

2006 Annual

SIMON BIGNELL (*Associate Editor*)

introduces our coverage from Cardiff.

CARDIFF'S magnificent City Hall played host to this year's Annual Conference. Five hundred delegates attended the first new-format conference designed to be a shop window for the best of British and international psychology. Feedback from members over past years has led to a shorter, more intensive and higher-quality event with a smaller number of sessions taking place at the same time (for this year's feedback go to www.bps.org.uk/ac2006).

A series of themed symposium sessions provided fertile ground for new developments where experts were brought together to exchange ideas and approaches. These were linked and chaired by high-profile keynote speakers who showcased the latest research from across the discipline. Angela Clow, Chair of the Society's Conference Committee, said: 'The Annual Conference has always forged links between researchers and practitioners, but this year this seemed especially true: I think the new format and themed poster sessions worked really well. With no competing parallel sessions, lots of delegates came to see the posters, which were excellent – and we started a new poster prize, awarded for a combination of excellent science and presentation.'

The historic city of York is to host next year's conference. Members have been encouraged to nominate keynote speakers through BPS subsystems. These will be supported by invited symposia centred on the keynote themes.

Many of the award lectures will appear as articles in future issues, but for now the following pages give you a taste of some of the other talks. In addition, as part of our continued integration of our print and web offerings, you can find many more reports by going to www.thepsychologist.org.uk and clicking on 'this month's issue'.

TONY DALE



Those that can, teach well

THIS year's Award for Distinguished Contributions to the Teaching of Psychology was jointly given to Dr Andy Field (University of Sussex) and Professor Mark Griffiths (Nottingham Trent University).

Mark Griffiths' award lecture, 'Artificial dissemination? Aca-media and the teaching process', gave a fascinating and very personal insight into the mind of a media veteran and self-professed 'write-aholic'. Mark has published more than 100 refereed research articles, and has appeared on over 1000 radio and television programmes. In a 'quiet' week, he typically gets around 20 phone calls from journalists. On top of that, he regularly writes tips columns, and letters to newspapers.

When academic colleagues ask why he spends so much time working with the media, Mark simply points to the pay-offs. Journalists' questions reflect issues that non-academics find interesting, and stimulate research projects that directly feed back into his teaching. Publicity attracts people to the university, and earns him respect from the students. His high profile has also helped him influence policy

making; for example, a short article on scratch-card addiction was read out word-for-word in Parliament, during a discussion about the National Lottery Act.

The tight coupling between his teaching and dissemination activities (or 'aca-media', as he describes it) is something that Mark is clearly very proud of. In fact, he credits his success and popularity as a lecturer to the skills he acquired in working with the press. Many academics shy away from media attention because they fear misrepresentation, but we shouldn't shoot the messengers; Mark claims that poor communication is usually the fault of the



TONY DALE

Mark Griffiths receives his award from Graham Powell (President)

Conference



TONY DALE

Andy Field with Graham Powell

academic, not the journalist. Explaining scientific ideas accurately in 'bite-sized chunks' is a key skill when talking to students, and Mark points out that there is no reason to treat journalists any differently.

Andy Field's award lecture addressed a very different topic: null hypothesis significance testing, or NHST (otherwise known as 'what we normally teach undergraduate psychology students during statistics classes'). Statisticians consider NHST unsound because it can produce false conclusions; one expert described it as 'one of the worst things to happen in the history of psychology'. To explain why, Andy used an audience-friendly example: Does listening to black metal band Cradle of Filth make people go out and murder innocent grannies? You could test the null by finding thousands of people who listen to Cradle of Filth and are as nice as pie, but find the one bad apple and that throws a spanner in the works.

In addition, probability values are affected by sample size, and statistical

significance is not the same as practical significance (and $p < .05$ is a fairly arbitrary cut-off point). But evidence suggests that the majority of psychologists don't actually understand what probability values represent.

More importantly, out in the real world the null hypothesis is never true; there is no such thing as 'absolutely no difference' or 'absolutely no relationship'. So testing our predictions against the null hypothesis is like asking a meaningless question. Why do we keep teaching such an unsound method to our students?

