http://www.kent.ac.uk/psychology/childdevelopmentunit)



## ROYAL SOCIETY BRAIN WAVES PROJECT

What implications do existing and future findings in brain science have for society and ethics? The Royal Society plans to find out via a new 'Brain Waves' project, to be chaired by Professor Colin Blakemore of the University of Oxford.

The project will take place in five modules, the first of which will focus on implications for public policy and report this autumn. Psychologists and BPS members are well represented on the project's main steering group and on the working groups for the various modules. Indeed, the second module on neuroscience, education and lifelong learning is chaired by BPS Fellow Professor Uta Frith; the third module on neuroscience, conflict and arms control is

chaired by BPS Fellow Professor Robbins, and the fourth on neuroscience, responsibility and the law is chaired by former British Psychological Society President's Award Winner Professor Nicholas Mackintosh. The final module 'Lessons for the governance of novel areas of science and new technologies', which aims to bring together findings from modules one to four, is due to conclude in summer 2011.

Professor Blakemore said that advances in our understanding of the brain are helping improve treatments for neurodegenerative disease and mental illnesses, and will also increase our insights into normal human behaviour and

mental well-being. 'We need to do something that scientists usually don't like to do – to speculate about the future,' Blakemore said. 'There's a lot to think about and we must begin now the process of providing the best possible information in areas of public policy such as health, education, law and security. Progress in neuroscience is going to throw up all sorts of questions about personality, identity, responsibility and liberty. We need to be prepared to answer and respond to those questions.' CJ

! For further information see <http://royalsociety.org/brainwaves> or e-mail [science.policy@royalsociety.org](mailto:science.policy@royalsociety.org)

# The happiness goal

The football World Cup in South Africa is almost upon us and the clock is ticking down on London 2012. It's a timely moment to ask: Why, when it costs a country billions of pounds to host a major international sporting event, do they bother?

The usual argument is that it's all about the legacy – the lasting economic benefit. But according to two economists, Georgios Kavetsos and Stefan Szymanski, the evidence for this simply isn't there. Instead, they have tested an alternative explanation for the political appeal of big sports events: perhaps they make the population happier. Kavetsos and Szymanski also tested an additional claim, often made by governments investing heavily in training athletes: that sports success is good for a country's well-being and national pride.

The researchers mined the Eurobarometer Survey series, involving 12 European nations, including the UK, between the years 1974 to 2004. Twice a year, a random selection of 1000 people per country were interviewed and one of the questions was about their life satisfaction. Kavetsos and Szymanski looked for any changes in average life-satisfaction scores in surveys that took place in the autumn following the Olympics, football World Cup or European Cup. Specifically, they wanted to know if a country doing better than expected in a competition had any beneficial effect on average life satisfaction and/or whether hosting a competition had any benefits (the data available meant the latter question was restricted to the hosting of football events).

There was very little evidence that performing better than expected at a sports event had any positive benefit for the average life-satisfaction scores of a country's citizens. The data moved in the right direction, but with one exception the effects

were not statistically significant. By contrast, there was strong evidence that hosting a major international football event boosted the life satisfaction of a host nation's citizens.

Just how large was the life-satisfaction increase for a typical citizen in a host nation? Kavetsos and Szymanski said it was pretty big: three times the size of the happiness boost associated with gaining a higher education; one and half times the happiness boost associated with getting married; and nearly large enough to offset the misery triggered by divorce.

Is there a catch? Unfortunately, yes. By one year after the event, the benefits had gone, so the effects on people's happiness were extremely short-lived (the effects of marriage on happiness, by contrast, are long-lasting). There was also no evidence of a host country's happiness being boosted in anticipation of hosting an event.

'Most politicians calculate that hosting events can only enhance their political standing,' Kavetsos and Szymanski said. 'This makes sense if the benefits of hosting are not derived through economic gains, but through the feel-good factor, specifically associated with being the host.'

In the April issue of the *Journal of Economic Psychology*

## Direct evidence for human mirror neurons?

In the April issue of *Current Biology*

V.S. Ramachandran famously wrote that mirror neurons will 'do for psychology what DNA did for biology'. Yet although recordings from single cells in the brains of monkeys have identified neurons that respond both to the execution of a movement and the observation of another agent performing that same movement, the existence of such cells in humans has been inferred only from indirect evidence (e.g. brain imaging). To address this, Roy Mukamel and colleagues seized the opportunity provided by clinical investigations on patients with intractable epilepsy, who had electrodes implanted into their brains to identify the loci of their seizures.

Mukamel's team had 21 of these patients look at videos of hand gestures or facial expressions on a laptop in one condition, and perform those same gestures and expressions in another. Most of the 1177 cells that were recorded showed a response either to the execution of an action or the sight of that action, not both. However, there was a significant subset of 'mirror' neurons in the front of the brain, including the supplementary motor area, and in the temporal lobe, including the hippocampus, that responded to the sight and execution of the same actions.

