What has psychology done?

The Psychologist’s editor, Jon Sutton, presents the results of a Society investigation.

Psychology – telling you things you already know in words you don’t understand. Over the years I’ve heard that a lot; from friends and family, journalists, even from other psychologists. Wouldn’t it be great to always have a comeback to hand? Some psychological nugget from modern times, some interesting, novel and practical insight to floor the doubters?

Last April, Stephen White (the Society’s Publications and Communications Directorate Manager) came to the rescue with the idea of a complement to the Annual Report, looking at what psychology had done rather than on what the Society had done. This report would aim to outline significant scientific research developments and practical applications from the discipline in roughly the last year, for the benefit of an external audience of research councils, politicians, civil servants, employers and journalists.

The call duly went out to all Society subsystem chairs and publication editors and the board chairs. People were fairly forthright about the methodology, as psychologists are wont to be, and a few people said the answer to ‘What has psychology done?’ was basically ‘Not a lot’. Then slowly but surely, perhaps spurred by a plug in Ken Brown’s President’s column and repeated notices in The Psychologist, contributions began to arrive.

Many thanks to everyone who contributed, in the face of considerable uncertainty about how or even whether their material would be used. This has been a learning experience. While we hope we have managed to pull together an interesting and useful feature, this can’t be taken as the state of the science and a comprehensive showcase of the best that the discipline has to offer – yet. But we hope you will read the following pages with interest, respond to the call for comments at the end and then keep an eye out for any similar – or perhaps completely different – process for 2006.

Mind and memory

Our own heads seem like a good place to start this journey: the stuff of psychology, and of people’s perceptions of it, since the dawn of the discipline. The Cognitive Psychology Section committee picked out studies in three areas: insight, amnesia and recognition.

Insight

In the study of problem solving, recent years have seen a resurgence of interest in how people tackle insight problems. First studied extensively by the gestalt psychologists of the 1920s and 1930s, such problems are generally thought to require a restructuring of the way the person represents them in order to make solution easy. An example is the famous nine-dot task in which the solver has to join nine dots with four straight lines without raising pen or pencil from the paper. The dots are presented in a 3 x 3 array, and most people wrongly search for a solution within this square array.

There is little doubt that the experience of insight is widely reported, and it seems to have a neural basis, according to an fMRI study of people solving tasks with and without insight (Jung-Beeman et al., 2004). But now an international team, including Tom Ormerod of Lancaster University, has shown that many classic insight tasks seem to be tackled by search methods similar to those used in more conventional problems and are difficult because they require detours that seem to take the person further from the goal (Chronicle et al., 2004).

Establishing whether insight is a special process or part of a more generic cognitive mechanism is of practical importance, for example, in management training. If insight is a special process, then teaching people ‘think outside the box’ strategies such as brainstorming may be beneficial. But if insight is like any other kind of problem solving, then this kind of training may actively impair performance. Instead, teaching strategies for evaluating progress and differentiating between types of problem-solving attempt may be more effective.

Amnesia

In the film Memento, Guy Pearce plays a man suffering from amnesia who relies upon notes to himself to overcome his inability to form new memories. This idea that amnesics are unable to register new information is of course an old favourite among dramatists, but it has also exercised cognitive psychologists over the years. A point that has never been fully settled is whether amnesics fail to encode the information in the first place or whether they simply can’t retrieve the material that has been encoded.

A recent collaboration between researchers in Italy, Scotland and the US has added an interesting new twist to this saga, and to our understanding of memory in general and amnesia in particular. Cowan et al. (2004) examined the recall
of amnesics for lists of words or stories presented either prior to an activity-filled delay or following the same interval spent in a dark, quiet room. The researchers found that for four of their six amnesic patients much less forgetting occurred when they spent the time in the dark quiet room (even when they appeared to sleep during the delay). The most obvious conclusion appears to be that for some amnesics the root cause of their problem is neither an inability to learn new information nor a retrieval deficit when the information is learned, but (as in the film) an enhanced vulnerability to the interference effects of subsequent information.

Recognition The recognition and naming of words, objects and faces are fundamental human abilities. However, the ubiquity, ease and speed of these talents belie the complexity of the underlying processes. Following a heated debate, age of acquisition (AoA) has been accepted to be an important predictor of processing power (mostly due to the work of Andrew Ellis and his many successful graduates). By AoA we mean that the name of an early-acquired object (such as ‘ball’) is recognised and named faster than a later-acquired object (such as ‘vase’). The earlier the name of an item is acquired, the faster that item can be perceived or named, even when frequency of occurrence is taken into account.

