

Variations or

Associate Editor
for **Conference
reports** FIONA
JONES introduces
the reports

ON 15 December, psychologists once again converged in the rain on that dismal concrete block, the Institute of Education.

This year's London conference was successful in attracting over 800 people. When all gathered in the breaks between sessions, the central hall, with book publishers, coffee and posters, formed a lively focus for discussion and renewing acquaintances.

For the first time, the conference had themes — something which has until now been reserved for the Annual Conference.

The two themes chosen were 'risk and decision making' and 'the family'. The former seems to have been particularly popular in attracting a very wide range of presenters, at least some of whom did manage to remember that risk taking has benefits and can be a whole lot of fun. While reducing risky driving is clearly a worthwhile aim, other risk reduction strategies seem worrying in terms of increasing control and uniformity and the stifling of innovation (e.g. in the case of medical protocols) or making life possibly longer but very boring.

Many such issues were raised by Frank McKenna in his invited speech and by other individual speakers and symposia throughout the conference.

More reports to follow in next month's issue.

CHRIS CHAPERON

Why do we like eating all those chips?

Risk taking and everyday tasks

FIONA JONES reports on an invited speech by Frank McKenna of the University of Reading.

WHY, despite numerous health promotion campaigns, do people continue to take risks with their health? The continuing appeal of risky behaviour and people's resistance to health warnings pose a challenge for psychology. In his lecture, Frank McKenna raised these issues referring particularly to his work on driving.

Many studies have used gambling (in a lab situation) as a model of risk-taking behaviour, despite the fact that it is not typical of most of the risks we take in everyday life. A feature of gambling is that gamblers will have experienced high levels of minor losses. Most real-life risks (such as in smoking) are characterised by a small likelihood of much more major losses — of which most of us have little experience.

There has therefore been a move towards the study of risk in real-life situations. Here it is clear that, despite being constantly reminded of the dangers to our health, we all continue to indulge in unhealthy behaviours of one sort or another. McKenna suggested

that, because of this, it is often concluded that information campaigns do not work.

However, this may be too pessimistic. We tend to be good at seeing risk in society in general, but less willing to apply the idea to ourselves. Thus, health promotion campaigns often do not directly make a great impact on individual behaviour. But this does not necessarily mean they have failed.

For example, in the UK most of us did not wear seat belts voluntarily despite promotional campaigns, but once they were legally enforced we complied quite willingly. This contrasts with the situation in the US, where there was no campaign to persuade people of the value of wearing motorcycle crash helmets. As a result, once they were legally required, objections were so strong that in some areas the law had to be repealed.

A problem with health risks is that many activities involve a trade-off between health risks and perceived gain. Maximising our life expectancy, while an important feature in health campaigns, is not our only criterion in

a theme

everyday life. We may, for example, travel by car rather than train because the greater convenience may outweigh the increased risk.

McKenna proposed that for researchers and public health campaigners risk is often viewed in terms of costs or potential loss, which is a natural focus for public health campaigns. However, loss may not be in the mind of the risk taker. The motivation for such individual behaviour is the potential benefit, which may be great.

In car driving, for example, perceived vulnerability does not predict choice of speed — the perception of accountability is more important. Weinstein's work on optimistic biases has suggested that people think they are relatively invulnerable to perceived threats and that these views are very resistant to change.

In his work on driving, McKenna has found that people rate themselves as more careful, safer and less likely to be involved in an accident than the average driver. He has attempted to change this behaviour by asking people to imagine an accident involving either themselves or another person.

Drivers imagined themselves in less severe accidents than the one they created for others and they tended to attribute the blame to others. Following this, they reduced their valuations of their own skill but not of their safety or likelihood of being in accidents. It was not until they were asked to construct a world in which they were to blame for the accident, that they rated themselves as lower on skill, safety and as having an increased likelihood of being involved in an accident.