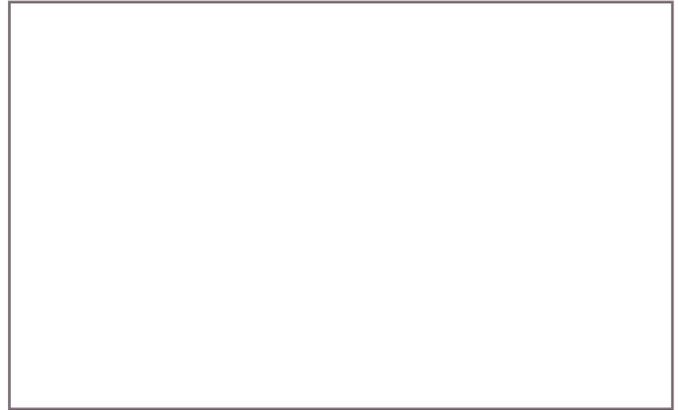
Critics could argue that rather than having mirror properties, a cell that responded (for example) to both the sight and the execution of a smile was actually being activated by the smile concept. Mukamel's group

reject that argument. They had a control condition in which the words for actions appeared on a screen, rather than those actions being seen or performed. The postulated mirror neurons responded to the sight and execution of an action, but not the word.

Another potential criticism is that the execution-related activity of a postulated mirror neuron is triggered by the sight of one's own action, rather than by motor-output *per se*. However, this can't explain the mirror neurons that responded both to the sight of a given facial expression and one's own execution of that facial expression (although proprioceptive feedback could still be a potential confound).

Mirror neurons make functional sense in relation to empathy and imitative learning, but a drawback could be unwanted imitation and confusion regarding ownership over actions. The researchers uncovered another subset of cells that could help reduce these risks – these cells were activated by the execution of a given movement but inhibited by the sight of someone else performing that same movement (or vice versa).

'Taken together,' the researchers concluded, 'these findings suggest the existence of multiple systems in the brain endowed with neural mirroring mechanisms for flexible integration and differentiation of the perceptual and motor aspects of actions performed by self and others.'



## Psychological calm in the eye of a storm

In *PLoS One* (<http://bit.ly/dCH9Tk>)

Research conducted in the aftermath of a devastating Chinese earthquake has uncovered a paradoxical psychological phenomenon – survivors living in the most devastated regions appear to be the least concerned by the ongoing risks. Shu Li and colleagues dubbed this the ‘Psychological Typhoon Eye’ in a paper published last year and now they’ve found that the effect was still in evidence a year after the disaster.

The 2008 Wenchuan earthquake registered 8 on the Richter scale and killed over 68,000 people. More than four million people were also injured. In their initial paper, Shu Li’s team observed that survivors living in the most devastated regions were the least concerned, as measured by their estimates for: how many relief workers were needed; the likelihood of an epidemic outbreak; the need to take safety measures against aftershocks; and the level of dose needed if a fictitious psychological medication were made available for an earthquake victim.

The new study of over 5000 residents finds that this association held after four and eleven months and it also replicates the finding when using a ‘relational distance’ measure of involvement in the quake. That is, people who reported having closer rather than more distant relations who’d been affected by the quake tended to report less ongoing concern with the threat.

One of the explanations for the Psychological Typhoon Eye mooted in Li’s 2009 paper was psychological immunity – the idea that exposure to danger builds psychological resilience. However, the new study undermined this explanation – people living in the most devastated regions still showed the same level of Psychological Typhoon Eye regardless of whether they themselves had suffered physical or economic harm from the quake. Another possible explanation is cognitive dissonance: that continuing to live in a dangerous area is psychologically uncomfortable, and to justify this decision people have to downplay the risks in their own mind. Li’s team said more research was needed to test this explanation.

These studies are not the first to find paradoxical psychological responses to danger. Research in the 1970s found that people living nearer to French nuclear power stations perceived the risk to be lower than those living further away.

## You’ve got lie-mail

In the March issue of the *Journal of Applied Psychology*

E-mails feel so transient, so disembodied, that we’re more tempted to lie when sending them compared with writing with pen and paper. That’s according to Charles Naquin and colleagues who tested the honesty of students and managers as they played financial games.

Forty-eight graduate business students were presented with an imaginary \$89 kitty and had to choose how much they’d tell their partner was in the kitty, and how much of the kitty to share with their partner. Crucially, some participants shared this information by e-mail, others by pen and paper. You guessed it – those who shared the info by e-mail were more likely to lie about the kitty size (92 per cent of them did vs. 63 per cent of the pen and paper group), and they were also more unfair in how they shared the money. Participants in the e-mail group also said they felt more justified in misrepresenting the amount of money to their partner.