The main reason, Andy suggests, is that we haven't got any better ideas. NHST allows a recipe-book approach to teaching statistics, which is convenient because

students don't have to understand anything – they simply have to follow a series of steps. Alternative approaches (like Bayesian methods, or minimum effects testing) are difficult to understand, let alone teach. Even effect sizes are often thought to be too hard for undergraduate students to grasp.

The 1994 edition of the APA style manual recommended that researchers report effect sizes as well as probability values. But 12 years later, many psychology journals still do not insist on this. As Andy points out, teaching methods are unlikely to change until NHST loosens its grip on the research culture. *SH*

□ See tinyurl.com/fkwfg (Mark Griffiths) and tinyurl.com/ew3a7 (Andy Field).

Don't rally round to help drivers

RESearch from Manchester Metropolitan University may shed light on why back-seat drivers can be so annoying. It may be due to the difficulty drivers have in absorbing information from other sources whilst at the same time trying to concentrate on the road ahead. Mark Wilson, Dilwyn Marple-Horvat and Nick Smith looked at what happens when a driver has to attend to competing sources of information.

A computerised rally car simulator was rigged up to present volunteers with information about the severity and direction of approaching corners as they completed a

course as quickly as possible. This information was either a voice telling them which way to go or colour-coded arrows at the top of their display screen. Neither auditory nor visual co-driver information led to quicker course completion times than when the drivers were left to their own devices.

While they sped around the course, an eye-tracker confirmed that drivers were gazing at the arrows. Pupil dilation and drivers reports indicated they experienced an increased mental load when the extra co-driver information was given. The big surprise was that the verbal information influenced completion times as much as the

visually presented information. It was expected that the visually presented arrows would have an impact on completion times because drivers had to take their eye off the road briefly to look at the arrows and respond to them. Although the verbal information did not require an overt eye movement, the effort required to attend to the message and adjust driving was similar to the visual condition.

It seems that competing sources of information, whether verbal or visual, may interfere with the task of driving. This may have implications for in-car equipment such as the latest satellite navigation systems as well as hands-free devices. These devices may be more trouble than they are worth because the instructions they provide can be so distracting whilst driving. The next phase is to replicate the findings in the real world by using a vehicle on a private racetrack in Anglesey.

SB

□ *Congratulations to Mark Wilson and his team from Manchester Metropolitan*

THE LURE OF EXTREMISM

FOR people whose self-identity feels like a rudderless boat at sea, there's nothing more alluring than an extreme group to provide some anchorage. That's according to Professor Michael Hogg's (University of Queensland) 'uncertainty reduction theory', based on research he and others have conducted showing that people who feel less certain about their own identity are more attracted to extremism and zealotry.

In one study, students with a weak sense of self identified more with an on-campus protest endorsing extreme views and measures than did students with a strong sense of self.

The effect can also be experimentally induced: in another study, some students were deliberately made to feel unsure of their own identity using probing questions about past experiences, whereas other students were deliberately manipulated to feel a stronger sense of self. Afterwards the students made to feel unsure of themselves were far more likely to say they identified with an extreme on-campus group than the students whose sense of self had been reinforced.

CJ

University for being the winners of first prize in the poster competition. The award is the first of its kind at the Annual Conference and is awarded for a combination of excellent science and

presentation. The winners and the four runners-up receive a framed certificate, and the winning poster will be used on the Society's website as a model for next year's delegates.

Age-old problems

WHILE it is accepted that many cognitive abilities decline with age, there is conflicting evidence on the nature of older adults' ability to compensate. For example, Louise Phillips (University of Aberdeen) highlighted how little data there is to support explanations of the prospective memory paradox; that is, that older adults perform better than younger adults on naturalistic tests of prospective memory (e.g. remembering to phone the experimenter at the correct time), but that younger adults perform better than older adults on lab-based tests (e.g. reacting to a cue after a delay). While there is some evidence that motivation is important (age deficits disappear when participants are told a prospective memory task is highly important), there is currently a lack of data, and not enough evidence to support other explanations, such as the impact of task demands or use of reminders. Phillips argued that ecological validity is particularly important in prospective memory manipulations.

