

US psychologists resign over

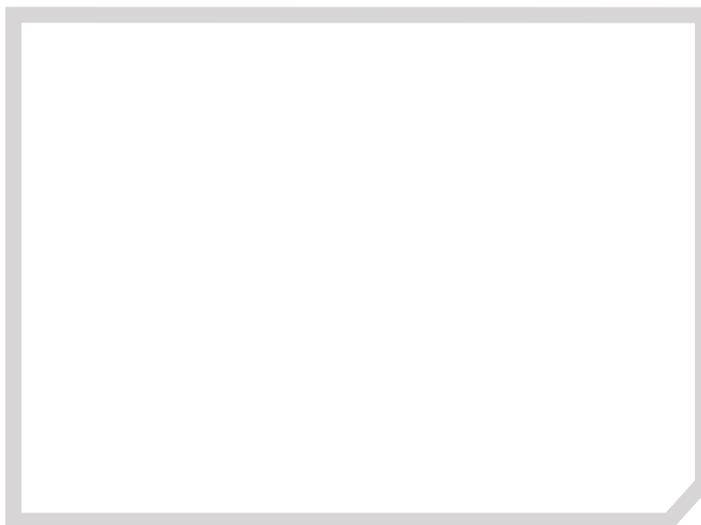
Several prominent psychologists have resigned from the American Psychological Association in protest over the organisation's position on interrogation and torture.

Those leaving include Beth Shinn, former President of two APA Divisions; Ken Pope, former chair of the Ethics Committee, and Bryant Welch, who was founder and Director of the Practice Directorate. The APA say that 67 people have resigned; some 350 names have pledged to withhold their fees at www.withholdapadues.com.

The APA position remains controversial, despite recent statements (see box below). The organisation has stopped short of prohibiting psychologists from any participation whatsoever in military interrogations, saying in their FAQs at www.apa.org/releases/faqinterrogation.html that 'by staying engaged, APA is able to work with the many parties, both within and outside of the military, who are dedicated to preventing torture and other forms of cruel, inhumane and degrading treatment.'

LATEST DEVELOPMENTS FROM THE AMERICAN PSYCHOLOGICAL ASSOCIATION

In February the APA wrote to President George W. Bush to ask him to 'definitively outlaw waterboarding and several other so-called "enhanced" interrogation techniques'. Later that month the APA's Council of Representatives approved an amendment to its 2007 resolution, stating that psychologists are 'absolutely prohibited' from any involvement with practices that are defined as torture or cruel, inhuman or degrading treatment under UN and Geneva conventions, among other leading human rights documents. Stephen Behnke, Director of Ethics for the APA, said: 'This more specific language, which has been praised by human rights groups, should allay concerns that the 2007 resolution was anything less than ironclad.'



A protester outside the 2007 APA convention in San Francisco

Many critics still feel this is not good enough. Stephen Soldz, an outspoken opponent of the APA position and Director of the Center for Research, Evaluation, and Program Development at the Boston Graduate School of Psychoanalysis, told us: 'The APA position is deeply disingenuous given that the historical record is that psychologists, designed, conducted, standardised, and

supervised abusive interrogations. There is not one instance in the public record of a psychologist taking action to oppose abuse ordered or condoned by his/her command. The APA knows this. Yet they maintain their fiction.'

The APA cite the case of Army Colonel Dr Larry James, who was sent to Abu Ghraib to implement procedures to prevent future abuse, as an illustration of 'the value of our strategy of engagement to safeguard the welfare of detainees.' Asked in *The*

Guardian in February about the existence of the mysterious Camp 7 interrogation site, Dr James replied that he does not want to know where Camp 7 is. 'I learned a long, long time ago, if I'm going to be successful in the intel community, I'm meticulously – in a very, very dedicated way – going to stay in my lane,' he said. 'So if I don't have a specific need to know about something, I don't want to know about it. I don't ask about it.' Soldz argues 'that is hardly the statement of an anti-torture hero. One who looks away and "stays in his lane" is not someone going out on a limb to prevent abuse.'

Responding to an open letter from Soldz and others to the APA President Dr Sharon Brehm, which discusses James's involvement at Guantanamo, Dr James said: 'Letters that name and that associate individuals with torture through innuendo have no place in an informed and responsible discussion. They are deeply painful. They are also extremely discouraging to psychologists in the military seeking to do the right thing, many of whom are early in their careers and often in dangerous settings far from family and from loved ones.'

James continued that 'Having custody and control over an individual is an awesome responsibility. When I was sent to Abu Ghraib, following the well-publicized abuses, I relied upon psychology and well-known psychologists to help me fulfill my mission – to develop training and implement systems designed to prevent further acts of abuse.'

According to Soldz, 'there is a diversity of opinion among APA critics over whether psychologists should have any involvement at all with interrogations. Some of us believe that psychology, like medicine and psychiatry, should support a "bright line" stating that direct participation in interrogations is incompatible with being a health provider profession dedicated to "do no harm", as

Bob Parker (<http://focusframe.com>)

torture

our ethics code states. Others feel that participation in interrogations might be acceptable in certain circumstances. But we all agree that psychologists should not be serving interrogations in sites where fundamental human rights are being violated. That is our bottom line.' JS

A UTOPIAN VISION?

