

Rows over replication: the 'cornerstone'

A row has erupted online after an eminent social psychologist in the USA reacted angrily to a failed replication of one of his classic stereotype priming studies. John Bargh, Professor of Psychology and Cognitive Science at Yale University, used his blog on *Psychology Today* to launch a stinging criticism of the researchers who failed to replicate his 1996 study, the journal they published in, and the British science blogger who reported on their new research (tinyurl.com/7xjyxtq).

In a post that extends to several pages, Bargh implied that Stéphane Doyen (Université Libre de Bruxelles) and her colleagues are 'incompetent and ill-informed'; he claimed that the open-access journal *PLoS One* allows researchers to 'self-publish' their studies without appropriate peer review so long as they are willing to pay the \$1350 fee; and he described Ed Yong's *Discover* magazine blog coverage (tinyurl.com/7nenrtm) of the failed

replication as 'superficial online journalism'.

The new paper by Doyen et al. 'Behavioural priming: It's all in the mind, but whose mind?' (*PLoS One*; tinyurl.com/7n5zy6m) attempted to replicate Bargh's highly cited 1996 article, co-authored with Mark Chen and Lara Burrows, which showed that participants primed non-consciously by the elderly stereotype walked away from a psychology lab more slowly (*Journal of Personality and Social Psychology*; tinyurl.com/7km8bqk).

Doyen's team made some changes to Bargh's methodology, including doubling the number of participants and using infra-red beams to time participants' walking speed (as opposed to a research assistant with a stop-watch). Their attempt at replication failed – participants exposed to ageing-related words in a scrambled sentence task didn't walk away any more slowly than control participants.

However, when the study was repeated with the experimenters knowing the expected results of the study and which condition participants had been allocated to, the slowing effect was observed. In another twist, experimenters told to expect participants to walk away faster actually obtained data supporting this reverse-effect, but only if they used a stop-watch. A final important detail is that there was evidence that some participants in the prime condition had noticed the ageing-related words they'd been exposed to, thus casting doubt on the scrambled sentence task as a way to deliver primes non-consciously.

Based on their results, Doyen's team concluded that 'experimenters' expectations seem to provide a favourable context to the behavioural expression of a prime.' They argued further that it was important to consider the limitations of automatic behavioural priming: '...it seems that these methods

DOES PSYCHOANALYSIS HAVE A PLACE IN HEALTH SERVICES?

There was a time not so long ago when psychiatry and psychotherapy were dominated by the psychoanalytic approach. Today, observed Professor Robin Murray, chair of the latest Maudsley Debate, psychoanalysts are an 'endangered species'. For this, the 44th Maudsley Debate hosted by the Institute of Psychiatry, the house proposed to a packed auditorium that 'psychoanalysis has a valuable place in modern mental health services'. The audience's initial vote was 251 for the motion, 32 against with 42 abstainers.

First to propose the motion was Peter Fonagy, a Chartered Clinical Psychologist, Associate Fellow of the BPS and the Freud Memorial Professor of Psychoanalysis at UCL. Fonagy said this was a 'deadly serious' issue and that psychoanalytic psychotherapy was 'fighting for its life'. In the race to demonstrate the relative merits of different therapeutic approaches, Fonagy said psychodynamic psychotherapy was at a distinct disadvantage. Most randomly controlled trials are focused on cognitive behavioural therapy (CBT), and success is measured by symptom reduction. Despite psychodynamic psychotherapy not being focused on symptoms, Fonagy said the few trials that had been conducted with this approach were showing it to be an effective treatment. He added that brain science and its revelations about developmental effects were also converging with the psychoanalytic model and its emphasis on early relationships.

BPS Fellow Paul Salkovskis, Professor of Clinical Psychology and Applied Science at the University of Bath, was the first to oppose the motion. He said it was a 'confidence trick' to confuse psychoanalysis with psychodynamic psychotherapy. Psychoanalysis, he argued, was wedded to several harmful beliefs and doctrines: including the rejection of a symptom focus, the rejection of evaluation, the idea of training by undergoing one's own analysis, and 'really bad' theories

from the comic (e.g the Oedipus complex) to the dangerous (e.g. in relation to obsessive compulsive disorder). 'Go and look at the psychoanalytic explanation for OCD and tremble' Salkovskis, said. He concluded that the philosophical and theoretical tenets of psychoanalysis put it at odds with a modern mental health service – remove those tenets and it's not psychoanalysis any more.

The motion was seconded by Alessandra Lemma, a Chartered Clinical Psychologist, Associate Fellow of the BPS and Visiting Professor in the Psychoanalysis Unit at UCL. She argued that CBT only works for 50 to 60 per cent of clients and that there's a need for an alternative approach for the remainder. Psychodynamic psychotherapy focuses on the person, not the disorder, she said. For chronic, complex difficulties you need a theory of interactional processes, she said, and 'psychoanalysis is unrivalled in providing a highly sophisticated theory of interactional processes'.

