An Olympian effort

In his keynote at the Society's Annual Conference, attended by 800 delegates in London this April, Dr Dan Gould fanned the flames of Olympic Fever. **Dr Diane Halpern** was there to report for us.

Ninety-nine days and counting down. London has Olympic Fever, so the organisers of the Annual Conference of the British Psychological Society called in the 'doctor' for diagnosis and prognosis of all things Olympian – Dr Dan Gould, Professor of Applied Sport Psychology and Director of the Institute for the Study of Youth Sports at Michigan State University. Gould has been a 'performance enhancement consultant' to a variety of sports teams, including the United States teams for wrestling and skiing, as well as with individual tennis and figure skating competitors. During his career, he has studied the mental skills that help athletes perform at their best. His work on the psychological factors that underlie elite performance also provides insights in other areas of exceptional performance, such as military work and surgery.

Dan Gould delivering his keynote to a packed audience

Olympic success is a mix of positive self-talk, intrinsic motivation, personality dispositions, and cognitive and behavioural factors that come together to create peak performance. The athletes train every day for years, often decades, all for the increased likelihood of optimal performance in the short time span when they are competing at their Olympic event, when the difference between victory and defeat is often measured in milliseconds. The Olympic Games are an ideal laboratory for testing and developing psychological theory and practice for high performance.

So what are the characteristics associated with Olympic success? Most studies of Olympic champions are retrospective, largely because it is difficult to predict the winners, and it is difficult to get Olympic athletes to participate in research in the months leading up to the Olympics. In one study, Gould and his colleagues compared the performance strategies for Olympic medal winners with other competitors who did not win a medal. They found that the medallists had more emotional control and were more likely to practise on 'automatic

STUDYING SEX DIFFERENCES – NOT FOR THE FAINT-HEARTED!

Dr Dan Gould reports on Dr Diane Halpern's keynote

A reason I really enjoy attending conferences like the 2012 BPS Annual is that I can hear eminent scholars and practitioners discuss their work; work that is often on topics and using methods very different to the ones I study or use. This was the case when I had a front row seat to hear Dr Diane Halpern's keynote, 'Sex differences in cognitive abilities: New data, new theories and new conclusions'.

I knew Dr Halpern was a highly respected scholar who has spent the good part of her career studying this topic, conducting numerous studies and publishing a number of important books. However, I quickly discovered that in addition to being an impressive scholar she is an exceptional teacher who gave a highly informative and interesting keynote address.

The first thing I was reminded of is that studying sex differences is not for the faint of heart. It is not only a scientific issue of considerable interest, but also a topic that evokes substantial emotion and is steeped with political implications. This causes some people to (sometimes knowingly and other times unknowingly) selectively review the literature identifying studies that might fit their point of view while ignoring others. Not Halpern – a careful scientist, she examines the literature in great depth with considerable objectivity in identifying patterns she may or may not personally like. I have some experience of this: a doctoral student of mine once studied if and why coaches feel they coach male and female athletes differently. She conducted a sound study but immediately after delivering the first presentation on her results, internet chatrooms were full of messages noting how the study reinforced traditional sex-role stereotypes and was not an example of good science. The controversy went on for a few weeks until I asked the head of the Women's Sports Foundation research committee to provide an independent review of the study and its results. It was concluded that it was a well-conducted and objective piece of research. However, like Dr Halpern, my student and I learned that studying sex differences evokes a great deal of emotion and can quickly turn into a politically charged issue.

While sex differences in cognitive abilities can be controversial, Halpern convincingly argues that this is an important area of study for many reasons. For example, in the US the pool of scientists and mathematicians is dwindling while women make up half of

pilot'. By contrast, other elite athletes who competed but did not win an Olympic medal reported greater use of mental imagery during practice and exhibited higher levels of negative thinking. The next step in sports psychology research is to apply these findings in prospective studies (before the outcomes of the Olympics are known) and in intervention studies in which groups of athletes are taught how to improve their emotional control and how to use more automatic processing in their preparation for competition. A big problem with this area of research is that with the stakes so high, no one wants to be in the control group.

Gould also explained that the Olympics are all about performance. The major types of variables that affect performance include family support, financial sponsorship, strong preparation, positive team influences, talented coaching, and a generally supportive environment. Olympic athletes need a plan to deal with distractions, which are very common and often unpredictable during competition. Distractions include transportation glitches (a frequent occurrence at Olympic venues), noisy dormitories, political controversies, and excessive media attention. It is easy for athletes to get caught up in the hype of the Olympics. The multiple distractions can disrupt an athlete's carefully established routine, so the athletes need to be prepared for dealing with them.

Physical preparation is a key factor for success, but it is also fragile, with a thin line between training hard enough to get an edge and over-training that becomes a detriment to performance. Athletes who do not win at the Olympics often cite over-training as the main reason. A good coach can recognise overtraining and get the athlete to stop training before it hurts performance. Good coaches are well organised so that they minimise the stress of unexpected hassles (both big and small) and they guide the athlete in mental preparation, while providing emotional support and exuding confidence.

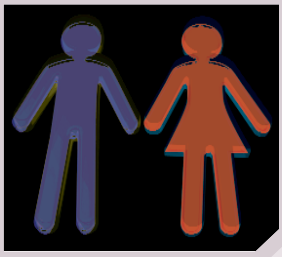
Gould acknowledges that there are genetic factors that make success more or less likely. As he said, 'The level of improvement due to athletic training is constrained by the genetic factors. One's genes determine the size of his/her bucket. The athlete and the environment determine the bucket's contents.' Even the most genetically endowed athletes need to learn strategies for peak performance, how to cope with adversity in a constructive manner, and to develop their personalities so that they can remain stable and motivated during years of intense practice. Because there are so many different types of sports, there is no single athletic gene that could predict success overall. We need to begin talent development at a young age, but there is no way to predict which young athlete will eventually make it to the top of their game. Every elite athlete will need to practise for thousands of hours before achieving elite status, but even intense practice cannot assure elite athleticism. During practice top athletes need to develop mental toughness, confidence, and the ability to stay focused and set goals. They need to remain optimistic and confident. But they also need a supportive environment so that they don't have financial worries that will cause them to lose practice time or distract them from the single goal of being the very best in the world, for one sparkling moment, on the day of their Olympic competition.