Matthias Kliegel (University of Zurich) presented an empirical study examining the effects of age, cognitive abilities and task familiarity on planning performance. Participants completed one of two errand-planning tasks, which were matched for factors such as structure, difficulty and format but differed on content. One involved an everyday shopping tour (e.g. 'pay a cheque into the bank, pick up your friend from the hospital') while the other involved interplanetary space travel (e.g. 'leave some gold on Planet A, pick up the galactic president from Planet B'). Young and older adults performed equally well in the everyday planning task, despite older adults showing age-related deficits on tests

of cognitive resources. However, older adults performed worse than young adults on the space travel task. It is of course reassuring that older adults cope well with everyday tasks, but it is worrying that unfamiliar settings can cause problems. We are not just talking about failing to set the new video to record Countdown; important decisions such as pension planning may be gravely affected if information is not presented in an appropriate way.

It is a common belief that, in terms of cognitive functioning, we should 'use it or lose it', but there is mixed evidence as to whether this belief is correct. Some studies have shown positive benefits of everyday cognitive activity, while others have found no evidence that activities such as crosswords reduce age-related decline. Ken Gilhooly (University of Hertfordshire) assessed the relationship between cognitive functioning in older people and their levels of mental, physical and social activity, and also whether they took part in activities with the specific intention of maintaining cognitive functioning. Unlike many studies in this field, the sample were spread across health status and socio-economic background, and data was available from their participation in a project dating back to the 1970s. Gilhooly found that mental activity levels (e.g. chess, crosswords) were positively related to performance on abstract problem-solving tasks, even when factors such as socio-economic status were accounted for. Those people who deliberately engaged in activities to maintain cognitive function showed reduced age deficits, particularly in older age groups. This does not provide definitive proof of a causal link, but certainly these strategies do no harm; in other words, don't give up the sudoku! SC

Snails, puppy dogs' tails and androgens

THE relationship between prenatal levels of male sex hormones (androgens, such as testosterone) and human psychosexual development is complex, and sometimes misunderstood. In a keynote talk, Melissa Hines (City University, London) provided an overview of recent key findings in this area, which were often complemented by an earlier symposium on psychobiology and gender development.

While manipulation of androgen levels in animal studies is not necessarily a problem (as in the research reported by William Davies from the Babraham Institute during the symposium), there are obvious difficulties in systematically investigating their role in the development of human beings. Hines discussed a couple of approaches. One is to study people who, for some reason, have been exposed to abnormally high levels of prenatal androgens. Another is to look at normal variability in exposure to prenatal androgens and assess its influence on later behaviour.

Female humans with congenital adrenal hyperplasia (CAH) lack a crucial enzyme, which results in exposure to high levels of testosterone prenatally. CAH girls tend to show some masculinised behaviour, particularly in terms of toys, playmate preference (i.e. boys over girls) and activity preferences. For example, CAH girls spend more time playing with "boys' toys" than unaffected girls, and less time with "girls' toys". The degree to which parental approaches influence this was discussed by Hines, and also by Vickie Pasterski (also of City University). It could be suggested that CAH girls display masculine toy preferences because they are treated as more masculine by their parents than unaffected girls. But Hines and Pasterski both reported that, when parents of CAH girls are observed interacting with their children in a play environment, both mothers and fathers respond more positively when CAH girls played with girls' toys than boys' toys. In other words, CAH girls' toy preferences cannot be explained by parental socialisation; it is far more likely that

prenatal hormones have influenced their behaviour.

Both Hines and Stephanie Van Goozen (Cardiff University) reported research suggesting that normal variations in levels of sex hormones prenatally can influence later activity preferences; girls exposed to higher levels of prenatal testosterone tend to display more masculine play behaviour even when other factors related to gender-typed behaviour (such as older brothers) are controlled for. However the picture is far from simple, as demonstrated by the findings of Alessandro Iervolino (Institute of Psychiatry). For example, by comparing twins and non-twin sibling pairs, Iervolino explored two competing hypotheses; the socialisation hypothesis (the influence of sharing the home environment with an other-sex sibling) and the testosterone-transference hypothesis (sharing a womb with an other-sex twin). She demonstrated that, while genetic factors did make contributions to gender-role behaviour, shared environment factors also played a role.