Last up, Professor Lewis Wolpert, a developmental biologist and the author of *Malignant Sadness: The Anatomy of Depression* (which charts his own experience of the illness), said he'd undertaken psychoanalysis and it was a 'total disaster'. He stressed how it is conscious thoughts that play a central role in conditions like depression, not the unconscious. It's things that happened yesterday – losing a job, being ill – that most often trigger depression, not events in childhood. He said there was no evidence for the basic psychoanalytic ideas of ego, super ego and so on – 'mystical nonsense', he called them. Psychoanalysts were not interested in cure, he claimed: 'It's all nonsense and we should abandon it completely.'

At the closing vote, there were 260 for the motion, 43 against and 35 abstainers. **CJ**

See www.kcl.ac.uk/iop/news/Podcasts.aspx

of science'

need to be taken as an object of research per se before using it can be considered as an established phenomenon.'

In his blog post, Bargh argued there was no way that experimenter expectancies could have interfered with the results he and his colleagues obtained. He blamed the replication failure on 'gross' methodological changes made by Doyen's team. For example, he quoted them as having instructed participants to 'go straight down the hall when leaving', in contrast to his study, which he said let participants 'leave in the most natural way'. In fact, as Yong has pointed out in a response on his blog (tinyurl.com/7ffztux), Doyen's team wrote that 'participants were clearly directed to the end of the corridor'; similarly, Bargh and his colleagues wrote in their study that the experimenter told the participant that 'the elevator was down the hall'.

Bargh concluded his blog post by arguing for the robustness of the concept of stereotype priming, which he said has been replicated 'dozens if not hundreds'

of times and is solidly embedded in several theories across multiple scientific fields. 'I am not so much worried about the impact on science of essentially self-published failures to replicate,' he wrote, 'as much as I'm worried about your ability to trust supposedly reputable online media sources for accurate information on psychological science.'

As we went to press the controversy was playing out online with several psychologists contributing their views: Matt Craddock commented on Bargh's *Psychology Today* post; Matthew Lieberman has written a piece on his blog *Social Brain, Social Mind* (tinyurl.com/7gty5k4); and Daniel Simons posted his views on Google+ as 'A primer for how *not* to respond when someone fails to replicate your work' (tinyurl.com/7rctma7).

In a related incident, the failed replication attempt of Daryl Bem's 'precognition' study, by Chris French

(Goldsmiths, University of London), Stuart Ritchie (University of Edinburgh) and Richard Wiseman (University of Hertfordshire), has finally been published, also in *PLoS One*, with Bem responding in the comments. Their report was rejected by several journals including the *Journal of Personality and Social Psychology* (see 'News', June 2011), which originally published Bem's findings along with his appeal for attempted replications. Writing in *The Guardian*, Chris French said: 'Although we are always being told that "replication is the cornerstone of science", the truth is that the "top" journals are simply not interested in straight replications – especially failed replications. They only want to report findings that are new and positive.' CJ

REPLICATION – YOUR VIEWS

We are looking to curate an 'Opinion special' on replication in the May issue. If you are reading this in the first few days of April, there may still be time to contribute – e-mail the editor on jon.sutton@bps.org.uk. Otherwise, we are as ever interested in your views for the 'Letters' pages on psychologist@bps.org.uk.

Behavioural insights to save £millions

The UK government's Behavioural Insight Team, led by psychology graduate David Halpern, has claimed that hundreds of millions of pounds could be saved using simple, psychologically inspired interventions to reduce fraud, debt and error.

The claims are made in a new report, published in February, that details seven ways public organisations could save money: make it easier for people to fill out forms, including tax returns; highlight key messages early in communications; use personal language; prompt honesty at key moments when people are filling in forms or answering questions; use the influence of social norms by emphasising that most other people behave prosocially; reward desired behaviour; and highlight the risks and impact of dishonesty.

These ideas are being put to the test in eight ongoing trials by the Behavioural Insight Team in partnership with public bodies. For instance, HM Revenue and Customs has experimented with tax reminder letters and found that they seem to be more effective if they include a message saying that the majority of people in the recipient's local area pay their tax on time. A trial with the Driver and Vehicle Licensing Agency is testing the influence of including a picture of a



person's untaxed car in reminder letters. Another with HM Courts and Tribunals Service is testing whether people are more likely to respond to text message reminders to pay fines if the

text mentions them by name and states how much they owe.