The next generation of sport psychologists will build on the solid foundation that was laid by Dr Gould and his colleagues. They are likely to fill in the gaps in our knowledge using longitudinal research designs with experimental controls that allow causal conclusions. In short, like all researchers they will stand upon the shoulders of those who went before. Thanks to Dan Gould, I will watch the extraordinary performance of the world's best athletes (and second, third, and fourth best as well) with new-found enthusiasm. Whether they stand draped in the flag of their country while its national anthem plays or whether they are huddled offstage, unable to stop the tears of defeat. They all should be congratulated for their mental toughness, motivation and superb performances.

the workforce but only 25 per cent are employed in science and math related fields. Additionally, she persuasively argues that sex differences have implications for numerous public policy decisions like single-sex schools, child-rearing practices, and affirmative action.

The main conclusion from Dr Halpern's address is that the 'truth' about cognitive sex differences is complicated, and although there are many similarities in the cognitive abilities of males and females, there are also differences that are very large, and have been replicated across time, cultures and species. So those looking for simple answers will not find them. She presented an excellent example using recent brain-imaging and neuroscience results, pointing out how some reviewers draw sweeping conclusions from emerging data while ignoring other potential explanations. At the same time she concluded that current neuroscience brain research will unlock many exciting findings in this area. However, it is essential that this research be objectively conducted and interpreted.

Some of the biggest gender differences in cognitive functioning identified in Halpern's address were large differences favouring females in writing and episodic memory tasks, especially those dealing with faces and location. Differences favoured men on visuospatial tasks, but the effects are task-dependent (e.g. very large effects exist on mental rotation tasks).



I thought Dr Halpern's comments were particularly informative when she explained how mean differences that result from these studies are especially influenced by the highest and lowest ends of the data distributions, with more males in both the high and low ends of the distribution tails. It was also interesting that she presented findings that in more gender-equal societies, some sex differences disappear (e.g. girls scoring lower in math than boys) while others grow larger (e.g. the male advantage in visuospatial tasks). Finally, she predicts that with revolutionary advances in biological psychology a key issue for the future will be 'not if, but when drug intervention is safe, effective and ethical' in order to modify sex differences in cognitive functioning.

In summary, Halpern concluded that there are 'no single or simple answers to the complex questions about sex differences in cognition'. An individual's experience, educational policies, one's culture and biological factors all interact in complex ways to explain sex differences in cognitive abilities and influence the number of men and women who pursue advanced study in math and science. Thus, it is imperative that psychologists study this important area of research; and luckily those future generations of researchers will be able to profit from Dr Halpern's impressive body of work in the area.

Understanding, preventing and alleviating the effects of trauma

Professor Chris Brewin reports on a symposium convened by Professor William Yule

One of the main aims of this symposium was to illustrate the relevance of traumatic stress to many aspects of the Society's activities and members. The breadth of topics underscored the value of the proposal for a new Section on Disaster, Crisis and Trauma Psychology to join together members whose professional activities bring them into contact with major incidents and personal catastrophes, whether from a legal, forensic, developmental, occupational, public health or clinical perspective. This would also be valuable for those who conduct research into the social, interpersonal, cognitive, biological or neuroscientific aspects of trauma. Members who wish to support the formation of the new Section are currently able to vote in favour of introducing it at tinyurl.com/bpssections.

The first speaker, Professor Emily Holmes from Oxford University, presented her research showing how the intrusive memories that characterise post-traumatic stress disorder (PTSD) might be prevented by using insights from cognitive science. She and her team have demonstrated how playing the computer game Tetris up to four hours after exposure to a trauma film can reduce the incidence of intrusive memories in healthy participants. Crucially, it appears to be the visuospatial aspects of the game that prevent the consolidation of traumatic images as verbal games such as Pub Quiz do not have the same effect. This research is being taken forward by investigating whether Tetris might assist blocking the reconsolidation of a traumatic memory 24 hours after watching a trauma film, as well as by introducing it into a real-life accident and emergency department.

The second speaker was Professor Bernice Andrews from Royal Holloway, University of London. Her topic was the relevance of research on trauma and traumatic memory to legal contexts such as the civil, family and criminal courts, as well as immigration tribunals. A number of PTSD symptoms involve or have an impact on memory, including flashbacks, amnesia for aspects of the event, and difficulty concentrating, and these may affect the nature of testimony provided.

IN BRIEF

Recalibrating racism

The success of the far-right British National Party (BNP) is a discursive accomplishment, argued Simon Goodwin (Coventry University). Analysis of three high-profile media appearances by party leader Nick Griffin revealed ways in which the BNP uses language to present themselves as reasonable not racist. Two discursive strategies were identified: portraying 'indigenous' British people as the victims of anti-white racism, and blaming this racism upon an elite subgroup, which appeared to include both the government and the BBC. Whilst still problematising multiculturalism in society, the BNP have constructed a rhetoric where they appear to challenge rather than promote racism. AJ

Parenting and ADHD

There is now strong evidence for a biological basis to ADHD, but Sinead Rhodes (University of Strathclyde) noted that the importance of the psychosocial context shouldn't be overlooked. A study examining parenting practices in samples of children with and without ADHD found that parents in the clinical group reported higher levels of discipline practices, and that these were related to poorer inhibitory control in children. However, the greater use of discipline did not involve higher use of corporal punishment; there were no differences in the amounts of positive parenting practices used. Parents of children with ADHD were less involved in activities with their children but an unexpected finding was a reminder that the psychosocial context plays an important role for the development of children generally. Lower levels of parental involvement were correlated with poorer emotional functioning (as rated by teachers) in children even in the typically developing sample. AJ

Intrusive memories in PTSD might be prevented by insights from cognitive science

Other specific features of memory in individuals suffering from PTSD, such as disorganisation and fragmentation in accounts of traumatic incidents, may also be unfamiliar to juries, lawyers and judges, who may draw inappropriate conclusions about the reliability of testimony that has these features. Although psychologists cannot usually comment directly on the truth or falsity of testimony they may be able to provide valuable guidance on factors that may be positive or negative influences on their likely reliability.

Professor Stephen Joseph of the University of Nottingham summarised recent research described in his new book *What Doesn't Kill Us: The New Psychology of Posttraumatic Growth*. The idea that traumatic experiences can lead to positive as well as negative consequences for a person is central to existentialist and humanistic traditions in psychology, as well as to the more recent positive psychology movement. He noted that recovery from disorders such as PTSD needs to be seen not just in terms of symptom reduction but in more general improvements in self-perception, attitudes to life and relationships. He distinguished 'hedonic' measures that measure growth mainly in terms of happiness from 'eudaimonic' measures that consider well-being more broadly in terms of a sense of autonomy, purpose in life and self-acceptance. In concluding his talk, he called for better theories of positive functioning in response to trauma to complement the existing focus on pathological conditions such as PTSD.