'If one truly wants to promote ethical interrogations, transparency is the solution. The Abu Ghraib abuses became public only when photographs appeared. If one truly aimed to reduce abuse, it would only require cameras in every detention center and videotaping of every interrogation, with independent access to the tapes. Instead, the Defense Department reaction after Abu Ghraib was to order all cameras removed from detention centers.

'Further, we need independent human rights monitors in the detention centers, with full access.

The International Committee of the Red Cross, while conducting admirable work, cannot play this role, as their reports are secret. The independent monitors need the

right to report publicly on abuses they witness. Of course this is 'utopian'. But this is no more utopian than the fantasy that psychologists have any unique qualities that will lead them, any more than anyone else, to risk their careers and oppose abuse. Psychologists, with all we've learned about the powerful effects of settings upon individual behavior, should be the first to recognize this truth.'

Stephen Soldz, writing in a recent special issue of the *Swedish Journal of Psychology*

Stephen Soldz

Bob Parker (<http://focusreframed.com/>)

When time slows down

A favoured device of many a film director is to recreate that sense of time having slowed down, so often reported by people caught up in crashes and other terrifying situations.

A possible cause of this fear-induced time distortion is that sensory processing is speeded up, thus leading to enhanced temporal resolution – a greater ability to discriminate between rapidly occurring events. But now psychologists in America have tested this theory and found that temporal enhancement doesn't occur (tinyurl.com/36g2t3).

Chess Stetson and colleagues asked participants to free-fall 100 feet at the

Nothin' But Net thrill ride in Dallas. While in mid-air, the participants' task was to identify a digit, rapidly alternating with its negative image, presented on a wrist-watch style device.

Testing before the free-fall showed that on average the participants were unable to see digits that flickered with their negative image more rapidly than every 47 ms. Although the participants felt that time had slowed during the fall, their ability to identify the flickering digit mid-flight was no better than on the ground, thus demonstrating that their sensory processing hadn't speeded up.

The researchers said this suggests the fear-associated slowing of time occurs after the event. Writing in the journal *PLoS One*, they concluded: 'We speculate that the involvement of the amygdala in emotional memory may lead to dilated duration judgements retrospectively.' CJ

Scottish educational psychology services

Educational psychological services in Scotland are to be extended to cover the post-school sector in all council areas. Education Secretary Fiona Hyslop said that in building on their current nursery and school focus, 'this service will make a difference to young people across the country. Psychological services will work with lifelong learning and training partners to provide a crucial bridge between school and what lies beyond. I am confident that this will provide young people with the support, confidence and

advice they need to go on to a successful, positive future and to play a full part in a thriving Scotland.'

Currently, educational psychological services are focused on youngsters up to the age of 16. Post School Psychological Services (PSPS) extends the current provision and aims to improve the move out of school for young people up to the age of 24, but they are currently only delivered in 20 authorities. The roll-out across Scotland will extend the service to the remaining 12 council areas. The scheme will cost approximately

£1.4 million next year and will be funded centrally from the Scottish Government until 2010.

PSPS provides consultation and assessment with young people who have additional support needs and, through multidisciplinary working, supports and advises organisations such as colleges, the Enterprise Networks, training providers and Careers Scotland in their delivery of services to young people on the path towards work, further learning or training. JS

Parenting for all fails

A parenting programme made available to all families, rather than just those most at risk, has failed to have an observable beneficial impact on children's behaviour (see tinyurl.com/3cuzo4). The finding comes after the announcement in 2006 by the UK Home Office to fund dozens of parenting experts across the country.

The motivation for parenting programmes is that harsh or abusive parenting styles have been found to contribute to later behavioural problems in children, but there are questions over how such interventions should be delivered.

DELAY ON STATUTORY REGULATION

Shortly before we went to press the Society received word from the Health Professions Council that the statutory regulation of psychologists will no longer be introduced in 2008. The new working date is February 2009. Further information to follow.

A drawback of targeted programmes is that many families who don't meet the at-risk criteria will miss out, and that many vulnerable families fail to participate due to issues of stigmatisation. For these reasons, psychologist Jordana Bayer and colleagues at the Centre for Community Child Health, part of the Murdoch Children's Research Institute and the Royal Children's Hospital, tested the effectiveness of a parenting programme that was made available to all families attending primary care nursing centres in Melbourne, Australia.

Three hundred and twenty-nine mothers received several handouts on typical child development when their children were aged eight months. Then as their children turned 12 months and again at 15 months, the parents attended two two-hour group sessions on how to replace yelling and smacking with techniques of ignoring and distraction, and they were introduced to the idea of quiet time, during which children are encouraged to think about their misdemeanours.