It is important to recognise that, while high levels of prenatal androgens appear to have a substantial influence on sex-typical play behaviour, the relationship between androgens and other gender-related behaviour is less clear cut. For example, prenatal testosterone in CAH girls has been related to gender identity and sexual orientation. There is some evidence that CAH women are somewhat more likely to express slight unhappiness with their sexuality, and that they are also somewhat more likely to say that their behaviour or desires are not exclusively heterosexual. But Hines pointed out that childhood play is much more altered than either gender identity or sexual orientation and is certainly not predictive of later gender dysphoria. Additionally, Hines found no evidence that CAH females perform differently to unaffected females on cognitive tasks that typically show sex differences, such as three-dimensional mental rotation. This runs contrary to claims that prenatal hormones can explain sex differences in cognitive abilities.

SC

IN BRIEF

Almost half of undergraduates report having been physically abused by siblings, according to Paul Naylor and colleagues (University of Sheffield). Firstborns are more likely to be physically aggressive than those born second, particularly when they are less than four years apart.

Taking part in online support groups can reduce feelings of anxiety and concern towards dental treatment, according to Heather Buchanan (University of Derby) and Neil Coulson (University of Nottingham).

In a blow for aromatherapy, Neil Martin (Middlesex University) found that it made no difference to perceived pain whether participants with their arm in ice were exposed to a pleasant odour (lemon) or an unpleasant one (machine oil). The 'no smell' condition led to significantly lower pain than either of the smells.

Traumatic stress in response to intrapsychic events such as delusions can be understood in similar ways to traumatic stress resulting from physical traumas such as disasters, according to Brock Chisholm (University of London) and colleagues.

The number of concussions received by high-level field hockey players was found to be associated with anxiety, lower confidence, dizziness, headaches and blurred vision, in a study by Ella Rafferty (Exeter University). As a direct result, the Welsh Hockey Union now advises that players should wear protective equipment during all training sessions.

The media's representations of the recent Civil Partnership Act have been the subject of a study by Adam Jowett and Elizabeth Peel (Aston University). The quantity and variety of media coverage in UK newspapers immediately before, during and after the act came into force suggests an elevated status for 'Gay Marriages' in public discourse.

Sports players innately use psychological skills, even when they have had no formal training in them. That's according to J. Page and colleagues (University of Chester), who found that Gaelic sports players made use of psychological skills in competitive play. Successful teams made more use of relaxation.

IN BRIEF

Women's attitudes towards sexual behaviour may be more conservative than is supposed, according to research by Sharron Hinchliff and Merryn Gott (Sheffield University). Forty-six women were interviewed about why they have sex. Pleasure, fulfilment, emotional expression and sense of duty were given as reasons within a committed relationship. However, analysis of interview responses suggests that attitudes may be held towards women who have casual sex outside of this context as having 'something lacking' in their lives.

A task that implicitly measures the thoughts of sexual offenders has been tested, with interesting results. Anthony Brown (Cardiff University) indirectly measured the mental associations made between target concepts 'Child' and 'Sex', as well as giving offenders a more explicit questionnaire about their beliefs. The implicit test showed differences between convicted paedophiles and inmates convicted for non-sexual offences irrespective of whether they denied committing the offence, whereas the more obvious questionnaire failed to show a difference.

A 2005 survey has shown that a remarkable 97 per cent of 12- to 16-year-olds have a mobile phone; and NCH research reveals that 20 per cent of these have experienced some form of 'digital bullying'. Over 11,000 children were asked about text and e-mail bullying in a recent survey by Nathalie Noret (York St John College) and Ian Rivers (Queen Margaret University College). They found that this new form of bullying was on the increase and that girls experience being the victim of nasty and threatening messages more than boys do.

Context reinstatement assists the recollection component of recognition, reported David Groome and Holly Burns Tait (University of Westminster). When presented with photographs of TV newsreaders and asked to recall their names, participants performed significantly better when they also listened to the music associated with the relevant TV news programme.

'How many times must I tell you?'