Finally, Dr Richard Meiser-Stedman of the MRC Cognitive and Brain Sciences Unit in Cambridge presented his research on children's reactions to trauma. Noting that there has been a popular widespread belief that children are resilient to the effects of trauma, he reviewed evidence that nothing could be farther from the truth. Since researchers began to question children rather than their parents, it has become evident that post-traumatic symptoms are common, can last for many years, and have a broad impact on cognitive and social development. As in adults, subjective reactions to the trauma appear to be more important than the objective severity of the event, and PTSD is associated with similar reactions such dissociation, fragmented memory, negative beliefs and maladaptive coping. To date, despite the expectation of marked developmental differences, the emerging picture is of vulnerability processes that are startlingly similar in adults and quite young children of primary-school age.

PTSD and memory

It's **Professor William Yule's** turn with the reporter's pad, bringing us an account of Professor Chris Brewin's keynote

If anyone ever believed that studying PTSD could only be of interest to therapists, Chris Brewin's carefully argued opening address quickly demonstrated that experimental studies of pathological reactions can throw considerable light on normal processes – in this case on memory.

Flashbacks – distressing, intrusive memories – are at the core of post-traumatic stress reactions. They are involuntary and predominately image-based rather than verbal. The involuntary memories appear to remain locked in the present while attempts voluntarily to call up memories of the event are often disorganised and fragmentary. Such observations led to the seminal model of PTSD – the dual representation model – first elucidated by him with Tim Dalgleish and Stephen Joseph in 1996. This, together with the 2000 model of Ehlers and Clark, underlined that PTSD is more a disorder of memory function than of anxiety.

Exposing healthy participants to a stressful film has been shown to generate spontaneous intrusive memories over the next few days. By manipulating the conditions in which the film is shown, a very informative series of studies was made possible. It was found that while, in general, increasing levels of alcohol reduced the explicit recall of traumatic scenes, low levels of alcohol resulted in an increase in intrusions. It was suggested that low level of alcohol selectively impairs the verbally accessible memory system (VAM) that can prevent intrusions but does not affect the situationally accessible memories (SAM). However, high alcohol levels compromised both systems.

Asking participants to undertake a complex tapping task led to a decrease in later intrusions, while doing a verbal task led to an increase. Such evidence tends to confirm the existence of these two pathways. So a question arises – are these related to any differing neural pathways? Evidence from a number of neural studies including functional MRI studies confirms the existence of parallel neural systems for visual information – a ventral stream connecting to the inferior temporal context and a dorsal stream linking to the superior parietal cortex. Under normal conditions, these two streams integrate but under traumatic stress they can operate separately. This led Brewin to present a new and elaborated model for normal encoding of a traumatic event with an egocentric, sensation-dominated pathway versus an allocentric, more verbal pathway.

This model suggested a novel way of investigating allocentric memories using virtual reality – computer-generated scenes that could be used to get the participant to imagine seeing a target image from a different vantage point (shades of Piaget's three mountains

THE AUTHENTIC SELF

Should you bother to 'be yourself' at work? A study by Oliver Robinson (University of Greenwich), Frederick Lopez and Katherine Ramos (University of Houston) explored the extent to which people vary the expression of their 'authentic self' across four social contexts (with partner, friends, parents and co-workers), and how this variability relates to well-being.

An online cross-sectional survey design captured data from a large sample of students and professionals in the US and UK. Expressed authenticity was highest in the partner context, followed by friends, then parents, and lowest of all at work. In a regression model, only authenticity with partner emerged as a significant predictor of well-being and life satisfaction.

'Authenticity does relate positively to well-being,' Robinson concluded, 'although this effect appears to be context-specific. Our results indicate that as long as individuals have partners with whom they can express themselves authentically, well-being is maintained. In the absence of a partner, authenticity with parents and friends also predict well-being. So if you "put on a front" at work – don't worry, it probably won't do you any harm.' JS

studies). It was found that worse allocentric memory performance was predictive of greater subsequent intrusions. Thus, it appears that there is indeed a long-term perceptual memory system supporting explicit recall as well as for the automatic registration of visuo-spatial information. There are two functionally distinct memory systems. Flashbacks are seen as sensation-based memories that involve the dorsal visuo-spatial processing stream whereas ordinary memories are contextualised – particularly in relation to time – and involve the ventral stream and medial temporal lobe. Brewin ended by noting how the model explains how the therapeutic practice of rehearsing trauma memories leads to their weakening rather than to their strengthening as had been anticipated from previous models.

The whole talk illustrated the strengths of adopting an applied science approach to the observations of human behaviour and experience. Advances in cognitive and neural science help better to explain the phenomena of PTSD while study of those phenomena help reframe the theories. He ended with a heartfelt plea for members to support the formation of Trauma Section within the Society so that work such as this could benefit from cross-Section collaboration.

Loved and lost in cyberspace

Dr Catherine Loveday reports from a symposium on internet dating scams

'Suddenly I was sending all this money to a man I'd never met and all my sense and sensibility was telling me not to, yet at the same time I was.' This was one of the opening quotes from a participant in a large study by Professor Monica Whitty (University of Leicester) and Dr Tom Buchanan (University of Westminster), investigating online dating romance scams. In this surprisingly common crime (200,000 known estimated victims in the last four years in Great Britain alone), an organised gang of criminals initially attracts individuals via a fake profile on an internet dating site and then after building up a rapport with their victim they quickly move correspondence to other online formats such as e-mail and instant messaging, where there are no safeguards.

Whitty described how the scammer will then continue to woo their victim with poetic e-mails and apparently high levels of self-disclosure before testing the water by asking for gifts or small amounts of money, always under the pretext of a powerful or heart-rending need, such as a sick child. Crucially, Whitty explained, the online nature of the interaction allows for careful management of self-presentation and a rapid and intimate style of communication leading to 'hyperpersonal' relationships. Both Whitty and Buchanan stressed that while some people will give away huge amounts of money, even those who recognise the scam before losing money will still suffer significant emotional consequences.