Although the proportion of parents agreeing to participate in the study was high, it was notable that only 49 per

cent of those allocated to the intervention group went on to complete all the parenting sessions – a problem that is also found with real world, non-research based programmes.

The parents' self-report, taken when the children were 18 and 24 months, showed that parents on the programme were less likely to use abusive or harsh parenting strategies and had more realistic expectations of their children's development, compared with a control group of 404 parents. But crucially, there were no differences between the groups in terms of children's levels of problem behaviour.

Writing in the *BMJ*, the researchers concluded that 'the outcomes at two years are insufficient to support widespread introduction of a very early universal programme to prevent behavioural problems in toddlers'.

Computer game beats stress

A computer-based task that trains people to locate smiling faces can boost self-esteem and reduce stress, psychologists have found. The practical applications are obvious and already the task has been turned into an online game.

Lead researcher Mark Baldwin of McGill University in America told us: 'Our research findings inspired us to bring our attentional training task out of the lab and make it available to people to try for themselves. So we've established a company, MindHabits, and made a game-like version of the task available online at mindhabits.com where the task can be tried for free.'

Many interventions for reducing social stress focus on changing the way people evaluate and interpret situations involving rejection, criticism or exclusion. Baldwin and his colleagues have taken a different

strategy. Their computer-based task involves training people not to pay any attention to signs of social rejection in the first place, thus reducing their stress response. In a typical training session, the participant will view a series of 4x4 grids, each filled with 16 faces, only one of which is smiling, while the others are all frowning or miserable. The participant's task is to click on the smiling face as quickly as possible.

In one of a series of five experiments published last year, Baldwin's group showed that playing this task for five minutes each day for four days significantly reduced the amount of exam-related stress experienced by students taking their finals. Another experiment

showed that playing the game daily led to increased self-esteem, reduced stress (measured by self-report and cortisol levels) and improved work performance among a group of telesales employees. Throughout, control participants whose

Parents on the programme were less likely to use harsh parenting strategies

Jordana Bayer told *The Psychologist* that she and her colleagues believe their intervention was not intensive enough to help those families whose children went on to develop problems. 'We are planning a further population trial to evaluate a universal approach with extra intervention for families in need,' she said. 'The planned trial boosts the length of our universal approach to three parenting groups, with individual family intervention for those at highest need.' CJ

task was to click on five-petalled flowers embedded in grids of seven-petalled flowers, failed to show comparable benefits.

'In our attentional training task the participant practises disengaging from social threats,' Baldwin told us. 'This seems to help people develop a mental habit of paying less attention to – and getting less caught up in – the inevitable rejections, criticisms and slights they confront in their everyday interactions.'

The task has yet to be tested on any particular client groups. But in a further study that Baldwin's team have under review, adult-education students who performed a demanding intellectual task felt less distracted by thoughts of a recent rejection experience, and also reported higher self-esteem, if they had previously performed the attentional training. CJ

IN BRIEF

Christian Jarrett reports from the American Association for the Advancement of Science, Boston

Feats of animal intelligence continue to impress, but according to Marc Hauser, there remains a chasm between human and animal intellect. In fact, he argues the intelligence gap between human and monkey, ape or dolphin is larger than the intelligence gap between these animals and a beetle. Hauser says he has identified four key ways in which human mental abilities are unique. Humans but not animals are able: to combine different types of information and knowledge; to apply the same 'rule' or solution to one problem to a novel situation; to create and easily understand symbolic representations of computation and sensory input; and to detach modes of thought from raw sensory input.

Research showing the importance of visual, as well as auditory, information for effective speech perception has inspired the development of a new computer-based 3-D language tutor called Baldi (tinyurl.com/39aynd). A click of the mouse and Baldi's skin turns transparent, allowing learners to see the movement of his tongue and palate in detail, thus aiding the acquisition of correct pronunciation. Baldi's creator, Dominic Massaro of the University of California, Santa Cruz, said: 'When you're learning a new language, it's helpful to see how the words are formed. For instance, in Arabic, segments are articulated at the back of the throat.' Baldi can speak with a natural, recorded human voice, or he can read input text with a synthesised voice.

Authors of a longitudinal study into the mental health of 12,000 children caught up in Hurricane Katrina have recommended that mental health interventions and services be incorporated into schools. Howard and Joy Osofsky, of the Louisiana State University Health Sciences Centre, found that more than 30 per cent of the sample's eight- and nine-year-olds reported feeling depressed or suffering from trauma-related symptoms when surveyed last year. Twenty-seven per cent were still living in a trailer, and overall the children had endured an average of three moves and two changes of school since 2005. However, the researchers concluded that most children given support will show resilience, hence the importance of introducing appropriate services into accessible settings.

Participants who imagined eating sardines or chocolate followed by crisps, overestimated or underestimated, respectively, their likely enjoyment of the crisps relative to the enjoyment reported by participants who really did eat crisps after sardines or chocolate. Dan Gilbert of Harvard University says this contrast helps explain why we're so poor at forecasting how we'll feel in future situations. When making those kind of predictions, we tend to compare: The family get-together on Saturday afternoon won't be much fun compared to watching the football, but then again, it beats an afternoon of DIY. Yet once we're in a given situation, our minds are preoccupied so that such comparisons aren't possible, and therefore don't influence our experience.