The assumption in much of the literature on risk is that people make deliberative assessments of risk. In fact, it may be that we are often oblivious to risk. Research suggests that new drivers may not detect risks or may detect them more slowly. Risk may be 'an emergent property' of people's behaviour, yet we may treat it as if it is the prime focus.

Instead, we need to consider factors underlying behaviour from people's own perspectives. One quite important element is that much risk-taking behaviour takes

place in a social context, such as when out driving with passengers.

In an interesting study of young drivers, McKenna found that, without passengers, men drive faster than women. Both men and women drive faster with a male passenger. However, the presence of women passengers reduces driving speed in young male drivers.

McKenna gave some consideration to the wider issue of whether people should be allowed to take risks. J.S. Mill suggests that intervention is only justified to prevent harm to others. This justifies drink-driving laws

but not seat belt legislation. Just where the balance should lie between individual freedom and the importance of preserving life is clearly an important issue, but one that was seldom mentioned during the conference.

McKenna summed up that perceptions of societal risks are more modifiable than individual risks, which are frequently simply not taken into account. We are often not involved in rationalistic decision making in everyday life; other factors may be much more important. We may simply be eating chips because we like them.

Decision making

FIONA JONES *reports on some key points from a symposium.*

A GOOD decision may still have a bad outcome. Nigel Harvey (University College London), as symposium discussant, pointed out that this is one way in which decision making is different from problem solving — where there is a right answer. Perhaps this is why problem solving is often regarded as fun, whereas decision making seldom is.

Decision makers aim to make decisions that are optimal in conditions of uncertainty. Optimal decisions may still lead to failure and we may be blamed. Harvey suggested that we now live in a highly technical and dynamic world where we have to make decisions that we have not evolved to make and that we may not be good at. This symposium addressed a range of such situations.

Harvey pointed out that many of the studies presented here used an applied psychology approach, which involves identifying problems in the field, extracting the essence, testing them using experimental methods and then going out into the field to verify findings. He made a strong case for the use of such methods rather than of a naturalistic approach, which works solely in the field, and which, he argues, has made less of a contribution to theory.

As an outsider, I would tend to favour the naturalistic methodology, but this symposium certainly went a long way to convincing me of the value of starting in the lab. Three examples of this approach are described below, looking at decision making in financial markets, magistrates' courts and medical consultations.

Emma Soane (London Business School) presented work looking at the psychological factors influencing the decisions of city traders who work in conditions of risk, uncertainty, competition and overload.

Unsurprisingly, city traders tend to be risk takers, often participating in high-risk sports and gambling in their time off. The majority find that emotions play a significant part in their decisions. Despite training, traders may suffer from biases (such as optimism) in their decision making. However, being under the illusion that they have more control than is the case is related to poorer performance.

In magistrates' courts, decision making has come under scrutiny from Mandeep Dhami of City University. Bail decisions are clearly critical for those at the receiving end (as those who followed *EastEnders* over Christmas will be aware). The legal system affords magistrates a good deal of discretion as they can take into account the offence, the

THE ROLE OF PUBLISHERS

What do publishers get out of conferences? What can publishers do for conference delegates? DAVID GILES gets the views from either side of the book stall ...

WITH a cup of coffee wobbling on a saucer in one hand and my briefcase in the other, I undertook my habitual trawl through the publishers' stands at the first coffee break of this year's conference. From a personal point of view, this is a valuable, though underrated, feature of conferences. For one thing, it is often the first chance I get to find out about forthcoming journals calling for papers, or new textbooks worth getting inspection copies of, or to spot any off-the-wall titles that might otherwise have passed me by. But what do publishers — and other delegates — get out of the whole exercise?

Most delegates I spoke to have mixed feelings about the role of publishers at conferences. We tend to get sent inspection copies and catalogues anyway, and genuine freebies are a thing of the past.

Very few people admitted to buying anything. However, for prospective authors in particular, the presence of publishing folk is an opportunity for a spot of networking; for already-published authors it is an opportunity for renewing contact.