DESPITE advice from healthcare professionals, many of us do things that we know are bad for us. Smoking, alcohol and drug use, poor diet, and lack of exercise are everyday examples; all are known to have physical and psychological consequences that we could avoid by changing our behaviour. The stakes are particularly high in conditions such as diabetes and heart disease, where lifestyle choices are critical in managing symptoms. How can people be

persuaded to take better care of themselves?

In his keynote lecture, Stephen Rollnick (College of Medicine, University of Wales; see www.stephenrollnick.com) discussed the challenge of behaviour change in healthcare settings, where good practice is understudied, and patients sometimes seem to be in denial about the link between lifestyle and health problems. One of the major difficulties is that healthcare professionals are not trained in behaviour

COLLECTING DATA ON THE INTERNET

THE appeal of internet data collection must be immediately apparent to anyone who has spent time waiting for student volunteers to show up at the lab on Monday mornings. However, it is not without its pitfalls. Tom Buchanan (University of Westminster) provided a crash course on some of the key issues that researchers should bear in mind when dealing with internet data.

Perhaps the most crucial issue is whether people behave differently when they are online from when they are in other settings. There is some good evidence to suggest that many offline social behaviours translate to online environments. Buchanan cited the example of the bystander effect, which appears to persist in chatrooms: the more people in an online environment, the less likely you are to be offered help if you ask a question. Interestingly, online behaviour is characterised by higher levels of self-disclosure and candid responding, and Buchanan made the point that this may often result in better data. In other words, 'experimenter effects' may be reduced by the anonymity of online responding.

Another benefit is the relatively broad pool of participants available; take a glance through most experimental psychology journals and you will find that many, if not most, of the studies exclusively use psychology undergraduates as participants. While online data collection is limited to people who have internet access, it still provides more diverse participants than the average undergraduate class.

There are, of course, a number of technical issues to be aware of when setting up online studies; for example, if you use Java software then be sure that it is a version that will be compatible with most PCs. Buchanan also mentioned the problem of dealing with participants who make multiple responses to the same study; it is important to remove these from any data analysis.

Finally, there are ethical issues to deal with, particularly because it may be difficult to debrief an online participant properly. One example Buchanan provided was the potential distress that could be caused by a study that showed participants a violent video clip to assess the effect of media violence. If a participant were to become upset and terminate the experiment prematurely, there would be no way to find that participant and undo the damage.

If you wish to find out more, there are a number of relevant web-based resources; <http://websm.org/> might be a good place to start.

SC

change techniques. A lack of theoretical understanding, combined with the stress and time pressure of a typical consultation, means that practitioners often feel frustrated with patients for repeatedly ignoring important advice.

Having described the challenges facing practitioners, Rollnick outlined an intervention technique that he has helped to develop for use in health and social care settings.

Motivational interviewing (MI) is a brief form of psychotherapy, in which clients are encouraged to discuss their own motivations for behaviour change. Autonomy is key; the practitioner does not tell the client what to do but acts as a supportive guide, helping the client to face contradictions in their thinking. Having identified the behavioural problems for themselves, the client can then be encouraged to come up with manageable solutions of their own.

MARK PINDER, REPORTDIGITAL.CO.UK

Some seem to be in denial about the link between lifestyle and health

The key qualities of a good motivational interview were highlighted using a recording of a real interview ('the Edinburgh tape'). A man with a chronic alcohol problem is talking about his experiences with a female practitioner, who listens actively and expresses empathy. She gently invites the man to think about the discrepancy between his core values in life, and his current behaviour. She echoes his belief in the possibility for change, and when the man talks about potential

obstacles, she tries to clarify how he is feeling, and offers an alternative perspective.

At the time of the interview, the man was drinking eight or more pints of cider per day at home. He found it impossible to get out of bed without alcohol. One year later, he was effectively recovered, going to the pub for a pint or two once a week with friends. The only intervention he received was MI.

Like any intervention, MI is not 100 per cent effective at triggering behaviour change, but reviews suggest that it is as effective as cognitive behaviour therapy, with the added bonus that it has a shorter duration. Medical problems linked to lifestyle choices cost the NHS millions of pounds every year. If MI could be rolled out to practitioners across the UK, it could well become one of the most cost-effective interventions available to medical science.