An increasing literature demonstrates that AoA affects a range of cognitive processes. Over the last year research has shown how different stimuli (printed words, pictures of objects and faces) appear to produce similar effects of AoA on recognition and naming, but differential effects on semantic tasks (Moore et al., 2004). Age of acquisition is demonstrated to influence eye movements during the reading of passages (Juhasz & Rayner, in press) in adults suffering from developmental dyslexia. There is also evidence that the order in which one learns the new words of a second language reveals enhanced processing for the earlier-learned words over those learned later (Izura & Ellis, 2004). A recent finding suggests that a child’s physical interaction with the world may actually be involved with the acquisition of spoken language (Funnell et al., in press).

Boosting the mind’s potential

Not everyone is happy to accept their mind the way it is, and now help is at hand in the form of the ‘Mind Gym’ (see www.themindgym.com). This London-based company, run by psychologists, aims to ‘help people use their minds more effectively so they get more out of life and contribute more to others’.

Professor Guy Claxton (University of Bristol) says: ‘Where the norm in this area is events that last days, our main product is an intervention that starts with a focused orientation, leads into a highly structured 90-minute “workout”, and is followed by supportive prompts and materials that help learning become second nature. Though each workout targets a specific area of psychological functioning – for example, interpersonal awareness, mnemonic techniques or emotional self-management – the overall range of workouts is comprehensive. The workouts are based directly on areas of psychological research; they do not simply repackaging the old training chestnuts of time management or learning styles.’

Seeking an alternative to learning styles, Claxton has also been working with colleagues at Bristol, and with educational provider TLO Ltd, to produce courses and materials for teachers that encourage and strengthen the core dispositions of learning, such as persistence, questioning, reflection and collaboration (see www.buildinglearningpower.co.uk). For more than 200 action research projects on the approach, see publications from Cardiff Schools Service (contact A.Griffith@cardiff.gov.uk) and Oxfordshire LEA (Julie.Fisher@oxfordshire.gov.uk)

But how can we tell if such approaches are having the desired effect? Professor Sheila Wolfendale (University of East London) has been commissioned by the DfES to prepare a discussion paper on the topic of parental involvement in the assessment of children’s educational achievement and development.

‘It has traditionally been assumed that “properly” trained professionals are uniquely and solely equipped to probe children’s functioning and to carry out expert formative and summative assessment,’ Professor Wolfendale said. ‘But recent exploratory research linked to practice demonstrates that parents can offer informed, knowledgeable perspectives and insights into their children’s functioning which are complementary to those of professionals and which, together, can yield rich data about all aspects of children’s development and attainment.’

The discussion paper charts the growing empirical base of this topic area, lists a number of approaches, offers a Triangular Model of Assessment Partnership, a blueprint for collaborative training for parents, children and professionals, and a proposed ethical assessment code of practice. See www.teachernet.gov.uk/workingwithparents.

Helping children in need

The Psychological Services Child Specialty

GOING FOR GOLD

The field of sport psychology has grown immensely during the last 15 years in Britain, culminating in the formation of the Society’s Division of Sport and Exercise Psychology last year. National governing bodies in sport are using the services of psychologists more frequently and to greater effect. This practice-based evidence was most recently portrayed during a review by the British Olympic Association of the psychological input at the Athens Olympic and Paralympic Games, which Dr Hugh Mandle told us about. ‘There were number of sessions in which athletes, coaches and performance directors gave their view of the support they had received leading up to and during the games. The range of interventions was substantial, including dealing with success and failure, confidence building, crisis management, dealing with the Olympic environment, dealing with injury, solving conflict, and helping to create an environment where excellence could flourish within individuals. It was not only the athletes that praised such support, but coaches, team leaders and Olympic support staff evidenced the difference psychology made to helping them achieve and enjoy their Olympic experience.’

www.themindgym.com

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Healthcare NHS Trust told us about two innovative projects they are running. The first, ‘Stoke Speaks Out’, will develop an accredited framework of training for practitioners, and shape services for children and their parents in the areas of parenting, attachment, speech, language and communication.

‘The psychology input will focus on parenting and parent-child attachments throughout pregnancy and onwards,’ said clinical psychologist Aoife McLaughlin.