So what type of individuals are prone to this kind of scam? As Buchanan explained, theory and common sense would both suggest that victims might have specific qualities, for example particular personality profiles or higher levels of loneliness. Since dating sites

'WE'RE ALMOST FRIENDS NOW, DEATH AND I'

How are people changed by the experience of killing others? A documentary film shown at the conference – *Hidden Battles* by Victoria Mills – explored the psychological impact of killing through the testimony of five individuals who have taken other people's lives: Zachariah, a former leader of the Al Aqsa Martyrs Brigade in Palestine; Aaron, a former Marine, who was deployed as a sniper to Somalia; Esmeralda, a New York housekeeper who fought in Nicaragua's Sandinista Revolution; George, a Vietnam vet; and Saar, a former special forces soldier for the Israeli army who now runs a successful dance company.

Glimpses of the original conflicts are interwoven in the film with footage of these five characters revisiting the scenes of their killing or interacting with their families. There is no narrative, only the stark testimony of the former killers. The message is often bleak. 'We're almost friends now, death and I,' says Zacharia,

seen hugging his young daughter goodbye, a pistol strapped to his side. Aaron, who suffers from long-term PTSD, recalls promising to himself that he would never kill. 'That promise didn't last long,' he says. 'I didn't remember it the whole time I was in Somalia, I just changed.'

But the film also offers hope. Zacharia recently handed over his weapons to the Israeli authorities and now champions his cause through the Jenin Freedom Theatre. George has worked as a firefighter and is now President of a chapter of Vets for Peace, and he helps counsel soldiers returning from Iraq and Afghanistan.

A panel of experts gave their response to the film. Former military psychologist and Northern Ireland veteran, BPS Fellow Dr Jamie Hacker Hughes, revealed the scale of the issue – each year, he said, 20,000 more veterans in the UK leave the military. Matt Fossey, a former Deputy Director of IAPTs, aired his concerns about the lack of services for the families of service men and women – a question he has tackled in a forthcoming report for Combat Stress. Imogen Sturgeon-Clegg of Combat Stress admitted she still has no concept of what it's like to kill. 'Many vets don't talk about their own killing,' she said. 'They often avoid talking to civilians because they don't want to be asked about whether they've killed.' All three panellists agreed that alcohol abuse is the biggest problem affecting the mental health of returning veterans.

Visit hiddenbattles.com to learn more about the film and to watch a trailer. CJ

routinely collect personality data, this might open up the possibility of putting some prevention measures in place. Surprisingly though, Buchanan and Whitty's research revealed that those people who fall victim to the scammers were very similar to those who didn't, both in terms of personality traits and in relation to gender and sexual orientation. There was however one characteristic that did differentiate: individuals with high levels of romanticism are more vulnerable. 'But are they still full of romantic ideals after the scam?' one delegate asked. 'Yes!' said Whitty. Interestingly, both the qualitative and quantitative data suggest that people continue to show high levels of romanticism even after the distress of being conned in this way. It seems then that on the whole, using personality profiles to predict those who may be vulnerable is not likely to be a useful preventative strategy. Instead, said Buchanan, research should focus on other ways of protecting and supporting victims.

Taking a different look at online relationships, Dr Martin Graff (University of Glamorgan) finished off the session by discussing his research on male and female jealousy in relation to online and offline infidelity. He asked students to imagine given scenarios where their partner had displayed either emotional or sexual infidelity, either online or face-to-face. Women reported higher levels of jealousy for emotional than sexual infidelity, regardless of whether it was online or offline, while the reverse was true for males. Strikingly though, his data revealed that for both men and women, levels of jealousy were as high in the online condition as they were in a real context.

How valid is the dyslexia label?

Dr Katie Slocombe reports on Professor Dorothy Bishop's keynote

I know four of my friends are dyslexic but I don't personally know anyone who has specific language impairment (SLI). Professor Dorothy Bishop, a world expert on developmental disorders, argues my different levels of familiarity with these disabilities is not down to random chance. My own encounters with these disabilities seems to be representative of many: whilst Bishop reports dyslexia readily passes the 'taxi driver test' of being a widely used and understood term, specific language impairment routinely draws blank or quizzical looks from members of the public. This is despite considerable similarities between the two disorders: the estimated prevalence is comparable (dyslexia 5–10 per cent; SLI 3–7 per cent), and they are both characterised by a specific and unexpected deficit in either learning to read, or talk that cannot be attributed to a more generic cognitive or sensory deficit or brain injury. So given these commonalities why is only *dyslexia*, but not *SLI*, a household term?

Some labels are simply more successful at spreading into the public consciousness than others. Successful ideas (memes) are easy to understand, remember and communicate, and thus propagate themselves, however the survival or the successful spread of an idea is not, unfortunately, dependent on the utility or validity of the idea. The label *dyslexia* is certainly a contentious one: Certain sections of the media portray dyslexia as a social construct devised by the middle classes as a way to hide stupidity, whilst a medical model of the disorder characterises it as a distinct syndrome with biological underpinnings. So how valid or useful is the label of *dyslexia*? Is it a disorder with specific and distinct symptoms with a biological basis? Bishop argues that empirical studies fail to find a distinctive cluster of symptoms that characterise just dyslexia: co-morbidity seems to be the rule rather than the exception. Similarly Bishop contends that despite much misleading press coverage of genetic markers for dyslexia, there are as yet no convincing biomarkers for

NO BIRD BRAIN

Imagine being beaten at a puzzle by a bird. That's the ignominy that's been suffered by dozens of undergrads tasked with working out the rule governing which coloured bars on a screen lead to a reward and which don't.

When the rule is the average height of the bars, pigeons find it easy to work out, but humans struggle. According to John Pearce (Cardiff University), winner of the Society's Excellence in Psychology Education Award, that's because we humans try to solve the problem abstractly whereas pigeons just focus on the concrete properties of what's in front of them. If the rule is changed to favour abstract thought (equal bars leads to a reward, unequal bars does not) then humans excel and pigeons struggle.

This example forms part of Pearce's exploration of the evolution of animal intelligence in his university lectures. Other studies show that animals have remarkably large and enduring memories (baboons have been shown to remember 5000 photos for at least six months), but they're mostly incapable of abstract thought. Pearce has found that by explaining animal learning theory in these kinds of terms, he's managed to rejuvenate his students' interest in a subject that they previously dreaded.