Some language experts have speculated that mutations in the *Foxp2* gene might have played a fundamental role in the evolution of language – after all, people with a certain version of the gene are unable to perform the coordinated motor movements needed for speech. However, according to Robert Berwick, Professor of Computational Linguistics at MIT, attempts to tie the evolution of language to a single gene such as *Foxp2* are destined to failure. 'There are some things in science that are very interesting, but that we're never going to be able to find out about,' he said. 'It's a sort of romantic view some people have, that anything interesting can be understood.' Berwick's own work is focused on comparing the structure of language with bird song.

The poor academic performance of children from ethnic minority backgrounds relative to their peers can be traced to age three, when differences in school readiness, in terms of vocabulary and cognition, start to appear. However, according to Jeanne Brooks-Gunn of Columbia University, whereas 30 to 40 per cent of the variation in school readiness within an ethnic group is accounted for by genetic differences, variation between ethnic groups is almost entirely due to environmental factors. These include differences in parenting behaviour (e.g. white mothers are more likely to teach their children and to provide learning materials) and health factors, such as a greater prevalence of low birth weight, asthma and ADHD among ethnic minorities. Brooks-Gunn said 'high-quality centre-based education programmes for all low income three- and four-year-olds' are likely to be effective.

The drugs don't work... or do they?

For the majority of people, the newer generation of antidepressant drugs: Prozac, Effexor, Seroxat/Paxil, and Serzone, are no more effective than a placebo sugar-pill. That was the conclusion of a meta-analysis that examined all the clinical trials, published and unpublished, submitted to the US Food and Drug Administration (FDA) for the licensing of these drugs. However, there was evidence that the drugs are more effective than placebo for a small minority of patients with extremely severe depression.

Writing in the journal *PloS Medicine*, the study authors, psychologist Professor Irving Kirsch at Hull University and his

American and Canadian colleagues, concluded: 'Given these data, there seems little evidence to support the prescription of antidepressant medication to any but the most severely depressed patients, unless alternative treatments have failed to provide benefit.' Their conclusion contradicts existing National Institute for Health and Clinical Excellence (NICE) guidelines, which state that antidepressant medication should be the first-line

treatment for moderate or severe depression, prior to psychological help.

Some of the unpublished data included in this new analysis was not made available to NICE when it drafted its most recent guidelines on treating depression (under current EU law, companies are not compelled to provide all their data). NICE is currently reviewing its guidelines for treating depression and has said it will consider the new meta-analysis. A guideline update is due for publication in June 2009.

Inevitably, the new analysis prompted media headlines such as 'Depression drugs don't work' (*The Times*), but in fact, both the drugs and placebo exerted a powerful beneficial effect, with the placebo response described by the study authors as 'exceptionally large'. Moreover, the effect of the drugs was statistically greater than the effect of placebo for most patients, it's just that the size of this difference was not judged to be clinically significant using the criteria laid down by NICE (i.e. a minimum three-point difference on the Hamilton Rating Scale of Depression). In the case of the patients with the most severe depression, the superior benefit of antidepressants over placebo was not due to any change in the size of the drug effect, but rather the effect of placebo was reduced.

As placebo sugar-pills are clearly so effective at countering depression, the new analysis begs the question of whether inert drugs can still be beneficial when patients are aware they are receiving a placebo. This is a little researched area. However, the medical commentator Dr Ben Goldacre reported in his *Guardian* column that a 1965 study found a placebo treatment for 'neurotic' patients produced good results even though the patients knew the drug was inert (tinyurl.com/2tnyhff). CJ

FROM THE RESEARCH DIGEST...

Sleep suit hot news

Forget counting sheep or popping pills. A team of Dutch researchers, led by Roy Raymann, has reported in the journal *Brain* (see tinyurl.com/2of3pz) the profound sleep-inducing effect of a warming body suit.

Eight young adults and 16 older adults, half of whom suffer from insomnia, spent two nights in a body-suit at a sleep laboratory, with a night at home in between. Water-filled micro-pipes in the suit maintained the skin temperature of the participants at either 35 degrees Celsius in the cool condition or 35.4 degrees in the warm condition, fluctuating gradually between the two every 15 to 30 minutes. Importantly, core body temperature was unaffected by these subtle variations.

The controlled skin temperatures match the typical climate of a person's bed and are close to the levels that people report to be of most comfort, with the warmer condition actually reported to be slightly less comfortable.

Recordings of the participants' brain waves at night showed that warmer skin temperatures resulted in a shift towards deeper sleep and a reduction of their likelihood of being awake at 6am. For instance, among the non-insomniac older participants, a subtle (only 0.4 degree) increase in skin temperature reduced the probability of being awake at 6am by a factor of 14; for those with a sleep problem, it was by a factor of five. Moreover, with the same subtle increase in temperature, the likelihood of an older insomniac participant being in a deep (slow wave) sleep was doubled for any point in the night.