'This is the first time that the Government has explicitly sought to draw upon behavioural insights to tackle fraud, error and debt in a systematic way,' the report says. 'The insights outlined in this document, applied in a range of different contexts and settings, show that not only is it possible to apply behavioural insights to reduce fraud, error and debt, but also that it can be done in a highly cost-effective way.' CJ

I Applying Behavioural Insights to Reduce Fraud, Error and Debt is available to download at tinyurl.com/7gwwcbe

Security applications of neuroscience

The Royal Society has published the report from the third of its Brain Waves modules, which is focused on the military and civil law enforcement implications of new neuroscience findings. The report calls for increased awareness among scientists as to how their findings could be turned to potential military and enforcement uses. It also calls for the UK government to be more open about the research that it is funding in this area.

The module 'Neuroscience, conflict and security' was chaired by Rod Flower, Professor of Biochemical Pharmacology at the William Harvey Research Institute, Queen Mary University of London. There was psychological input from Susan Iversen, Emeritus Professor of Experimental Psychology at the University of Oxford, and BPS Fellow Trevor Robbins, Professor of Cognitive Neuroscience at the University of Cambridge, both of whom were members of the module's working group. Professor of Experimental Psychology Barry Everitt at the University of Cambridge was a member of the review panel for the module.

The report describes how neuroscience advances can be used to enhance the performance of the military and to harm the performance of its enemies. On the side of performance-enhancement, it highlights the potential for neuroimaging to improve recruitment; for brain-machine interfaces to enhance

sensory performance and to help with rehabilitation from injury; and for drugs to overcome fatigue and help with recovery from PTSD. In relation to degrading enemy performance, the report describes work on the use of chemical agents designed to affect the central nervous system, and the development of non-lethal high-energy laser weapons designed to interfere with neurotransmitter release and other physiological functions.

A substantial section of the report deals with the treaties related to the ban of the use of biological and chemical weapons, to which the UK is a signatory – The Biological and Toxin Weapons Convention of 1972 and the Chemical Weapons Convention of 1993. The latter includes an ambiguous exception allowing for 'law enforcement including domestic riot control purposes'. The report says there is an urgent need for the UK government to clarify its position in relation to this exception, in particular whether it applies to incapacitating chemical agents and not only to riot control agents, which have a less drastic, irritant effect. **CJ**

I The third Brain Waves report *Neuroscience, Conflict and Security* is available at tinyurl.com/7o963j8



Urgent need for clarification?

Mapping well-being

A preliminary map of the nation's happiness is taking shape following analysis of initial well-being results collected by the Office for National Statistics (ONS: see tinyurl.com/6vth933). It seems we are a relatively content people. The average life satisfaction score was 7.4 out of 10; the average 'life is worthwhile' score was 7.6 out of 10; 'happiness yesterday' averaged at 7.3 out of 10; whilst the average 'anxiety yesterday' score was 3.2 out of 10.

The ONS began including four subjective well-being questions from last April in its Annual Population Survey of 80,000 UK citizens aged over 16 (for background see 'News', January 2011: 'National well-being and the wandering mind'). Respondents were asked how satisfied they were with their lives; to

what extent their life is worthwhile; how happy they felt yesterday; and how anxious they felt yesterday (all scored 1–10). The questions are designed to tap three aspects of subjective well-being: evaluative, eudemonic (people's sense of meaning and purpose), and experiential. The initial data was collected from April to September last year.

There were age and gender differences in the results. Women scored marginally higher than men on all four questions, especially life feeling worthwhile. Life satisfaction and life worthwhile scores were higher for younger and older participants relative to middle-aged respondents. Conversely, anxiety was higher among the middle-aged.

In terms of geographic differences across the UK, subjective well-being scores were highest in Northern Ireland (7.6 out of 10 compared with 7.5 for Scotland and 7.4 for both England and Wales). Within England, well-being was lowest in London and the West Midlands and highest in the South East and South West. Anxiety yesterday was highest in

London compared with all other UK regions.

Other observations to emerge from the initial data: people living in a household with children rated life as more worthwhile, but showed no advantages in life satisfaction or happiness yesterday, and they reported no more anxiety; having a partner was associated with higher scores in satisfaction, life worthwhile and happiness yesterday; conversely, being unemployed was associated with lower scores on those three questions.

'It's good to see the project under way, but this initial account is not likely to inspire politicians or the public,' said Peter Warr, Emeritus Professor at the Institute of Work Psychology, University of Sheffield. 'The approach is almost entirely through average subgroup scores with no apparent overarching framework or psychological basis. Findings to date repeat what is already known, but maybe more sophisticated analyses in the future or observed changes over time will be more interesting.' **CJ**

For funding opportunities this month, see www.bps.org.uk/funds

Funding bodies should e-mail news to Elizabeth Beech on elibee@bps.org.uk for possible inclusion

Psychology apps

The ubiquitous rise of smartphone and tablet applications ('apps') is beginning to filter through to the world of psychology. An app called Buddy that allows users to keep track of their activities and feelings has just been rolled out to mental health service providers nationally after a successful trial.