SH

Older but wiser

MANY of us can identify with the cries of 'I don't believe it!' from cantankerous old Victor Meldrew in TV's *One Foot in the Grave*. However, is it really the case that older people are different when it comes to dealing with social and emotional problems? One consistent finding from studies on ageing is that as age creeps up on us our cognitive abilities diminish. But we also gain experience with age – how does this affect our ability to help solve everyday problems?

In a recent series of studies with older adults, Fredda Blanchard-Fields (Georgia Institute of Technology) varied the emotional intensity of everyday problem solving tasks. In tasks that required a high degree of emotional and interpersonal skill, such as solving personal problems, they performed equal or better than younger adults did. However, it wasn't that older adults were simply better at solving everyday problems, they used a greater number of problem-solving strategies and showed greater flexibility in their responses.

When older adults attempt to deal with

problems that have low emotional content, for example when asking directions, they tend to use active strategies to get the job done directly. Age differences appear for interpersonal problems and those that have high emotional involvement. Younger adults tend not to consider the emotions of those involved as much as older adults do and want to solve the problem hastily. Their strategies typically involve proactively venting their emotions. When older people are tasked with problems that draw on social or emotional skills their accumulated life-experience gives them an advantage. Older adults tend to use more passive emotion-focused strategies, such as accepting the problem as it is or concealing their feelings.

In using combinations of solutions, such as directly tackling a problem, 'thinking outside the box', and by maintaining control of their emotions in heated social situations, older adults show a different style of strategy than younger adults. Blanchard-Fields research into the lifespan of everyday problem solving suggests that that older adults are more attentive to emotional issues than younger groups are.

They use this awareness to find ways of solving problems via emotional regulation: for example, in calming down an intense argument or remaining calm in order to tackle the problem at hand.

In a related talk, Alexandra Freund (University of Zurich) emphasised the changing nature of goal focus as we age. Freund reported that, while younger adults' goals tend to be growth oriented (e.g. wanting to get a degree), older adults' goals tended to be more focused on maintaining performance or loss prevention (e.g. wanting to stay healthy). Interestingly, in a lab-based sensorimotor task, younger adults persisted longer when the aim was to achieve as good a performance as possible (growth-oriented) whereas older adults persisted longer when the task became more difficult and the emphasis was on trying to perform as well as they had previously (maintenance-oriented). In fact, this change in goal focus may have advantages; Freund reported that, although maintenance goals were associated with low well-being for young adults, they were associated with high well-being for older adults.

SB and SC

Does pregnancy affect memory and attention?

WOMEN often report minor difficulties with memory and attention during pregnancy, yet laboratory studies fail to show consistent differences between pregnant and non-pregnant women in terms of cognitive performance. One possible explanation is that any impairments during pregnancy are mild, and the cognitive tests typically used in experimental studies are too simple to detect them. Alternatively, cognitive impairments in pregnancy might simply be a societal myth. Ros Crawley (University of Sunderland), Sophie Grant (University of Sunderland), and Kim Hinshaw (Sunderland Royal Hospital) conducted two studies to find out.

In the first study, pregnant and non-pregnant women completed 15 tests of memory and attention. The tasks were taken from neuropsychological test batteries designed to pick up mild impairments, using materials relevant to everyday life. As well as completing the tasks, participants rated themselves for changes over time in memory, attention, and applied cognitive abilities (such as decision-making).

In most of the cognitive tasks, pregnant women performed as well as non-pregnant women. Only two tasks showed differences

between the groups: pregnant women were slower than non-pregnant women on a test of comprehension speed. Pregnant women in the later stages of pregnancy (the third trimester) were also slower on a test of attention switching. However, pregnant women rated their own cognitive abilities in general as significantly worse than they were before they became pregnant. Non-pregnant women did not think their cognitive abilities had changed, compared with one year earlier.