Why the aversion? Pearce said that if you look at typical textbook coverage of animal learning theory, you'll see why. A figure explaining conditioning features obscure language and it comes over as an old-fashioned topic. But Pearce argued that it's an essential subject to study and that rebranding it as the evolution of intelligence really works. 'Students find the subject interesting …' he said, 'and once their interest has been engaged, they're keen to go on and study aspects of animal learning theory.' CJ

diagnoses of dyslexia. There are more consistent results from functional brain-imaging studies showing a reliable under-activation of certain cortical regions when individuals with dyslexia read, but it is still unclear if these patterns of brain activation are a cause or consequence of reading difficulties. So despite being a successful meme, *dyslexia* is perhaps not that useful as a label as it doesn't seem to define a specific entity. This is not to say that individuals with reading difficulties do not have genuine problems that require support and help, but Bishop suggests a more generic label of 'neurodevelopmental disability' may have advantages over the dyslexia label: this would still establish the need for support, but would encourage individual focused assessments of strengths and weaknesses by multidisciplinary teams. This could also help prevent individuals getting multiple different diagnoses and may help level the playing field in terms of research interest and funding into the poor sisters of dyslexia, SLI and dyscalculia. Bishop is realistic about the slim chances of success her proposal has, given the resilient nature of the dyslexia meme, but she certainly convinced me of the importance and benefits of trying!

Dorothy Bishop

Fitness fans

At the time of the conference, Scottish football club Rangers were in the news, with individual fans taking it upon themselves to pay off some of the club's smaller debts. It was fitting, then, that Nanette Mutrie (University of Strathclyde) showed how the loyalty of Scottish football fans can be harnessed as a way to motivate men to improve their fitness. Football Fans in Training provides an opportunity for men aged between 35 and 65 to participate in a 12-week group programme delivered within a Scottish Premier League club. The programme focuses upon graduated, individualised physical activity and developing a healthy lifestyle. It is gender-sensitised to tackle the high prevalence of male obesity within Scotland.

An initial feasibility trial, with randomised treatment and waitlist groups, found significant weight loss in programme participants that was maintained at 12 months. Additionally, participants reported increased self-esteem and quality of life, and decreased sedentary time.

The key to the programme's success, according to Mutrie, is a high starting level of motivation rarely seen in physical interventions. The men get to train within the hallowed ground of the football stadium, wear the club colours and work with the club coaches. Despite recruitment from across the socio-economic spectrum, the group are bonded by a shared interest before the intervention even begins and a big part of the experience is the banter amongst the men and coaches.

A full RCT is now under way across 13 football clubs, with plans for an expansion into rugby clubs. **AJ**

THE PSYCHOLOGIST AND DIGEST, LIVE!

'We've come a long way, but we've got a long way to go,' so ended Professor Steve Reicher's (University of St Andrews) stirring call for psychologists to make the most of the opportunities afforded by the publication you are reading right now.

Reicher, who writes a regular 'Real world' column for *The Psychologist*, said the publication serves three important functions. First, it allows psychologists to attack the taken-for-granted in a way that's not possible in traditional journals (for example, challenging the notions that no one helped in the case of Kitty Genovese and that Milgram's studies showed people follow orders blindly). Second, it (together with the Research Digest) encourages debate and communication between subdisciplines. 'We need that balance between the neurocognitive and the social,' he said, 'or else we fall into reductionism and fragmentation.' And third, it provides a chance to engage with the wider world, to change the cultural understanding of what psychology is and how it impinges on society.

Writing for *The Psychologist*, Reicher said, provides a chance to 'distil ideas until they have a limpid clarity and a compelling argument; it's a link to the world, so that not only do we turn to the world, but the world turns to us.'

Reicher was speaking as part of *The Psychologist*'s and the Research Digest's first conference symposium, convened by Professor David Lavallee (Chair of the Psychologist and Digest Policy Committee) and Dr Jon Sutton (Managing Editor). Invited presenters charted a journey through the publications. Professor Derek Mowbray (Psychologists Direct) opened the event, describing how, over the years, he'd used contributions to the magazine to make the case for a College of Health Care Psychology. In my role as Research Digest Editor, I highlighted a few items from the Digest with practical use for conference life (including how to brag without it backfiring; see tinyurl.com/cw4utgb). Professor Sophie Scott (UCL), a contributor to *The Psychologist*'s regular 'Big picture' format, talked about the universality of laughter across cultures and species, and the social functions it serves. Dr Darren van Laar (University of Portsmouth), a 'Careers' section contributor, discussed the rising popularity of the subject at university (it's now the fourth largest degree course) and the promising job prospects for graduates.

After the break, Marc Smith (Boroughbridge High School), a 'New voices' contributor, lamented the lack of boys choosing the subject at school and how this is related to misperceptions about the subject as being 'for girls'. As the session arrived at the back pages of the magazine, Professor Jim Horne (Loughborough University), a 'Looking back' contributor, provided gore-filled accounts from the Victorian medical literature of people who recovered remarkably well from exploding musket wounds to the head (see tinyurl.com/3vq6jyt). Finally, Julie Stokes OBE (Winston's Wish), a 'One on one' contributor, shared her experience of contributing to *The Psychologist*, including how she heard from the son of one of her early mentors. 'Out of writing the One on one came a whole series of connections for me to the psychology world,' she said. **CJ**

I See www.thepsychologist.org.uk to contribute to your publication or e-mail the Managing Editor of *The Psychologist* on jon.sutton@bps.org.uk

Exercise – Why bother?

Dr John Kremer (Queen's University Belfast) gave a keynote address to the Division of Sport and Exercise Psychology at the Annual Conference. **Professor David Lavallee** reports.

Dr Kremer opened his address by suggesting the legacy of the 2012 Olympic and Paralympic Games could be counterproductive, due to individuals simply watching sport on the television rather than inspiring people to take exercise. Kremer's epistemological critique of contemporary sport and exercise psychology challenged the audience throughout to consider the role psychologists can play in helping people become more physically active.

In the first part of the presentation he considered the social construction of physical exercise and the psychology of play. He discussed how children, by nature, engage in spontaneous, non-conscious exercise for fun (i.e. they are not 'bothered' why they exercise). Recent advances through what he described as

the second technological revolution have, however, created video games where we can play without exercising. Based on a review of the extant theories and models that have guided our work in the area (including reference to an article he published in *The Psychologist* in 1996 entitled, 'On the RAE, TQA and intrinsic motivation') he concluded that although research has helped understand the who, what, where and how of exercise psychology, no hard answers have emerged from a massive literature on the 'why' of volitional exercise.

This led into the second part of the address, during which Kremer presented five case study interventions promoting exercise, across a range of contexts including the general population, workplace and prisons. These cases, collectively, started to unveil the meaning associated with physical exercise and highlighted the important role(s) psychologists can play. Kremer concluded his keynote with an answer to the question posed in this title: to feel good about the self.