Publishers seem to feel the same way. Sarah Redford and Siobhan Pattinson from Blackwells claim that conferences give them a chance to meet their authors, get new names for their database and publicise any new titles that teachers and lecturers might like to adopt. They also admit to a spot of healthy competition with their rivals: 'It's quite open. People walk round and ask each other what's going on — it's a fairly small community, so we tend to know one another quite well.'

However, one or two argued that the cost of an appearance (£70 a day for editorial and marketing

staff, plus the cost of the stand itself) was rarely recouped from sales, and so the whole thing is largely a PR exercise. This is particularly true at the London Conference, one suggested, because Christmas is not a good time to promote new titles. There are few new academic titles on the market then, and it is a very busy time for publishers in general. Some publishers prefer to wait until the Society's Annual Conference at Easter to put their wares on display.

Nevertheless, all the publishers I spoke to agreed that the chance to meet authors in the same place saved them numerous campus visits up and down the country, and that it was important to be seen, to be 'in there'. For delegates too, the general feeling is that, if the publishers weren't there, then they would start to worry a bit. Especially, I suspect, if it's their books that have disappeared from view.

likely sentence, defendants' previous convictions, their community ties and the strength of the prosecution case.

In the study, Dhama asked magistrates to make decisions based on hypothetical cases. She found that men were more likely to be treated punitively regardless of the seriousness of the offence, although when magistrates were asked how they made decisions they said that they did not use gender in their decision making.

When given the same case a second time, over half made different decisions. Despite such inconsistencies, most were highly confident about their decisions.

In the medical context, decision-making practices are also shown to be very varied. Claire Harries (University College London) used hypothetical cases and interviews to assess GPs' assessments of risks and decisions in prescribing lipid lowering drugs.

Different criteria were used to assess risk from those used to make prescribing decisions. While GPs may agree about the risk, they make very different prescribing decisions, some not even prescribing at high levels of risk. Many were less likely to prescribe for smokers and those who were overweight.

The GPs were clearly giving weight to different factors from those presented in a risk assessment tool. While there are clear advantages to diversity and discretion in professional decision making, the level of variability and inconsistency in decisions in these studies is worrying.

Healthcare professionals and risks

FIONA JONES discusses two individual papers on health risks.

WHEN patients are endangering their own lives, but cannot give informed consent to treatment, balancing the risk to patients and the risk to healthcare professionals becomes one of the most difficult decisions to make. Nowhere were the thorny issues involved in managing risks quite so vividly illustrated at the conference than in the individual paper by Nigel Beail from Bamsley Community & Priority Services NHS Trust.

Beail drew on the example of a young man with learning difficulties who daily engaged in auto-erotic asphyxiation (semi-strangling while masturbating). Attempts to prevent this by parental pressure and drug treatment had been unsuccessful.

Treatments that involve shaping the behaviour would be intrusive and would involve physical contact, which could put the psychologist at risk of charges of assault. However, failure to treat could equally constitute negligence, and in this case could clearly put the patient's life at risk.

Beail's searches found no similar cases,



and clearly the issues involved had not been tested in the courts. However, he found that, in other cases of treatment without consent, legal criteria indicate that treatment can be provided to preserve life, health and well-being, if it is in the best interests of the patient.

and based on a body of professional opinion.

In the event, this meant that treatment was implemented, and the patient's behaviour was modified to the extent that he stopped using a ligature around his neck. At this point, the behaviour was no longer dangerous to life. However, the attempts to produce more appropriate sexual behaviour were only partially successful.

At this stage, legal advice indicated that treatment should not be continued without going to court. Treatment was therefore halted, even though the outcome for the patient was less than optimal.

This talk encapsulated the real-life dilemmas in managing risks and the need to monitor the balance of risks in a changing situation.