The Buddy app (www.buddyapp.org) was designed by London-based Sidekick Studios in association with South London and Maudsley Foundation Trust and with financial support from the NHS Regional Innovation Fund and NESTA. The app works via the sending and receiving of text messages to users' phones (this makes it compatible with any phone). The app sends reminders, helps with diary keeping and goal-setting, allows analysis of patterns between a person's feelings and behaviours, and aids session planning. In trials, clients using the app were less likely to miss therapy sessions.

The app has now been adopted by four boroughs in south east London, by North East Essex, and by the Five Boroughs Partnership in the north west. Organisations purchase licences for the app allowing them to provide it to a given number of people.

Meanwhile, Wiley-Blackwell, which publishes the Society's journals, has also launched a free psychology app called Spotlight (<http://t.co/NJJWv4TI>) for use with iPhones and iPads. The app allows users to keep track of psychology conferences, abstracts, books, blogs (including the Society's Research Digest) and journal special issues.

Elsewhere, Richard McNally's lab at Harvard University has reportedly just completed a trial of an iPhone intervention for anxiety. There's a Mobilize app in development at Northwestern University, which is designed to detect signs of depression; a Tell Me About It! app – a language development tool for autistic children based on the principles of applied behavioural analysis; there's an app in development at Samsung that determines user emotions based on factors such as typing speed and shaking of the phone; and the memory training guru Tony Buzan is planning a series of iMindMap apps around his Mind Mapping techniques. **CJ**

I Have you come across any good-quality psychology apps? Let us know via Twitter on @psychmag

Coercive self-citation

Have you ever submitted to a journal and received a request from the editor to add in some extra citations to unspecified papers published in that same journal? According to a survey by Allen Wilhite and Eric Fong (University of Alabama in Huntsville), published in *Science* (tinyurl.com/892qvkz), this practice is called 'coercive self-citation' and it's worryingly widespread. Receiving editorial advice on relevant papers to cite is acceptable, they say, but being asked to add superfluous papers, presumably to boost a journal's impact factor, is unethical.

Of 6672 social science researchers (including psychologists; most were American) who answered a survey, around 20 per cent said they had been subjected to these kinds of requests. A further 20 per cent were aware of the practice but hadn't experienced it firsthand. Junior researchers were more likely to say they'd been coerced, as were the authors of papers with fewer co-authors. The practice also varied with discipline, being more common in business and economics, and less common in psychology and sociology (although Wilhite and Fong stressed that 'every discipline reported multiple instances of coercion'). More highly ranked journals were more likely to coerce, although it's not possible to say whether their ranking was a cause or consequence of the practice.

Overall, although 86 per cent of survey respondents said the practice of citation coercion was unethical, 57 per cent said that, prior to submission, they would add superfluous citations to journals known to coerce. Junior researchers were more likely to acquiesce. Familiarity may breed acceptance: researchers who admitted to adding superfluous citations viewed the practice less harshly.

'We find that coercion is uncomfortably common and appears to be practiced opportunistically,' Wilhite and Fong wrote. The pair concluded by calling on academic associations to condemn the practice and for journal self-citations to not count towards a journal's impact factor. **CJ**

NATIONAL STALKING CLINIC

The world's first National Stalking Clinic has opened in London and is run by Barnet, Enfield and Haringey Mental Health NHS Trust (tinyurl.com/6waumgu). The clinic takes referrals from multiple sources including courts, probation services and mental health trusts and will provide psychological treatment, assessment and rehabilitation of stalkers. The head of therapies at the clinic is Chartered Clinical and Forensic Psychologist Sarah Henley, an Associate Fellow of the BPS.

ONLINE CHILD THERAPY

The NSPCC's ChildLine service has launched an online therapeutic game, The Sky's The Limit (tinyurl.com/86zyyqm). Lucy Mann, ChildLine Digital Manager, said: 'Games like this are designed to have a therapeutic element to them; we hope that the young people who play them can use the game to take their minds off things that are making them feel sad, like family problems or being bullied.' The game involves the player naming things that make them sad and then jumping through the sky via springs on clouds. They can smash through rocks with their sources of sadness written on them, or just relax and fly through the sky.

HISTORY PODCASTS

Psychologists at York University in Canada have launched a series of podcasts about the history of psychology. Christopher Green, co-founder of the Advances in the History of Psychology blog (<http://ahp.apps01.yorku.ca>) and the former producer and presenter of the This Week in the History of Psychology podcast series, is to front a new occasional series Discussions in the History of Psychology. He's also started two other new series: History of Psychology Laboratory and This Week in the History of Psychology: Shorts (see www.yorku.ca/christo/podcasts/). Collaborators include Jeremy Burman and Jacy Young.