Putting online research in context

Increasingly, sources of information from the internet are being used within psychological research, a trend that looks set to continue. The challenges embedded within such online research were raised in a symposium convened by David C. Giles (University of Winchester). Although the three talks looked at very different topics, all highlighted the need to be aware of the internet as a research context.

Giles argued that websites and discussion forums should be conceptualised as mass media productions and people's posts within these as media texts, akin to printed texts. In this way ethical concerns often felt regarding the use of individuals' online texts without permission are negated. Giles further suggested that online behaviour can only be fully understood by contextualising it within the specific internet source it comes from.

This theme was picked up by Adam Jowett (Bradford Institute for Health Research), who took a discursive approach to online text. A feature of online talk is negative posts; 'flaming' involves making a hostile post directed at an individual whilst 'trolls' make posts deliberately intended to provoke others. Jowett recognised that it is not possible for a researcher to accurately infer a person's motivations for posting, and thus cannot know whether flaming or trolling was intended. Instead his analysis of posts in a discussion forum for diabetics treated posts as social practice, focusing on what they achieved and how norms of what is considered appropriate or inappropriate online behaviour are negotiated within a specific online context.

Without trying to understand people's motivations, Jowett's approach still recognises that they are active participants engaged in online behaviour. Arguably, treating internet posts as objects of study may not adequately capture the whole picture. Some dilemmas along these lines were raised by the audience. Is it acceptable to treat posts as media texts if a website moderator states that researchers cannot use forum posts or must gain permission? Or if an individual writes within their post that researchers should not use it?

An additional challenge is the very mass media nature of the internet. It is easy for quotes or even images reported in studies, however anonymised, to be plugged into a search engine and the particular site they came from located. This was an important issue to be borne in mind for the Patients' Experiences of Penile Cancer study presented by Peter Branney (Centre for Men's Health, Leeds Metropolitan University). Participants were recruited with the explicit purpose of making interviews about their experiences available on a health website. Whilst anonymising steps could be offered, it had to be acknowledged that participants could well still be recognised given the personal nature of their disclosures.

Branney's study revealed that for some people the risks associated with putting their information online, and it being used within a piece of research, were acceptable. However, this was in a context that specifically aimed to offer help to other sufferers and where participants were both recruited offline and fully informed. It seems unlikely that the issues highlighted by this symposium, involved in using data already on the internet, are going to be resolved easily. **AJ**

Unlocking the mysteries of time perception

Do you ever wish you could slow time down? The secret, according to Claudia Hammond, winner of this year's Public Engagement and Media Award from the Society, is to exploit the holiday paradox – this is the phenomenon whereby vacations seem to whistle by when we're on them, but feel sluggish in retrospect. The in-the-moment speed of time is accelerated by the arousal and pleasure of engaging in so many new activities; but that same period seems slow looking back, as the brain mistakes memory detail and abundance as evidence that a longer duration has passed. 'If you fill your weekends with loads of new activities,' Hammond said, 'they will go fast at the time, but looking back they'll seem longer.'

Hammond, who has a new book out (*Time Warped: Unlocking the Mysteries of Time Perception*), had earlier opened her talk with an account of BBC journalist Alan Johnston's experience of time when he was held for four months by kidnappers in Gaza. He became obsessed with time, she said, trying to stay up late so as to sleep through as much of the next day as possible. Once released he vowed never to be impatient again, but just six weeks later he had slipped back into old habits. 'We can't change our perception of time long term,' Hammond said.

Time as a river – find reassurance in the idea that whatever happens, time moves on

Do you remember which year Johnston was released? What about the year of the Chernobyl disaster? Johnston was released in 2007, Chernobyl was in 1986. Hammond explained that most people make estimates that are too recent thanks to a phenomenon called 'telescoping' – because we can remember it well, we assume that a notable event must be more recent than it is.

When she's not writing psychology books, Hammond is prolific on the radio, presenting shows such as *All in the Mind* and *Mind Changers* for BBC Radio 4. During one programme she invited listeners to send in descriptions of how they visualise time. Their answers demonstrate how common it is to think of time as extending in space – for example, two thirds of listeners who visualise months of the year do so as a circle. Hammond

TITANIC TIME TRAVELLERS, BIN LADEN, EARHEART AND MORE

On the first day of the conference someone asked me whether I'd heard the latest conspiracy theory about the *Titanic*: that time travellers who went to watch the ship sinking, actually set the events in motion. As a good, scientifically minded, psychologist I began to try and pick apart the rationale for this theory, but soon realised it was impossible to refute.

The way in which some people believe in such improbable explanations was raised in the symposium chaired by Christopher French (Goldsmiths, University of London) on the psychology of belief in conspiracy theories. Translating even the lowest reported proportions shows that millions of people believe in such conspiracist ideas in the face of more likely accounts. Robert Brotherton (Goldsmiths, University of London) opened the session with a look at the challenges of assessing these beliefs. Eliciting people's attitudes towards real-world conspiracy theories, the typical methodology, fails to adequately account for cultural differences and the shifting nature of which conspiracy theories are 'in vogue'. Brotherton presented a new standardised measure which instead assesses fundamental assumptions about the world held by believers.

It appears that measuring people's higher-order beliefs has greater validity. Michael Wood (University of Kent) provided evidence that conspiracy believers develop a monological belief system. It is not the specifics of individual theories which are important, rather it is the overarching belief that conspiracies are likely to be behind events. Compellingly, Wood found that people can believe in contradictory explanations for the same occurrences: to believe, for example, both that Osama Bin Laden has been dead for years, and that he is still alive.

Furthermore, a review paper from French showed how our cognitive systems readily support such conspiracist ideation. We lean towards Type I errors, seeing meanings where there are none, have a natural tendency towards wanting 'big' explanations for 'big' events, and tend to find evidence that supports rather than undermines our existing beliefs. Other factors include scoring highly on authoritarianism, high degrees of openness to new ideas, and low levels of trust.

Viren Swami (University of Westminster) also identified relevant characteristics with an examination of conspiracy theory beliefs about Amelia Earheart's disappearance. Gender, ethnicity, religion and education levels did not predict belief in conspiracist explanations. However, self-esteem, self-assessed intelligences, and low levels of agreeableness were predictors.

Now you may be asking, as I did, what does it matter? What harm does it do to let people believe the improbable? The consequences of believing in conspiracy theories can be surprisingly serious. It engages people in politics but simultaneously disenfranchises them by promoting a feeling of powerlessness. It can also cost lives; beliefs in conspiracies about AIDS and the MMR vaccine have affected people's health behaviours on a large scale.