The team recognises the impact of the early parent-child relationships on the development of good speech, language and communication skills. Training packages will be developed to address the ways of enhancing parent-child relationships and parenting practice to improve communication. Successful progression through different levels of Stoke Speaks Out training will lead to accreditation and the skills to train other practitioners.

The second project sees a group of child clinical psychologists and systemic family therapists working to meet the psychological needs of children and young people in ‘special circumstances’. Again attachment philosophies and a focus on early intervention and prevention strive to bring psychological thinking to all levels of the networks of care, working in partnership with social services, the prison service, health and education.

Clinical psychologists Megan Jones, Jude Courtney and Alison Heard said: ‘Working with these clients is fraught with challenges. Their everyday experience is of abuse, neglect, trauma, violence and aggression culminating in multilayered mental health concerns and seemingly insurmountable obstacles. Often, this is not just at an individual or family level but is intergenerational and deeply entrenched within communities in this city of socio-economic, cultural and emotional deprivation. Other challenges are faced when we are working with systems that can mirror the chaos and disadvantage in their lives. But working with multi-agency partners has been enlightening, and with cooperation, persistence, and a common desire to provide nurturance, difficulties can be overcome to provide coordinated and consistent care to these young people, their families and their wider networks.’

The Scallywags team in Cornwall have also been working in challenging situations, with children with emotional and behavioural difficulties (see www.cornwall.gov.uk/scallywags for the external evaluation). The scheme has been led by an educational psychologist since late 1999 with the aim of identifying and intervening at an early stage with those children who have the potential to be marginalised through school exclusion and family breakdown and thus develop serious behavioural and mental health problems’. Moira Broadhead (Senior Psychologist) told us that ‘Scallywags began a research-based, cognitive behavioural early intervention project for children aged three to seven. The scheme has now been running for over five years, and more than 500 families have taken part in the year-long intervention and maintenance programme.

‘It has made a real practical and tangible difference to parent’s lives and children’s future development. The scheme has provided significant levels of decreased parental stress and significantly improved the children’s behaviour both while the scheme is running and after the six-month maintenance visit.’

In Bristol, Professor Alec Webster has been working on the South West Autism Programme, a collaboration between the University and the City Council education department. Trained and supervised tutors work with families on an individually tailored programme, with contact hours negotiated up to 25 hours per week.

Intervention includes behavioural approaches, intensive interaction, Picture
Exchange Communication System and other strategies, such as visual timetables. Individual programmes emphasise communication, play, social interaction and independence. Tutors work directly with children but also promote more facilitative family and nursery environments by coaching parents and staff, and supporting children through carefully planned transitions into school.

Data are now available for 47 families (see Webster et al., 2003, 2004), and Professor Webster tells us that ‘all pupils made real progress and in the best cases children made Developmental Quotient gains of more than 60 points in 18 months. On average, families requested and received 10 hours per week intensive provision. Importantly, differences in progress were not linked to the amount of intervention and similar gains have been made as in other intensive programmes but with much lower time demands. The research indicates that all families with an autism spectrum disorder diagnosis require access to some form of early intervention: for LEAs to do nothing is not an option.’

**Being healthy and happy**

Last year was a vintage year for psychologists with an interest in alcohol research. The publication of the Alcohol Harm Reduction Strategy for England was preceded by a number of articles in the popular press that highlighted the issue of binge drinking and its health-related consequences. Bob Patton (National Addiction Centre, London) told us how he has been collaborating with a psychiatrist and an A&E doctor on a project examining screening and brief intervention among patients presenting to the A&E of a large London teaching hospital. ‘As part of this research we’ve developed the Paddington Alcohol Test, a screening instrument specifically designed for use within busy medical settings. Our randomised controlled trial (Crawford et al., 2004) showed that hazardous drinkers who were given an appointment with a specialist alcohol worker not only reduced their alcohol intake, but were also less likely to return to the A&E over the following year. This model of screening and referral has been highlighted as an example of good practice by the Royal College of Physicians, the Prime Minister’s Strategy Unit and the Scottish Intercollegiate Guidelines Network.’

Alcohol advertising has also been on the agenda. The government has ordered Ofcom to review the rules by the end of the year, and research by Dr Karen Pine and Avril Nash at the University of Hertfordshire and by Dr Brian Young at Exeter University has played a key role in this review process. Ofcom has published the research reports from both universities on their website (see tinyurl.com/5vyop).