In a second study, participants rated pregnant women in general for changes in cognitive abilities. Ratings were given by pregnant women and their male partners, plus non-pregnant women and childless males. All of the groups thought that pregnant women had poorer memory, attention and applied cognitive abilities, compared with pre-pregnancy. Taken together, the two studies suggest that there are widespread stereotypes about cognitive impairments during pregnancy that are held even by people who have no recent experience with pregnant women. There may be genuine changes during pregnancy for some but not all aspects of cognitive ability.

SH

SIDE-EFFECTS

The growing list of deficits associated with prolonged cannabis use could include prospective memory – remembering what you're supposed to do. Thomas Heffernan (Northumbria University) and colleagues found that cannabis users recalled less items from the Prospective Memory Questionnaire, when controlling for other drug use, mood and the strategies used. However, Helen Macrae and Rob Sanders (York St John College) found that users perform similarly to non-users on an everyday prospective memory task, although they did show a deficit in some tests of executive function. Meanwhile, Andrew Parrott (University of Wales) suggested that prolonged dancing exacerbates long-term memory problems associated with Ecstasy use.

SC

CONFERENCE REPORTERS

Simon Bignell (University of Derby)

Dr Sandie Cleland (University of York)

Dr Sarah Haywood (University of Edinburgh)

Dr Kate Cavanagh (trainee clinical psychologist, University of Newcastle)

Dr Christian Jarrett (journalist on The Psychologist and editor of the Society's Research Digest)

Dr Jon Sutton (editor of The Psychologist)

Treatment for psychosis

FOR many years psychotherapies were considered unhelpful, even inappropriate or harmful, in the treatment of psychotic symptoms such as hallucinations and delusions. However, since the 1980s psychological interventions have shown promise for the treatment of psychosis, and family intervention and cognitive behaviour therapy (CBT) are currently recommended in the NICE guidelines for schizophrenia.

In a keynote address Elizabeth Kuipers (Institute of Psychiatry, London) offered a whirlwind tour of the changing view of psychological care for psychosis, including individual and family work. Kuipers concluded that the key to therapeutic work is in developing collaborative relationships and helping the service user and their family to make sense of their symptoms in the context of their life experiences, to improve self-esteem, to reduce and manage stress, anxiety, depression and isolation associated with hallucinations and to tackle delusory beliefs via a search for disconfirmatory information and alternative explanations.

The symposium that followed explored new research into familial and cognitive processes in psychosis and the development of new therapeutic strategies

that tackle the substance misuse and post-traumatic stress frequently co-morbid with the experience of psychosis, but often ignored in psychological treatment.

Supportive families can be a great help for people suffering psychosis, but hostility and rejection may increase the likelihood of relapse. Where do these hostile/rejecting behaviours come from? Drawing on theories of attachment and loss, Max Birchwood (University of Birmingham) presented a study investigating the development of critical comments in families following the onset of psychosis in a family member. He hypothesised that hostility and rejection might be understood as a defensive strategy, embedded in concern about the client, adopted by family members to cope with the perceived loss of the person they know or their future potential. Data from a small study appeared to accord with this hypothesis and further work is expected.

Daniel Freeman (Institute of Psychiatry, London) described studies investigating the prevalence and nature of suspicious thinking in normal student samples. He found that social evaluative concerns (e.g. 'people look at me strangely') were most common, being endorsed by half of more than 1200 participants, whilst ideas of

reference (e.g. 'people are spreading rumours about me'), and mildly to highly threatening thoughts (e.g. 'people are deliberately trying to irritate me' to 'I'm being observed or followed') are less frequently experienced regularly by students. Further studies, which made use of virtual-reality technologies, found that persecutory ideas (e.g. thinking that a virtual character was hostile or rude) predicted participants' endorsement of anomalous experiences in everyday life and experienced 'presence' (a sense of reality) within the virtual environment.

Substance misuse is common in psychosis and has adverse consequences in terms of social function, mental health and treatment outcomes, but there is mixed evidence as to whether psychological interventions add benefits over and above usual care. Christine Barrowclough (University of Manchester) described a study evaluating the impact of a long-term treatment programme integrating motivational interviewing techniques with individual CBT and family interventions with usual care from a family support worker. There was significant improvement in global functioning in the experimental group over those receiving usual care alone, and a non-significant trend towards lower rates of relapse and reduced substance use at no extra treatment cost at one year follow-up. Results from a large-scale evaluation of this promising treatment are expected in 2009.