So what should we do the next time we are faced with *Titanic* time travellers? Attempting to provide evidence to the contrary is unlikely to help; engaging with the theory simply provides more fodder for the belief. Instead, the speakers suggested that promoting people's critical thinking skills and addressing distrust in authorities may be more important. **AJ**

Allowing experience to make its impact

reported this herself, with her circle going anti-clockwise. For one woman, time was a slinky, for another it was a meandering time-line of past decades. Returning to Johnston's experience, Hammond said he saw time as a river, finding reassurance in the idea that whatever happens, time moves on.

Hammond closed her talk by explaining how the quirks in the way we think about time sometimes lead to mistakes, most notably the ubiquitous planning fallacy – our tendency to underestimate how long things will take. Among the most dramatic examples of this relates to the *Oxford English Dictionary*. The idea for the book was first mooted in 1857 and a completion date set for 1862. 'Five years later,' Hammond said, 'and they'd only got to the word *and*. It was finally finished in 1928, by which time it was completely out of date and had to be re-started again.' CJ

I For games illustrating anomalies of time perception, see Hammond's website: tinyurl.com/cx8j6yc

'The methods of scientific psychology are inadequate for understanding experience,' argued Wendy Hollway (Open University) in her keynote lecture on kinds of knowing. Hollway, a pioneer in qualitative methods, said it's 'good news' that the Qualitative Methods in Psychology Section is now one of the largest in the Society. But she warned that the 'ghosts of positivism, quantification and objectivity' still haunt the discipline.

Hollway championed a methodological approach inspired by British psychoanalyst Wilfred Bion's theory of thinking – an epistemology which Hollway said transcends the usual boundaries erected between the subjective and objective, between feeling and thinking, and between the separate individual and inter-subjective connectiveness. 'Psychoanalysis as epistemology is about knowing of, not knowing about,' she explained.

As an example of how these ideas can be applied in research, Hollway discussed her project looking at how women's identities change when they become mothers. Hollway and her colleagues deployed two psychoanalytically informed methods – free-association narrative interviews with the mothers (including the keeping of reflective field notes by researchers), and infant observation by trained psychoanalytic observers who made weekly visits.

When analysing interviews, Hollway said she increasingly works with the full audio, not just transcripts, because so much is lost by only looking at words on the page. Similarly, researcher field notes allow for reflection on the relationship between the researcher and the participant. Regarding the infant observation, Hollway explained how this required the difficult-to-master skill of 'evenly hovering attention' – the ability to listen to, not to listen for. This allows 'experience to make its impact'; reflection on what's observed is about generating thoughts and ideas, not exemplifying existing theories.

'I'd like to make absolutely clear', Hollway concluded, 'that my central point is not that basing knowledge on feeling is the goal… The goal is to notice one's feelings and reflect on them with support from structures, procedures and other minds. This way fair and valid knowledge lies. Live knowledge. Ethical knowledge.' CJ

Titanic – sunk by time travellers?

Offender profiling – myth and reality

'You're looking at a very old dog indeed,' said Dr Julian Boon (University of Leicester) as he addressed a packed room for his student conference keynote. Apparently still eager to learn new tricks, Boon said he was 'always learning' while sorting the myth from reality in the psychological profiling of offenders.

Claiming to be one of only three forensic/clinical psychologists dealing with profiling, Boon described his work with the police as 'an art and a science'. With 500–700 'calibrating cases' under his belt, he knows what to look for in the 'stimulus array'. For example, if there has been minimal attempt to hide the victim this suggests a 'disorganised offender', leading to the expected characteristics of social skills difficulties, prior knowledge of the area and victim, etc.

Boon took the audience on a grisly journey with celebrated killers and those tasked with 'detection, apprehension and incarceration'. Take 'Big Ed' Kemper, the serial killer, who convinced state psychiatrists he was 'safe' while the severed head of his latest victim was in the car outside. Or John Wayne Gacy, who the authorities extracted valuable information from on the ego-massaging

pretext that he was being broadcast live by satellite to other police stations. Referring to the challenges of working with such despicable human beings, Boon said you sometimes have to 'jump over your shadow' in search of the truth.

There are dangers in the techniques used, Boon said. Analyses that plot characteristics and events in multidimensional space can be 'hopelessly misrepresentative', Boon said: 'a house made of sand'. Humility is the byword, he concluded. The objective is to maximise effective deployment of limited police resources: anything that can point them in the right direction is 'gold dust', but the other alternative is worse. 'If you don't know, say so'. **JS**

High-risk sports

Why do some people choose to participate in high-risk sports, and how can psychology help meet the challenges involved? asked the symposium convened by Neil Weston (University of Portsmouth). Alexandra MacGregor and Jessica Tang (both Bangor University) presented papers that explored aspects related to motivation. MacGregor tested the predictive validity of the Risk Taking in Sport Inventory (RTSI), showing that whilst some people deliberately take risks, others engage in precautionary behaviours to minimise the danger. Interestingly, there was a buffering effect of precautionary behaviours for self-reported near-misses but not accidents.

Tang had utilised the RTSI in a study that further demonstrated that high-risk sports participators are not a homogeneous group of sensation seekers. For about a quarter of the sample of skydivers, bungee jumpers and base jumpers, participation was predicted by alexithymia, the lack of emotional regulation, whereas for another quarter it was predicted by anhedonia, the reduced ability to experience pleasure. The latter group appear to become habituated to the rush experienced, driving them to up the risks even higher.

For some, participation in high-risk sports is a serious and carefully planned endeavour in which psychologists may play a role. Weston described an intervention where understanding of the mental toughness attributes required by athletes informed the selection process to the Artemis Offshore Sailing Academy. Tasks were designed to push candidates and enable observation of their mental toughness in a virtual recreation of a high-risk round-the-world sailing event, the Vendée Globe.

Amanda Wilding (University of Bournemouth) demonstrated how psychology can also support individual participants. The Academy of Performance Coaching successfully worked with two men who rowed across the Atlantic in support of a charity. Although the pair would not consider themselves elite athletes they faced a high-risk, ultra endurance challenge. To support them, their mindset had to be changed and normalisation was key, suggested Wilding. The men were trained to expect the worst, meaning that when it did happen it felt like a normal experience. **AJ**

A POSTGRADUATE VIEW

Walking into the Grand Connaught Rooms for the BPS 2012 Annual Conference in April, I was struck by the opulent and open feel of the place, with its marble staircase, leading to the Grand Hall and Drawing Room. Taken with the friendly and helpful BPS staff, first impressions were that it was going to be an enjoyable few days.