As for the other main vice, smoking, O’Connell et al. (2004) have suggested that success at breaking the habit is all about how you’re feeling at the time, rather than your static traits. Lapsing is more likely in the playful and rebellious states than it is in the opposite states (serious and conforming). Such temporary ‘metamotivational’ states turn out to be better predictors of lapsing than unchanging traits do, and this leads to possibilities for treatment that are implicitly denied by the ‘this is how you are’ trait type of approach.

That study was nominated for this feature by Michael Apter in support of his reversal theory (see www.reversalthey.org). He says that ‘research continues to support the theory’s claim that attention to the metamotivational states identified in the theory can be more helpful in understanding various dynamic personality processes, than the more traditional and static trait approach. Teaching people to recognise, control and make effective use over time of a full range of metamotivational states has become a central theme in management consultancy work using reversal theory (see Carter & Kourdi, 2003). Another recent book (Kerr, 2004) uses reversal theory as a framework for understanding, and dealing with, violence in sport. For example, Kerr argues that it is important to distinguish between mischievous (playful) violence and angry (serious) violence – something which the police often, and tragically, fail to do in attempting to control soccer hooliganism.’

Without the cigarettes and alcohol to get through the working day, you might like to turn to the Health and Safety Executive (HSE) Management Standards for tackling work-related stress. Over the past few years, psychologists at the HSE have been working with a range of stakeholders, including employer organisations, to develop guidance and best practice standards on work-related stress. The Management Standards, launched in November (see www.hse.gov.uk/stress), look at six key aspects of work that can lead to work-related stress if not properly managed: demands, control, support, relationships, role and change. Each standard contains statements about good management practice in that area, drawing on considerable research in the field, and the HSE has also developed guidance for employers on how to take a risk assessment approach to measuring their conformity with the standards.

**Mental health**

We received a number of nominations concerning innovative treatments for mental health problems. First up was Professor John Taylor, Head of Psychological Therapies and Research at Northgate Hospital, Morpeth, telling us about his work on anger management for people with intellectual disabilities (see Taylor et al., in press). Cognitive-behavioural interventions have been shown to help with a range of psychological problems, but they tend not to be used with...
intellectually disabled (ID) populations owing to the widely held belief that such clients would not benefit from these therapies because of their cognitive limitations.

In a series of studies, Taylor and his colleagues looked at the effectiveness of a specially modified individual cognitive-behavioural anger treatment with people with ID and severe challenging behaviour. ‘Anger associated with aggression and violence is an important issue for people with ID,’ he told us. ‘It is the main reason for people in this client group to be admitted or readmitted to hospital care, and for them to be prescribed antipsychotic and behaviour control drugs. In our main outcome study the treatment group’s self-reported scores on measures of anger disposition, reactivity and control were significantly improved following treatment compared with the routine care control condition, and these improvements were maintained at follow-up. Limited evidence for the effectiveness of treatment was provided by paid carers’ ratings of client behaviour post-treatment. This research shows that people with mild to borderline ID can successfully engage in and benefit from psychological interventions that have cognitive restructuring as a core treatment component.’

Also working with challenging clients and behaviours was Alex Hossack, Head of Mersey Forensic Psychology Service. ‘I feel that we have progressed the treatment of paedophiles with the introduction of a novel, although contentious, adjunct to treatment,’ he told us. ‘Successfully treated sex offenders were selected to be voluntary co-facilitators of a sex offender treatment programme. This “paraprofessional” role attempted to bypass the effect of humiliation, loss of self-confidence, self-esteem, resentment and fear in offenders presenting for treatment: factors that significantly inhibit therapeutic engagement. Mersey Forensic Psychology Service currently has eight paraprofessionals who are integrated into all aspects of the programme, including advocacy in initial interviews, the first phase of treatment to reduce anxiety by providing an example of the light at the end of the tunnel, and presenting at conferences, training events, media interviews and more. Clients successfully completing treatment rate this part of service provision as one of the most important support and encouragement factors.’ The team has also set up a helpline for potential or practising sex offenders (see Hossack et al., 2004; Hossack & Robinson, 2005; see also the article by Alex Hossack and Gemma Wall in The Psychologist this month.

In the field of eating disorders, Dr Susan Simpson, a chartered clinical psychologist with the Eating Disorders Service at Royal Cornhill Hospital, Aberdeen, told us about their use of videoconferencing. One third of the population of Scotland does not have access to a specialist eating disorders service, and those who live in remote and rural areas are most disadvantaged. With pressures on health services to provide a more equitable and cost-effective service to all, the motivation to develop suitable alternatives to face-to-face treatment has intensified.