Individuals with severe mental illness (such as schizophrenia or bipolar disorder) are at increased risk for trauma exposure, including sexual abuse and bullying, and hence they have high rates of post-traumatic stress disorder (PTSD), which has associated difficulties including more severe psychiatric symptoms and more impaired social functioning. Kim Mueser (Dartmouth Medical School, USA) described the ongoing evaluation of a 12- to 16-week manualised treatment for PTSD in severe mental illness which includes a crisis plan, psychoeducation, simplified, flexible steps for cognitive restructuring and relapse prevention. So far, Mueser has found high participant retention in the treatment group and medium effect-size benefits over usual care on a range of outcome measures, with homework completion predicting improvement in symptoms of PTSD. Future work will investigate whether these benefits are found 'on the ground'. KC

At the top of their game

SPORT is big business these days, and psychologists are increasingly involved (either directly or indirectly) on the training pitch and in the dressing room. This very hands-on day of presentations and exercises, organised by the BPS, the Football Association and the British Association of Sport and Exercise Science, showed some reasons why.

David Lavallee and Beth Pummell (Loughborough University) opened the day by discussing the importance of transitions in football (injuries, relocation, changes in competition level, de-selection, retirement). Lavallee reported that across 14 studies, 20 per cent of athletes experienced psychological adjustment difficulties associated with sport-related transitions. He used the 2004 Athens men's coxless four team as an example of how they succeeded in reaching their goal of winning the gold medal by coping successfully with injuries and changes to the make-up of the team. Then the audience split into groups for a case study using a systems approach to young player development.

Ex-England 'Psycho' Stuart Pearce used the Sex Pistols, others (according to Loughborough University's Chris Harwood) use anything from Abba to U2 to get themselves in the right frame of mind before a game. Harwood's forte is adding a personalised script to the music, to enhance motivation, mood, concentration and confidence in the build up to the big match or to relax, recover and reflect after it. Harwood draws on a range of theories, from Bandura's self-efficacy theory to Holmes and Collins's PETTLEP approach. This encourages players to get as close as they can to the real thing in their imagery, through Physical, Environmental, Task, Timing, Learning, Emotional and Perspective aspects. The example that Harwood played mixed stirring evocations of the matchday environment and performance required with music from *Braveheart* and *Gladiator*. It was impressive stuff – perhaps it should be, given the amount of time Harwood says they take to prepare, time which is not always financially rewarded in the lower leagues. Harwood also admitted the importance of team culture in the acceptance of such techniques: he said that there will always be the third who want sports psychology, the third who aren't so

MARK EGERTON, EMPICS

David James – imagery sessions with bathroom tiles in the shower

sure, and the third who don't want anything to do with it. Sport psychologists should be thankful for MP3 players and headphones.

Richard Mullen (Brunel University) gave a good example of the PETTLEP approach to the physical aspects of imagery when he recalled how the notoriously daft goalkeeper John Burridge used to watch *Match of the Day* in his full kit. Mullen ran through ex-England goalie Ray Clemence's analysis of what makes a good number 1: concentration, commitment (something Mullen said they often need less of not more), confidence, courage (mental and physical), composure and communication. The last aspect is so important that many keepers say their best game is when they don't touch the ball. Another England keeper, David James, was attending the event and gave some interesting insights into the social structure that he needs for practising, and how even the tiles in his shower are roped into imagery sessions.

Finally, Robert Forzoni (Brunel University) described the use of personal motivational videos in his work with Commonwealth boxers, West Ham United and others. Videos are an 'athlete-friendly media' that can be used as a source of inspiration, as a pre-competition distraction, or to introduce and reinforce sport psychology or an academy. For a coach, just seeing themselves in action can lead to behaviour change (e.g. the increased use of open-ended questions) through self-modelling. One of Forzoni's examples, a painstakingly produced mesh of football action and Al Pacino's 'inches' speech from the film *Any Given Sunday*, suggested that he was both an excellent motivator and frustrated filmmaker! JS