The researchers believe skin temperature affects cells in the hypothalamus that are responsible for controlling sleep. The findings have huge practical implications, even before the development of user-friendly body-suits. For example, the temperature environment people choose to sleep in, based on comfort, may not be optimal for inducing sleep. A warm bath before bedtime could help increase skin temperature at the start of the night, and a timed electric blanket could be used to increase skin temperature in the morning. Thick blankets or an all-night electric blanket won't help because they will simply cause overheating, especially of core body temperature, which will disrupt sleep.

'The effects of even very minimal temperature manipulations within the thermoneutral comfortable range are so pronounced that they warrant further research into practical thermal manipulation applications to improve sleep,' the researchers concluded.

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

Suicide, the media and prevention

The Welsh Assembly has responded to recent suicides among young people in the Bridgend area by announcing plans for a nationwide suicide prevention strategy. Based on the Choosing Life scheme that launched in Scotland in 2002, it aims to raise local and national awareness about suicide, coordinate neighbourhood support initiatives for those at risk, and help improve media reporting.

The Choosing Life scheme also commissioned a major review of the literature on suicide prevention, published in January (tinyurl.com/3946ju).

Unfortunately, from an assessment of 200 primary empirical studies and 37 prior systematic reviews, the authors (Maria Leitner of InfoTech UK Research, Wally Barr and Lindsay Hobby, both at the University of Liverpool) conclude 'there are no interventions to prevent suicide which can be regarded as having unequivocal support'.

However, Leitner and her colleagues were able to identify some psychosocial interventions that show promise. For instance, suicidal patients interviewed by John Eagles and colleagues in 2003 said they found informal social networks (partners, family and friends) as supportive as psychiatric services, thus demonstrating the importance of enhancing these networks around people at risk (tinyurl.com/34vywx).

Other studies have shown the benefit of telephone support. For example, from a study of over a hundred callers to a counselling service, Robert King and colleagues at the University of Queensland found that the majority experienced a reduction in their suicidality by the end of the call (tinyurl.com/3e22e4).

Regarding actual therapy, Leitner's review found the strongest evidence was for dialectical behavioural therapy, especially in the context of helping young people diagnosed with borderline personality disorder who had self-harmed. In one study, Kent-Inge Perseus and colleagues in Sweden found that 10 self-harm patients unanimously agreed that DBT-therapy had saved their lives (tinyurl.com/3yxsjk).

Dr Nicola Madge, a reader in child psychology at Brunel University and member of the Reference Group for England's National Suicide Prevention Strategy, said: 'Despite some promising

interventions, we do not really know how to prevent suicidal young people from killing themselves. This is especially true for the many young people who commit suicide "out of the blue", without even family, friends or professionals realising they are at risk.'

Meanwhile, Dr Rory O'Connor (University of Stirling) told us about an exciting Australian trial, which is 'investigating the protective effects of sending a series of tailored postcards, which enquire about general health and provide information about self-help

strategies, to adolescents at high risk of suicidal behaviour. It's based on Jerome Motto's successful postcard study with adults, where he found that

the suicide rates were lower over a period of five years in the postcard group compared to those in the comparison group.'

"we do not really know how to prevent suicidal young people killing themselves"

Another issue under discussion in relation to Bridgend is whether media coverage can affect the likelihood of vulnerable people killing themselves. In 2001 the Centre for Suicide Research at the University of Oxford identified 30 studies looking at this question, 21 of which found evidence of a rise in suicides after news reports, with 10 demonstrating a causal link. Sue Simkin, the Centre's coordinator, told *The Guardian*: 'There is clear evidence that reports in the media that give descriptions of the method of suicide and romanticise the deceased by giving descriptions of the attention they receive in the form of condolences and online obituaries give rise to other suicides.'

Many countries, including the UK, have now published guidelines for the media on how to report on suicides. Dr O'Connor said that research published in Austria last year (tinyurl.com/2r2gbd) 'concluded that media guidelines have an impact on the way suicides are reported and importantly on suicidal behaviour.' CJ

IMPROVING ACCESS – PLANS REVEALED

Emerging details regarding the government's continued investment in the Improving Access to Psychological Therapies (IAPT) programme show that psychologists are at the heart of the new plans (tinyurl.com/2dhs38).

Last November Health Secretary Alan Johnson announced £170 million of extra investment in psychological services, including the training of an extra 3600 therapists. Now new documents have been published showing who these therapists are expected to be and how they will be trained, together with information on how the IAPT services will be organised.

In line with a stepped-care approach, some of the new therapists will offer 'low-intensity' help, including guided self-help and computerised CBT. These therapists will come from a range of backgrounds, including psychology graduates, and will be trained, at an undergraduate or postgraduate level as appropriate, on a one-day-a-week, one-year course.