Simpson and colleagues (in press) treated six patients with bulimic disorders via videoconferencing. ‘Overall, clients indicated high levels of satisfaction with video therapy, suggesting that it enabled them to feel more in control and less “intimidated” or “pressured” than a face-to-face encounter. For some, video therapy was their only opportunity to access treatment because of geographical isolation and lack of locally trained therapists. Levels of therapeutic alliance were generally high throughout treatment for all, and scores were comparable with previous findings on studies with depressed patients who were seen face-to-face. Anecdotally there was an indication that video therapy may be of particular benefit to clients who are especially uneasy about attending face-to-face sessions, such as those who experience high levels of shame.’

Professional developments

As for how the discipline is organised professionally to meet mental health needs, last year saw the introduction of ‘graduate mental health workers’ and plans for a new psychology associate role within the NHS. Kim Wood (Ealing Primary Care Trust) told us that the graduate mental health worker role is ‘a great application of psychology to practical everyday problems and settings’. The rationale, according to Kim, is to improve access to treatment, offer options in settings that people feel comfortable in and build capacity to improve the management of mental health.
problems in primary care, thereby reducing some of the stigma people feel accessing mental health services. ‘In many cases these workers will be university course psychology graduates. Their job is to provide face-to-face work with a GP’s patients, to have the time to do mental health promotion activities, and to network with the wide variety of community-based groups that can offer support to a person with mild to moderate mental health difficulties. In this way, they increase the network of resources available to a person who walks through their neighbourhood practice door.’

Also attempting to meet mental health demand is the proposed role of psychology associate using a readily available, well-qualified and highly motivated resource (psychology graduates) to help meet the (increasing) demand for effective and professional psychological interventions within an appropriately trained, supervised and remunerated career structure. The role is one that undertakes psychological interventions, including assessment and treatment, using approaches and techniques that can usually be described by protocol. The postholders would work in association with, but under the supervision and management of, chartered psychologists. The posts would be permanent, and would be career positions within the family of applied psychologists in the NHS. It is also expected that a proportion of associates will be supported to continue training towards becoming qualified as chartered applied psychologists.

The Changing Workforce Programme of the NHS Modernisation Agency, in collaboration with the BPS, has funded a two-year pilot of the role that will run during 2005–2006 and involves wide consultation, development of a training programme for the grade, and a comprehensive evaluation of the impact of the role. (See tinyurl.com/Re887 for the feasibility study report.)

Last year also saw the launch of the Register of Psychologists Specialising in Psychotherapy. Psychology and psychotherapy in Britain have developed separately, often in conflict. Nevertheless, over the years psychologists have trained in and practised psychotherapy and often made strenuous efforts to bring the disciplines together in creative and mutually informing ways, and the Register formally recognises this.

Sheelagh Strawbridge told us: ‘The Register recognises the value of a range of psychotherapies and unites them within a framework of principles. These stress a psychological attitude towards inquiry and critical evaluation; a psychotherapeutic attitude towards self-exploration and reflective practice; and, social and political dimensions of practice. In focusing on the possibilities of a generative relationship between psychology and psychotherapy, it encourages the development of psychologically informed psychotherapy and psychotherapeutically informed psychology. It also highlights the importance, in the context of developing policies towards CPD, of recognising the way in which post-qualification learning contributes to the development of the profession.’

Your views please
So that’s it, what did you think? Would you have preferred to see the process communicated, organised and presented in a different manner? Should the process be an open forum, or peer reviewed? Presented in print, or web-based? Annual or ongoing? How can we best reach those who matter? If you didn’t contribute, why not?

As for the wider discussion, have psychologists done enough? If not, how could you do more? Is there less of a concrete and practical use coming out of the discipline than there used to be? Does less originate from the UK than elsewhere (for example compare and contrast our exercise with the APA initiative, www.psychologymatters.org)?

Over to you: comments (marked ‘for publication’ or ‘not for publication’) to me on jonsut@bps.org.uk. Come on, don’t be shy: to end with one more study, Dr Peter Forster told us about his research showing that the internet can be an important part of a person’s overall ‘psychological sense of community’ (Forster, 2004). If we are to continue with this exercise, it should be all about finding what is happening in our community, and telling others about it.

References