TWEETS PREDICT IMPACT

The amount of buzz generated by a journal article on Twitter is a reliable predictor of the ultimate scholarly impact that article will have. Gunther Eysenbach (University Health Network, Toronto) analysed thousands of tweets about new articles published in the *Journal of Medical Internet Research*. Articles that generated a high number of tweets in the days following their publication were 11 times more likely to be highly cited 17 to 29 months later compared with less-tweeted articles (jmir.org/2011/4/e123/). **CJ**

Doubts cast on influential theory of visual processing

Psychologists in Germany have challenged one of the most influential theories in neuropsychology – the dual stream model of visual processing proposed by Mel Goodale and David Milner. This model (see tinyurl.com/b3ktap for *Psychologist* article) proposes that visual information entering the brain splits down two parallel paths: the dorsal path heads to the top and rear of the brain where the information is used for guiding actions; the ventral path reaches the temporal lobes where it is used for conscious perception and recognition. The model is hugely influential and will be familiar to all contemporary psychology graduates. The three seminal papers proposing and supporting the model have been cited over 930 times.

Much of the supporting evidence came from studies of the brain-damaged patient known in the literature as D.F. This woman's damage to her occipital and parietal lobes from carbon monoxide poisoning appeared to have left her with a rare form of 'visual agnosia' – she was unable to recognise everyday objects but was perfectly able to grasp and use them. In other words, she appeared to have an impaired ventral stream but a preserved dorsal stream.

Marc Himmelbach and his team at Eberhard Karls University say that D.F. has become one of the most influential brain-damaged patients in neuropsychology, comparable to Paul Broca's aphasic patient Leborgne and Phineas Gage – the 19th-century railway worker who survived an iron rod passing through his brain. However, as is the case with Leborgne and Gage, the German team believe that standards of testing have become more stringent since the seminal work with D.F. was published back in the 90s. In particular, conclusions were drawn about D.F. without comparing her performance and behaviour to age-matched controls.

For their paper, Himmelbach and his team have replicated the three main tests performed on D.F. with 20 female, age-matched healthy controls (mean age 36.5 years). These tests included indicating the size of various rectangular wooden blocks using the thumb and forefinger; actually reaching and picking up the blocks; indicating the orientation of a narrow slot in a disc; posting a card through that slot; and indicating the size and shape of odd-regular shapes and then actually picking up those shapes. Results from the original work with D.F. were compared against the results from these new healthy controls.

Himmelbach and his colleagues don't dispute that D.F.'s performance was far more impaired for recognition tasks compared with the reaching and grasping tasks. However, compared against their new control data, they say it's clear that D.F. was also severely impaired in her reaching and grasping performance, seemingly undermining the neat interpretation that she had a preserved dorsal stream. The German group also point to more recent tests of D.F. showing that she

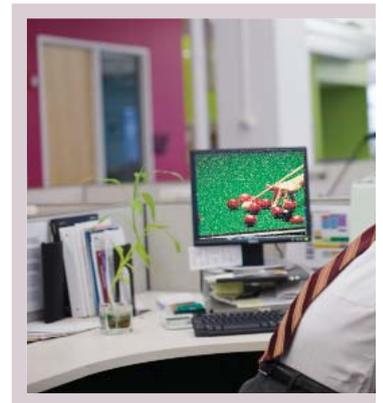
has obvious motor deficits when the task is more complicated – for example, she was unable to grasp a disc through three holes in its surface using her thumb, index and middle fingers.

Other evidence highlighted by Himmelbach and co concerns a more recently identified patient 'J.S.' who has a similar pattern of brain damage to D.F. and who is more impaired on recognition than motor tasks, but who nonetheless is clearly severely impaired on motor tasks compared with healthy controls. Based on a scan of J.S., the researchers also doubt that the pattern of brain damage suffered by D.F. is as circumscribed as previously claimed. Finally, the researchers are critical of the lack of 'kinematic data' from the original tests of D.F. – things like reaction times, peak velocity of movements and so forth. Such data, they say, would show whether her movements were really normal, or if she were, for example, taking longer than normal to compensate for her difficulties.

'In conclusion,' the researchers said, 'the behaviour and anatomy of D.F. on its own does not provide firm grounds for the perception vs. action interpretation of dorsal and ventral stream areas.' They added that other sources of support for the dual stream model 'do not provide unequivocal evidence in favour of or against [the model] without reference to D.F. and could also be integrated by alternative models that do not explicitly state an action-perception dissociation.'