Other therapists will offer 'high intensity' interventions, including face-to-face CBT for anxiety and depression. They will be postgraduates, including clinical psychologists and psychotherapists, and their training – a postgraduate diploma or equivalent – will involve a two-days-a-week, one-year course.

Strategic health authorities are being invited to commission their share of training places now, for the training to begin in September this year.

The Department of Health's implementation plan adds: 'Some therapists will of course already be in post or available on the open market, working in either the private sector or the NHS (many as clinical psychologists). The programme will draw on these therapists in order to start delivering the services and provide initial leadership. It is envisaged that when the new service is complete in, say, six years' time, the majority of the staff will be "new", that is, people who have been trained for the purpose since 2008.'

The new IAPT services are expected to take referrals from GPs and self-referrals; to be located in GPs' surgeries, job centres and voluntary organisations but also with a central base; and they are expected to monitor their outcomes. CJ

NO SOFT OPTION

We knew it, but now the Qualifications and Curriculum Authority has confirmed it – psychology is not a soft option. Subject experts compared psychology with biology and sociology at AS and A2 level using assessment materials and work by candidates. Concerns were raised about sociology and (in another investigation) about media studies, but of psychology, the report said: ‘...standards in biology and psychology were very well aligned across the grade range in both the AS and A2 examinations.’ The study suggests that the perception that students were turning away from science to psychology because it was seen to be the soft option ‘has little basis in fact, at least in terms of the demand of the examinations and the grading standards set.’

See tinyurl.com/358nck

MIND READING

‘Mind reading’ using brain scanning technology has been taken to another level in a study in which 12 participants viewed line drawings of a range of dwellings and tools (tinyurl.com/3dq8ot). From an analysis of cortical activity, excluding visual areas, researchers at Carnegie Mellon University were able to tell not only the category of object (dwelling vs. tool) the participants were looking at, but also which specific item (e.g. a hammer). The results showed that objects are represented by activity across a wide range of brain areas, and that there is a striking similarity between participants in the neural coding of a given object.

IMPORTANCE OF DADS

In a systematic review of 24 longitudinal studies, researchers at Uppsala University found long-term benefits to a child if a father figure was involved in their upbringing in some way (tinyurl.com/2sn4zs). Lead author Anna Sarkadi said ‘we found various studies that showed that children who had positively involved father figures were less likely to smoke and get into trouble with the police, achieved better levels of education and developed good friendships with children of both sexes’.

COMPETITION

Do you have a passion for brains? Could you write a newspaper-style article celebrating the amazing world of brain science? At-Bristol, the European Dana Alliance for the Brain and the British Neuroscience Association have joined forces with *Focus* magazine to find the best brain communicators in the country.

See www.youramazingbrain.org

BACKGROUND INFORMATION

It’s counterintuitive, but new research shows that open-plan offices can reduce the distracting effect of background speech, by ensuring that 12 or more people are talking at any one time, and by maximising the conditions for echo. That’s according to research by Elizabeth Winder of Cardiff University – winner of the British Psychological Society Division of Occupational Psychology’s latest Student Prize for Excellence.

In the study, participants wore headphones which played the sound of voices. Their task was to recall, in the correct order, numbers presented on screen. Performance improved with the addition of more voices before plateauing at 12. With the addition of high echo levels, memory performance peaked at 15 voices, with accuracy nearly as good as in quiet conditions.

See tinyurl.com/2j58ab

EVENT REPORT

Christian Jarrett reports on ‘The Unbearable Lightness of Seeing’ at the Royal Institution, 15 February 2008

Science was lent some glamour in February. With the Duke of Kent in attendance and the audience in black tie, as is traditional for the RI’s Friday evening discourses, the neurophysiologist and former MRC-head Professor Colin Blakemore began his presentation: ‘Vision is just there,’ he said ‘...it’s easy’ – at least that is how it seems when compared to the more obvious mental demands required for tasks like maths.

But the effortlessness of vision belies its computational complexity, to which over a third of the human brain is devoted. The intricacy of the eye alone led Darwin to write that the idea it was formed by natural selection ‘seems, I freely confess, absurd in the highest degree’. However, Darwin went on to argue that the eye could have evolved, a view supported by modern genetics, which has demonstrated, for example, that

that some of the same key genes involved in the development of the human eye are also fundamental to the eye of the fruit fly and other organisms.

The brain is a visual computer

However, if the function of the eye is to faithfully re-create the visual scene, then the problem of understanding vision is simply deferred to whatever interprets that re-creation. So, Blakemore explained, we must go beyond the eye to the back of the brain, to the sprawling visual cortex which processes incoming visual information. Here, the Nobel Prize winners David Hubel and Torsten Wiesel showed how single cells vary in their sensitivity to lines of different alignment, their pattern of responding thus providing an electrical description of the visual world.

Different parts of the visual cortex process different aspects of the visual scene – what Semir Zeki described as a ‘division of labour’. For instance, there is an area called V5 or MT, which is devoted to processing visual motion. Rare bilateral damage to this area from stroke leads to the unfortunate, yet remarkably circumscribed, condition known as akinopsia, leaving patients unable to see motion.