A follow-up study ramped up the ecological validity. Full-time managers took part in a group financial game, forming teams of three with each member pretending to be the manager of a science project negotiating for grant money. This game was played with real money, the players all knew each other, and any lies would be revealed afterwards. Once again, players who shared information by e-mail were more likely to lie and cheat than those who used pen and paper.

Naquin’s team said their results chime with previous research showing, for example, that peer performance reviews are more negative when conducted online rather than on paper. ‘Moving paper tasks online either within or across organisational boundaries should be undertaken with caution,’ they said. For example: ‘Taxes using the increasingly popular e-filing system could be even more fraught with deception than the traditional paper forms.’



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# Elections, volcanoes and hypnotised rabbits?

Owen Hughes on how the Society's Annual Conference pushed through the media mêlée and embraced new ways of engaging the public

There are times when you may be forgiven for thinking that someone somewhere doesn't want you to get the word out about the British Psychological Society's Annual Conference. It was always going to be a challenging year when the prime minister called a general election a couple of weeks before the conference, sparking pages and pages manifesto and debate talk in the newspapers. Then a certain Icelandic volcano decided to eject tons of ash into the skies above Europe. As if this wasn't enough the media was treated to a story about a man who was able to hypnotise aggressive rabbits so that the vet could treat them.

Before and during many of the British Psychological Society's conferences a great deal of time and effort goes into letting the public know about what is being presented. The aim is to raise the profile of the profession and inform people about the fascinating work that goes on, often behind closed doors, helping us understand human psychology better. The gauntlet was well and truly down. The BPS press office, supported by the Media and Press Committee, had prepared over 20 media releases to be distributed to a huge range of media outlets from newspapers to radio stations and the growing number of online news sources. Despite the competing stories three journalists from national publications were present throughout the conference, with other national and local newspapers carrying stories.

In response to the times it was decided to embrace some of the new social networking tools that are available as well. The top of the tree at present, rather appropriately, is Twitter. The Society's conference team had already set-up a Twitter account for the conference. We decided to enhance this with input from the PR team and committee to

inform, educate and connect those at the conference with the wider world. Twitter allows the user to send a message of a maximum of 140 characters which can then be read or retweeted by those who have chosen to follow the user, online or on smart phones. Now if you are under 30 I am probably preaching to the converted, but venturing into the Twitterverse was quite a novel experience for many of the press committee.

The joy of social networking is that it allows an immediate reaction to a given presentation. It allows people who are not physically at the conference to follow what is happening in real-time and read what they are missing. It may have even encouraged some people to attend the conference next year.

It is true that not all tweets were related to ground-breaking psychological research. The immediacy of the format makes it ideal for updating conference attendees on housekeeping items, so alongside news of what was discussed in sessions, media releases and coverage and retweets of anything 'tagged' with #bps2010, people following in the ether were treated to information about where they could find coffee. As an egalitarian form of communication Twitter allows anyone who can confine their thoughts to 140 characters to join in the conversation. As more people started to follow the conversation Twitter enhanced the sense of community at the conference.

We are living in the internet age and this has had a big impact on how we get our news. The very definition of news has

changed so what was once the preserve of politicians and celebrities is now open to everyone. You can become the news yourself and allow anyone with a computer to keep up with what you had for breakfast. Can't find a newspaper or magazine to publish your musings? Worry no more, the blog is here, allowing you to post whatever opinions or interesting things you have discovered to an immediate audience. Many blogs take a more serious approach and have become respected in their own right as a source of information. Media releases are targeted at them and they have even become the topic of research themselves. Several authors presenting at the conference were happy to speak to blogs as a way of publicising their work.

Traditional forms of media were still to the fore of course: John Marzillier, who did a workshop during the conference to launch his new book, was interviewed by Libby Purves during her midweek programme on Radio 4. Other papers

which grabbed media attention were Oliver Robinson's research that having friends, rather than family, is the key to a happy retirement, and Iain Greenlees' research that red is the best colour shirt to wear if you are a goalie. Elizabeth Loughren's work had topical interest a couple of

weeks before the London

Marathon with her finding that men run marathons to compete, women to feel good.

This year's Annual Conference was the first to hold a public engagement event on the evening before the conference proper. The subject this year was the psychology of music and consumer behaviour, wittily titled 'The tills are alive...'. Lectures are normally sober affairs but on this occasion, while Adrian North told the audience about how supermarkets can shape whether you by French or German wine by playing the appropriate music, David Hargreaves gave the audience examples of music on his keyboard.

So this year's Annual Conference was one of firsts. A conference during which the BPS embraced new media like never before, raising the profile of the Society and giving it a more friendly face. There are many ways to judge success in public relations, but if communicating with new audiences and getting a mention on *Have I Got News for You* is any sort of measure then this year's conference was a success.

contribute

The Media page is co-ordinated 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@leeds.ac.uk](mailto:f.a.jones@leeds.ac.uk)