In the January issue of *Neuropsychologia* (see tinyurl.com/7azzyfn)



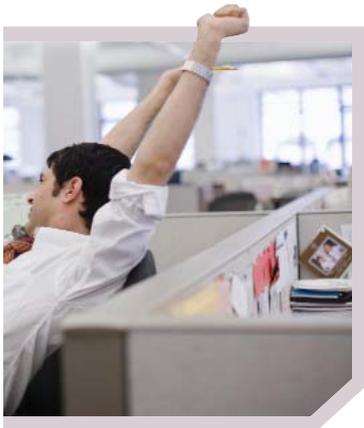
Lost sleep and cyberloafing

In the *Journal of Applied Psychology* (see tinyurl.com/85t7359)

When the clocks went forward at the end of March, did you have an urge to watch the 1982 snooker championship final on the internet at work the following day? A new article suggests that we may be more prone to 'cyberloafing', frittering away work time on unrelated online activities, when we haven't had enough sleep.

The researchers, led by David Wagner, began sifting through Google's publicly available data for rates of entertainment-related searches, judged to be a proxy of cyberloafing. Using a 'quasi experimental' approach, the investigators recognised an event that affects everyone's sleep: when the clocks go forward for Daylight Saving Time. Prior evidence suggests we lose on average 40 minutes of sleep per night following the switch, as our body rhythms struggle to adjust. The researchers used data from 203 metropolitan areas in the USA, weighted by area size, across 2004–2009. They found that entertainment-related searches on the Monday after DST were 3.1 per cent higher than on the Monday before, and 6.4 per cent higher than on the Monday after.

A second study took this to controlled lab conditions. Ninety-six undergraduate students wore a sleep-monitoring bracelet overnight before attending a lab session to complete a computer task – assessing a potential new professor for the university by



watching a 42-minute video lecture. What the researchers were really interested in was the amount of time they would spend surfing the internet instead. Cyberloafing was higher for participants who experienced more instances of sleep interruption or less sleep overall, as recorded by their monitoring bracelet.

This is another piece of research advancing the ego depletion theory, which states that willpower is a resource that is used up through effortful acts. Researchers have previously argued that sleep is a means of recharging our regulatory resources, and these studies confirm that less sleep does indeed make us prey to counterproductive activities like cyberloafing. However, those who naturally exercise self-discipline may be somewhat resistant: in study two, the effect of sleep interruption on cyberloafing was weaker for participants who scored high on a measure of conscientiousness administered beforehand. (The effect of less overall sleep still remained.) This is consistent with ego depletion, as highly conscientious types are more likely to actively use methods to regulate their effort to overcome counterproductive behaviours, rather than taking the path of least resistance.

The costs of cyberloafing have been estimated at around £300m a year, so it's worth understanding when we're more vulnerable to its temptations.

I This item is from the Society's Occupational Digest, written and edited by Dr Alex Fradera – see www.occdigest.org.uk and follow @occdigest.

Easily embarrassed and altruistic

In the January issue of the *Journal of Personality and Social Psychology*

Social interactions can feel like walking a tight-rope, an excruciating pit of embarrassment always just one tiny misstep away. But could embarrassment also function in our favour, helping to advertise some of our better, more desirable qualities?

Matthew Feinberg and his colleagues at the University of California, Berkeley conducted five experiments in total, involving hundreds of undergrad participants. The first two studies were designed to test whether people who experience more embarrassment are more prosocial. In the first, participants were video-recorded as they recounted a time they'd been embarrassed. The videos were coded and it was found that the students who displayed more signs of embarrassment (e.g. gaze aversion, nervous face touching and laughter) also tended to endorse values of fairness more, and they were actually more generous with money in an economic game. In the second study, participants who said they would be more embarrassed in a range of hypothetical social scenarios tended to be more generous in an economic game, and they also scored more highly on a questionnaire measure of their prosociality.

Further studies tested whether embarrassed people are perceived as more prosocial. It was found that individuals who had appeared more embarrassed in the videos from the first study were rated as more prosocial by new

participants. Another set of participants rated actors displaying an expression of embarrassment as more prosocial than those displaying pride or a neutral expression. Still more participants agreed to cooperate more fully in an economic game with people who they'd seen pictured looking embarrassed.

A fifth and final study was the most realistic. Participants saw their research partner praised for his or her superb performance on a mental performance test. Unbeknown to the participants, their partner was an accomplice of the researchers. On being praised, this actor either responded with embarrassment or with pride. Crucially, later on, the participants tended to cooperate more with their partner if he or she had shown embarrassment earlier, as opposed to pride. What's more, the greater the intensity of their partner's earlier display of

embarrassment, the more participants tended to trust and cooperate with him or her. The researchers also ruled out the possibility that the actor was displaying shame, rather than embarrassment. One final important detail: the researchers checked and these effects of embarrassment weren't because the participants saw their embarrassed partner as weak, liked them more, or because they felt compassion towards them.

'Our data are the first to reveal that people who feel and show intense embarrassment are indeed more prosocial,' the researchers concluded, 'and that this display triggers prosocial inferences and actions.' The researchers said there was a need for more research – for example, to find out whether it's possible for people to feign embarrassment and thereby benefit from the flattering assumptions onlookers make about them.