Before presenting in the first session of individual papers in Crown, I managed to catch Professor Chris Brewin's keynote. As a sport psychology PhD student adopting a predominantly sociocognitive approach, this left me rapidly trying to rediscover my neuropsychological vocabulary from my undergraduate days, but it was fascinating due to sheer volume of work and clear real-world impact of Brewin's work, particularly in the area of post-traumatic stress disorder. I was also suitably impressed with the standard, content, and variety of some of my fellow early-career researchers' presentations; in particular, I enjoyed Philippa McGregor's talk on her qualitative work on stress and coping in elite coaches, and Juliette Stebbings' alternative view on well-being and interpersonal style.

How much many academics would kill for a prop like a pair of Olympic Gold medals to enhance their presentations? It was a privilege to watch James Cracknell OBE's inspiring and rather haunting talk. I thought he provided a great insight into the extreme commitment and hyper-competitive nature required for elite sport, but also the need to harness that and find a balance when embarking on super-human challenges.

Another highlight was the keynote by Professor Dan Gould, arguably the most eminent sport psychologist currently working in the field today. His extensive body of work seems to prove that seeking the precise formula for Olympic success is somewhat of a Holy Grail, as it includes such a multitude of factors. It was though inspiring to see someone with so much passion for his work, and someone who has so successfully integrated his academic work into the applied world.

All in all it was a very enjoyable and thought-provoking week, and I look forward to Harrogate in 2013! **GJ**

I Gareth Jowett was supported in his attendance at the Annual Conference by the Society's Research Board. Each year it makes funds available to provide postgraduate students who are presenting at the Annual Conference with bursaries that cover their attendance fees. In 2012, 15 bursary places were offered to students from across the country. Bursaries will be available for the 2013 conference in Harrogate, and details will be placed on our conference website www.bps.org.uk/ac2013 when applications are open.

Pioneering psychology

Forget Freud or James, the speakers at this symposium on psychology's pioneers made the case for some less obvious characters. Peter Lamont (University of Edinburgh) opened by profiling Edward Cox, the founder of the first British psychological society – not our own venerable organisation but the short-lived Psychological Society of Great Britain.

Cox, an amateur psychologist with a background in publishing and politics, had leanings towards the mystical, showing an interest in mesmerism and psychic phenomena (in fact, he coined the term *psychic force*). His 1873 book *What Am I? A Popular Introduction to Mental Philosophy and Psychology* explained that 'The province of physiology is body. The province of psychology is mind and soul.' The Psychological Society of Great Britain died with its founder in 1879 – the same year that Wilhelm Wundt founded his psychological lab in Leipzig. Lamont said that the main difference between Cox's psychology and the work of Wundt and other more mainstream names, was not so much in content or methods but in the fact that Cox was an amateur who lacked any academic affiliation.

Next, Alan Collins (University of Lancaster) made the case for the pioneering contributions of Kenneth Craik, the inaugural director of Cambridge University's Applied Psychology Unit (APU). Craik died tragically young in 1945 at age 30 in a road accident and yet his legacy is immense – he led the way in cybernetics, artificial intelligence, mental models, vision research and in directing the APU. Collins said his most influential work was *The Nature of Explanation* published in 1943 and described by historian Graham Richards as 'amounting almost to Cognitive Psychology's first manifesto.' Collins concluded that being a pioneer is not about being the first, but about preparing the way for large numbers to follow – precisely what Craik achieved with his mix of 'craft and intellectual power.'

Social critic Michel Foucault, the pioneer chosen by Peter Hegarty (University of Surrey), wrote that 'discourse is not now, it's time is not yours'. For Hegarty, how historians judge greatness is an important question – just think, he asked, 'how would you want future historians to measure greatness today?' Contemporary measures of achievement in academia use quantitative indexes of citations. By that criterion, Hegarty said, Foucault wins hands down, being one of the most highly cited scholars in social science. 'But in judging greatness, I'd want future historians to look at which areas were subjugated and neglected,' Hegarty added. In books like *Madness and Civilisation* (1961) Foucault rejected the psychology of his time, drawing attention to society's mistreatment of mental illness.

The session concluded with Geoff Bunn's (Manchester Metropolitan University) tribute to Liam Hudson, who died in 2005. With just a single-line Wikipedia entry and no obituary in *The Psychologist*, Bunn argued that Hudson is 'the most scandalously overlooked psychologist'. Hudson, an 'interdisciplinary polymath', was the author of several landmark monologues, starting with *Contrary Imaginations: A Psychological Study of the English Schoolboy* (1966), in which he distinguished between divergent and convergent thinkers. According to Bunn, this book made his reputation and influenced educational policy. Another key Hudson text was *The Cult of Fact* (1972), a critique of psychology. In later years, Hudson's interests diversified, including photography and art, a novel *The Nympholepts* (1978), and *Bodies of Knowledge* (1982), which was a study of nudes. 'The key thing about Hudson is that he emphasised psychology as a medium of dialogue,' Bunn said 'and it's this aspect of his work that I want to celebrate. Isn't it the case that today more than ever psychology needs to initiate dialogue between the empirical and the hermeneutic, between sciences and humanities and between the quantitative and qualitative and perhaps, above all, between the past and the present?'

The symposium coincided with the conference launch of the Society's Origins Project – a multimedia timeline of the history and development of psychological science (http://origins.bps.org.uk). We are hoping to feature pieces on the chosen pioneers in our 'Looking back' section. CJ

MORE, AND YOUR WRITERS

More coverage will appear in the coming months in the form of articles from award winners. Dr Carole Allan's Presidential Address will be made available online.

Your reporters:

Chris Brewin, Professor of Psychology at University College London
Daniel Gould, Professor of Applied Sport Psychology at Michigan State University
Diane Halpern, Trustee Professor of Psychology & Roberts Fellow, Claremont McKenna College
Alana James, Postdoctoral Researcher, CAMHS Research Unit, Institute of Psychiatry
Christian Jarrett, Psychologist journalist and editor of the Research Digest
Gareth Jowett, Sport Psychology Doctoral Researcher, York St John University
David Lavallee, Professor of Psychology at Stirling University
Catherine Loveday, Principal Lecturer in Psychology, University of Westminster
Katie Slocombe, Lecturer, University of York
Jon Sutton, Managing Editor, The Psychologist
William Yule, Emeritus Professor of Applied Child Psychology, Institute of Psychiatry