Seeing movement is an essential aspect of vision, as Blakemore demonstrated with a line



Visual interpretation – not a piece of cake?

drawing of a bird against a backdrop of scattered lines – the bird was easy to see when moving, but became virtually invisible the moment it stopped. A key problem for the brain in this regard is distinguishing between our own movement and the movement of objects in the outside world. Brain imaging experiments have shown the visual area MT is active when a series of vertical lines move back and forth across our retina, yet silent when the lines are still and we move our eyes across them. Somehow, the movement of the lines across the retina is cancelled out when the cause is our own movement.

In total, Blakemore said, 35 different visual areas have been identified in the brain, each specialised to a given aspect of the visual world. Objects, for instance, are associated with activity in the parahippocampal gyrus, and faces with activity in the fusiform face area.

A great deal of what we know about vision has come from studying those situations where the brain makes mistakes. Blakemore demonstrated this strikingly with an inverted photograph of a smiling woman's face. 'Did you notice anything about the picture?' he asked. 'Was she smiling?' She had indeed been smiling but the odd thing was that though the photo was inverted, her smiling mouth and eyes were the right way up, yet no one had noticed. The reason, Blakemore explained is that we process emotional expressions and the whole face separately from one another.

Vision is inference

We feel as though our perception of the visual world reflects reality, but in fact, much of what we see is invented. For example, we each have a blind spot in both

eyes, where the axons of our retinal cells feed out into the optic nerve. However, we don't notice this gap in our vision because the brain 'fills in' the missing information. Blakemore gave a splendid demonstration of this by asking the audience to cover their right eye while he walked in front of a light tube, strung horizontally across the stage at head height. As Blakemore walked through each audience member's blind spot, his head seemed to disappear momentarily as the brain's filling in process inserted surrounding visual detail where his head should have been – a virtual decapitation!

Not only is much of what we see invented, we also fail to process much of what really is out there. Blakemore said this partly reflects an economy drive by the brain as it attempts to keep its huge energy costs down to a minimum – there's no point processing parts of the visual world that are irrelevant. As it is, 4 per cent of the energy extracted from the food we eat is spent on visual processing. 'Don't worry about going to a health farm,' Blakemore said, 'just go see a movie!'

One way the poverty of our vision can be demonstrated is to watch a video made by Professor Richard Wiseman (available on YouTube at tinyurl.com/2ee8j3). To enjoy the demonstration, watch it first before reading on. The remarkable thing about the video, Blakemore explained, is not the card trick – it's the fact that most people fail to notice that Wiseman's t-shirt changes colour, as does his colleague's clothing, as does the table top and the background screen. This phenomenon is known as change blindness, and as Blakemore concluded, it shows how there is 'both more and shockingly less to seeing than meets the eye'.

RESEARCH FUNDING NEWS

The Wellcome Trust is offering International Engagement Awards to provide support for **public engagement with health research in developing countries**. Up to £30,000 is available to fund projects that could include media, communication or public engagement training for researchers, opinion gathering projects, and the development and production of teaching materials. There are two closing dates for applications in 2008, 25 April and 24 October.

| www.wellcome.ac.uk/doc_WTX036603.html

The British Educational Research Association (BERA) is inviting applications from BERA members for the **Brian Simon Educational Research Fellowship 2008/9**. Funding of up to £3000 is to encourage research that is independent, imaginative, scholarly and dedicated to educational advance. Fellowships are awarded to support research into topics such as the importance of common schooling; the study of intelligence and education; and the internationalising of education. The closing date for applications is 30 April 2008.

| www.bera.ac.uk/latest/index.php

The ESRC is offering the annual 1+3 and +3 Proposal (Open) **Studentship Competition to support PhD study**. For the 2008 competition, there are approximately 100 studentships available. Due to the limited number of awards available, the Proposal (Open) Competition will be held as two separate sub-competitions: (a) the 1+3 and (b) +3. The deadline for applications is 1 May 2008. The 1+3/+3 Nomination (Quota) Studentships are also being offered: those allocated directly to a department/school (outlets). The deadline for applications is 7 May 2008. Students interested in applying for a 1+3 or +3 Nomination (quota) should speak to the department where they wish to study. Students may only apply for either the Proposal (Open) or the Nominated (Quota) award.

| tinyurl.com/ytq4fc

The Health Foundation is again offering the Leaders for Change award scheme, which aims to equip experienced health professionals working in service improvement with the skills and knowledge to **lead change and achieve lasting improvements in patient care**. Clinicians and managers can apply. An allowance of £3000 is provided for training needs and replacement staff costs (for up to 25 days) can also be claimed. The closing date is 9 May 2008.

| tinyurl.com/yoyual

Funds for Women Graduates have Charitable Foundation Emergency Grants available to assist **graduate women who face an unforeseeable financial crisis** whilst engaged in higher education study in the UK. The next closing date for application is 21 May 2008.