The material in this section is taken from the Society's **Research Digest** blog at www.researchdigest.org.uk/blog, and is written by its editor **Dr Christian Jarrett**. Visit the blog for full coverage including references and links, additional current reports, an archive, comment and more.



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Bringing psychology to the public: Have your say

Fiona Jones on planned changes to the Society's media and press function

Members of the British Psychological Society, in common with scientists of many persuasions, are sometimes unhappy about the quality of press coverage of their discipline. Too often the psychology that reaches the media, and particularly the tabloids, can seem trivial and not representative of the best the subject has to offer. Psychology stories clearly reach the media by many different methods over which the Society has no control. So how *does* the BPS try to ensure quality research reaches broadcast and newspaper journalists?

Sometimes journalists will contact

individual psychologists themselves or via university press offices, but very often they will ask for recommendations from the BPS Media Centre. For example, in 2011 the office took around 2000 queries from the media. Undoubtedly, there is a great demand for psychological comment on issues relating to the activities of celebrities or issues of topical concern, such as obesity, work stress or childcare, for example. There is inevitably much less demand for information on cognitive or statistical psychology! The PR team therefore have very little influence on either the type of enquiry or the resulting output. Thus it can be hard to ensure that the full range of psychology is represented.

Where the PR team and Society members themselves have more influence is over the press releases that are produced. These include releases of new research from the Annual Conference and member network conferences as well as a selection of research from the latest BPS published journals. The PR team work very hard on behalf of the Society to produce a stream of press releases throughout the year. For many years now they have worked closely with the BPS Media and Press Committee, a team of approximately 12 psychologists who represent every branch of psychology and work in both academic and applied settings.

The committee role includes selecting appropriate presentations to be the subject of press releases at the Annual Conference. In addition they review BPS journals prior to publication to try to identify research suitable for release. Together with members of the PR team and the researchers themselves, they write press releases which are always checked for accuracy with the original authors. The involvement of the qualified and experienced psychologists on the Media

and Press Committee helps to ensure that good-quality research, including research from the less obviously media-friendly areas can sometimes reach the press. Equally importantly, we are able to advise that, while some research might be 'popular', it may be exploratory or not empirically rigorous and should not be recommended for release. We support the view that publicising empirically weak 'pop' research leaves the Society open to criticism and we are in a position to advise members of the PR team where we feel this is a risk. Members of the committee are also present in the press office at the Annual Conference to liaise between journalists and the researchers who are presenting at the conference. They are also often a first port of call for journalists looking for advice on stories and are committed to offering a fast response wherever possible.

In short, the Media and Press Committee is a major way in which members of the Society are able to contribute directly to the press outputs and in addition gain useful experience and skills in this area. Regular collaboration between an expert PR team and psychologists representing every area of psychology helps ensure that a wider range of the best-quality psychology research is publicised than would otherwise be the case.

It is therefore particularly concerning that the recent Board of Trustees Communications Review has decided that the Media and Press Committee be dissolved. This decision came with no apparent consultation with members on this specific issue. The review seeks to implement a more strategic approach to the BPS PR coverage, designed to ensure a rapid response and to present a unified view on major issues on which the Society needs to comment. This has been an area of weakness in the past. However, there also is a need for regular work, such as put in by committee members, to ensure that the work of BPS members, in all its diversity, is represented. At present it is unclear how the regular input from committee members – around two to three weeks a year each – will be covered. It is likely to result in more work for an already stretched PR and marketing team and could potentially lead to a reduction in coverage of research in the less obviously media friendly areas.

The BPS is a membership organisation, and it's important that members have a say. If you have any comments or suggestions please write to the Psychologist letters page or e-mail either F.A.Jones@leeds.ac.uk or C.parsons@staffs.ac.uk.



MEDIA PRIME CUTS

What exactly is Susan Greenfield's problem?
<http://t.co/Cb6q7L40> <http://t.co/GLo5iqe2>
 John Bargh on priming, failures to replicate, and the PLoS One publishing model
<http://t.co/OtVFzDli> (see 'News')
 'The emotional oracle effect', from @jonahlehrer <http://t.co/gabWpszs>
 Incompetent people lack the competence to recognise their incompetence
<http://t.co/b8N85Mx9>
 Which psychology study would you most like to see replicated? <http://t.co/xW8eVAUS>

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, Ceri Parsons (Chair, Media and Press Committee), on c.parsons@staffs.ac.uk

When Ariely met Gladwell

Through a series of bestselling books, Duke University behavioural economist Dan Ariely and New Yorker writer Malcolm Gladwell have both made significant contributions to the public's understanding of social science research. Last year, Ariely interviewed Gladwell as part of his 'Arming the Donkeys' podcast series, discussing the challenges of translating and representing academic research for a mass audience. The audio and a partial transcript have now been made available via the 'Journalist's Resource' website (see tinyurl.com/arielygladwell).

Ariely asks Gladwell how he picks his topics. 'I see things and I collect them, and I think they might be interesting,'

Gladwell replies. 'But there's no theory or system. I go to the library sometimes, and I just sort of roam around; or I go on the databases and I just type in things at random, or I get articles and read through the bibliography... But there's no rhyme or reason. Someone will say something to me interesting, and I'll follow up on it or something. To be a writer I think you're kind of constitutionally disposed toward optimism.'

How do you decide what's central to the story and what nuances to leave out, Ariely asks. It's impossible 'to reflect the full complexity of the underlying academic data', Gladwell admits. 'So what you try and do is either represent the best-supported position, or make it clear that what you're arguing is an interpretation of the data and there might be others. Or you use this in the service of a larger idea.' What about explaining variance: that something is a really important effect, but that there's still more unknown than known? According to Gladwell, 'you can only tell the story about the part that's known', but thankfully readers are 'a good deal more sophisticated than we give them credit for. I don't think anyone reads a book like yours or a book like mine or a book like *Freakonomics* and thinks that what we're talking about explains everything.'

At this point, I admire Ariely's honesty in saying: 'But when you write or I write, I don't feel that you or I make it explicit that [we're saying], "I'm going to tell you a story about the small part of the

picture." ... It's very hard to tell a good story [that says], "I'll tell you a story and at the end of the day I'll tell you it explains 20 per cent of..."' Gladwell counters that it's OK 'to tell stories the way we do', because 'the experience doesn't end on the final page. It is feeding into an ongoing conversation that people have about their lives.'



Malcolm Gladwell

Sticking with the theme of complexity, Ariely asks whether there are any topics that Gladwell has decided are just too opaque to tackle. Gladwell's answer is a fascinating summary of the challenges of communicating science to large and diverse audiences:

This is one of the things that academics sometimes fail to grasp about popular writing. Sometimes there are, I feel there is, some friction between me and the academic world; not a lot, but there's a little bit sometimes. Part of it is that I don't think they understand the limitations of the form. There's almost no occasion when they are writing for their own audience where they can't tackle a topic because of the difficulty explaining it. Someone's always going to be able to follow, or some huge percentage of their audience is always going to be able to follow it... It's a small audience, but that's the beauty of academic work.

Whereas I literally cannot discuss something that my audience cannot understand. I can't do it, I lose them, they're gone... and then I've failed. So that limits the way in which I talk about – not hugely or dangerously – but it limits. It means I will tend to stress some things sometimes more than others. And that is, you know, this is – to use to use my favourite quotation from *The Godfather* – as Hyman Roth said to Michael Corleone: "This is the business we've chosen." Right? You know, you accept when you take a position in a certain kind of a field... the limitations of it, and that's one of them.

MEDIA CURIOSITIES

Sometimes, you just want people to shut the hell up. Not my view, you understand: it's that of two Japanese researchers who have introduced a prototype for a 'SpeechJammer' which can 'disturb remote people's speech without any physical discomfort'.

In their paper (tinyurl.com/speechjam), Kazutaka Kurihara and Koji Tsukada point to situations of 'unavoidability' and 'occupancy' where the usual rules of turn-taking in conversation and quiet in public places are broken. Never fear, SpeechJammer is here! A direction-sensitive microphone and speaker, combined with a distance sensor and some other technical gubbins, becomes a portable gun exploiting the principle of delayed auditory feedback (DAF). Playing someone's voice back to them, with a slight delay of around 200 milliseconds, can jam a person's speech.

After the researchers' paper went viral and they posted a video online showing the prototype in action (see tinyurl.com/6ljh3xw), Professor Sophie Scott from the UCL Institute of Cognitive Neuroscience was moved to write a blog post on the topic (see tinyurl.com/7ujzw35). 'Need we worry about this? It's clearly at least technically feasible, but remember not everyone is as affected by DAF as everyone else (and some people are dramatically improved by the technique). There are DAF apps which you can use to find out what DAF is like, if you want to know more about how you'd react. Also, consider other technology that can come to your aid – wear noise cancelling headphones, and turn them on if you suspect long range DAF might be used on you.'

The arms race continues!

JS

MEDIA PRIME CUTS

Robin Murray on schizophrenia and his life's work <http://t.co/3iLuoJc4>

Psychologists, torture and confidentiality:

'what price is too high to be able to look yourself in the eye?' <http://t.co/Mbaot8l>
Why Adele makes us cry <http://t.co/PSs3Wink>
Survey on life crises from Greenwich's

Oliver Robinson <http://t.co/IXEP98JS>

'Female sexual dysfunction' is about relationship dissatisfaction
<http://t.co/o633cssY>

Mainstream media and neonatal death, from @DrPetra <http://t.co/vjxNfjdN>