| <http://ffwg.org.uk>

The NIH National Institute of Mental Health is offering funding for **Health Behaviour Change in People with Mental Disorder**. Funded research should identify health behaviours that are amenable to intervention, aimed at improving function and decreasing disability, morbidity and mortality among people with mental disorders. The public health significance of the study must be demonstrated. The closing date for application is 5 June 2008.

| <http://grants.nih.gov/grants/guide/pa-files/PA-08-089.html>

More members than ever are influencing public policy. See p.350 for more information.

info

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

Watching the watchers

Jon Sutton reports on a new series

The 20-part daytime BBC2 series *The People Watchers*, which ran in January and February, was the largest amount of psychology ever commissioned by the BBC. Hosted by Professor Richard Wiseman (University of Hertfordshire), it featured three psychologists (Sara Clarke, Emma Kenny and Jack Lewis) going out and about conducting hidden camera experiments and demonstrations. It covered classic psychological concepts such as bystander apathy, cognitive dissonance, and the halo effect of physical attractiveness.

The show borrowed a dollop of *The Real Hustle*, a smidgeon of *Dragon's Den*, and even a pinch of *24*. But within this derivative format and obvious constraints on the depth at which concepts could be explored,

the team coped well with the challenge of coming up with over 80 psychological experiments that would work as daytime TV.

My one niggle was that when comparisons were made (for example between a good-looking man and an ugly counterpart saying positive things about themselves to illustrate the halo effect), completely unnecessary differences between phrases or instructions used may have introduced confounding variables. I know this is looking at it from a psychologist's perspective, but if you're inevitably going to lack a lot of control in such situations you might as well make a bit more of an effort with what you do have.

So did it reach the parts that other psychology programmes cannot reach? Professor Wiseman told me: 'We have had some good feedback from the show, but no idea about viewing figures yet. I know lots of lecturers and teachers have discussed the footage in their classes, and written to say that it really brings the studies alive, so hopefully it will bring psychology to a much wider audience than normal science programming.'

As for the critical reception, it's fair to describe it as mixed. *The Times* said 'at last, signs of intelligent life on daytime television', but *The Observer's* TV guide described it as 'lazy common sense served up as rocket science and probably best avoided'. But was *The Observer's* TV critic really the target audience? And for me, this actually missed the main strength of the programme: just as Milgram revealed how poor people were at predicting how many would go the shocking distance, I would imagine *The People Watchers* could serve as a useful demonstration of how fallible common sense can be. I was certainly surprised by the way passers-by ignored a woman in apparent medical distress, and I'll certainly never forget the advice: use what breath you have to single out an individual when you ask for help.

Psychology seems to feature depressingly often in Ben Goldacre's *Guardian* column, 'Bad Science'. Each month I could probably spend a few hundred words reflecting on his reflections on the media – watching him watching us. But this month he struck a more positive note, with an article that read a little like a lay summary for a research grant looking at the effects of placebo.

The beauty of Goldacre's writing is that he digests, and whilst aggressively challenging many clinical trials, he does modestly try to provide a springboard for readers to have their own opinion and do their own reading. His column on 1 March (see www.badscience.net/?p=620) saw him covering the coverage of Professor Irving Kirsch's meta-analysis on the effects of antidepressants (see p.286).

Goldacre started his column by smugly declaring he knew it all along (so did I) and glibly describing the study as

'ridiculously badly reported'. But the elegance of this piece was to give some tasters of research conducted into placebo. For example, responses to some drugs have been shown to drop over the years, particularly after the introduction of a new, supposedly superior drug. This could suggest an initial placebo effect. Interestingly, the response to placebo has increased significantly in recent years (as has the response to medication in general) – perhaps expectations of medication have shifted.

True, the studies are not conclusive, nor is there only one interpretation: 'I'm giving you tenuous data, on an interesting area, because I know that you're adult to cope with ambiguity,' says Goldacre. The fascinating online comments suggest his faith in his readership was justified. Visitors to the site are also rewarded with a link to the classic study of non-deceptive

placebo use: 'Do you know what a sugar pill is? A sugar pill is a pill with no medicine in it at all. I think this pill will help you as it has helped so many others.'

Along with his broad and deep knowledge, it is Goldacre's enthusiasm for the equivocal that makes him such a worthy columnist, and it's why all the students on my Psychology and the Media course are pointed in his direction. He will long continue to be the first thing I turn to in the Saturday paper, although sometimes I wish he would swap with that Russell Brand in order that we might have foppish cockney appraisal of the efforts of evolutionary scientists, and we might get Goldacre's thrusting insight to illuminate the darker recesses of the Premiership.

CHRIS MOULIN

contribute

This is the page of the Society's Press Committee, which aims to promote and discuss psychology in the media.

If you would like to comment on a recent newspaper article, TV or radio programme involving psychology, if you

have tips for others based on experiences, or if you know of a forthcoming programme or broadcast, please contact the

'Media' page coordinating editor, Fiona Jones (Chair, Press Committee), on F.A.Jones@leeds.ac.uk