One popular way of managing risks in professional decision making in the health service is to standardise behaviour by the implementation of medical protocols. This was the focus of research presented by Dianne Parker of the University of Manchester, who reported that doctors are less likely than other health professionals to report violations of such protocols.

Parker investigated 300 healthcare professionals (midwives, nurses and doctors) in the specialisms of obstetrics, surgery and anaesthetics. Participants were given scenarios describing situations in which there was either compliance to a protocol, violation, or improvisation where no protocol exists. Outcomes for the patient were also varied being either good, poor or bad. Then participants were asked how likely they would be to report each scenario if they saw it.

The findings suggest that doctors are reluctant to interfere with fellow professionals. The prevailing culture in medicine values professional autonomy, and variations in practice are seen as signalling flexibility and innovation. Clinical protocols threaten such autonomy. Parker quoted one doctor as saying: 'If you feel the urge to write a clinical protocol lie down in the dark until the feeling goes away.'

Current recommendations suggest that research-based clinical guidelines be set up to be used in all NHS trusts. But Parker says that such trends need careful management — firstly, because the culture of professions may lead to resistance, but also because it is unclear that rigid compliance with such protocols is always advisable, given the unpredictability of different circumstances; innovation and flexibility may also be needed.

Reacting to warnings

DOUGLAS JOHNSTONE *attends a symposium on human reactions to warnings that can save lives.*

In the opening talk, Jan Noyes (University of Bristol) described her work looking at the errors made by pilots of commercial airlines in their response to automated systems. She suggested that between two-thirds and three-quarters of incidents are caused by human error and argued that the technology is now available for aircraft to be fully automated.

She also argued that, with the amount of air traffic increasing, accidents will also increase and could reach as many as one a week. One method of preventing this increase is through the design of warning systems that could draw the pilot's attention to possible dangers, thus reducing the possibility of human error.

A potential problem with automated systems is that, owing to over-reliance on technology, pilots may be less aware of the condition of the aircraft and the external environment than when using older systems. However, from a questionnaire sent out to civil airline pilots, Noyes found that pilots (who had actual experience of automation) did not believe that automation resulted in any loss of information and believed that automation had led to safer flights.

Noyes concluded by suggesting that the recent trend towards designing systems that accommodate human error appears to be the correct one to explore and that perhaps we do not even need the human at the front of aircraft any more.

Stella Mills (Cheltenham & Gloucester College of Higher Education) continued the theme of transport safety, describing research into safety on ships. Mills explained that, though ships do have various kinds of aids to navigation, such as auto-pilot, radar, echosounders, sonar and Navtex, ships' officers are less reliant on these systems than their airline counterparts.

When there is a potential hazard approaching there are no automatic warning alarms, instead the system requires its operator to recognise possible hazards indicated by the equipment. Mills argues that these systems need prewarning settings which will be activated by possible hazards, just as on aircraft.

Judy Edworthy (University of Plymouth) gave two talks: one concerning the effect

that synthesised speech has on alerting individuals to possible dangers; and the other on children's understanding of warnings.



In her first talk, Edworthy described her experiment in which she presented people with warning words, such as 'lethal', 'deadly', 'danger', and neutral words, such as 'modal', 'medley', 'manger'. She found that it is not only the actual words that are associated with a threat but also the tone of voice.

Participants rated that it was more important to attend to a higher, more fearful tone than to indifferent tones, and to warnings with a fearful tone in female voices rather than male, perhaps because of their higher pitch. In practical terms, warning systems that use synthesised speech are more likely to alert people to potential dangers than are traditional alarms.

Judy Edworthy's second talk described her investigations into whether children associate particular colours with danger. She found that children under eight years of age see red as signifying something important in terms of being hazardous, with orange and yellow equal second, followed equally by blue, green and black, and white as the least likely to indicate danger.

These findings are consistent with those of adults. Edworthy also found that the word 'danger' is more important in indicating something hazardous than the words 'warning' or 'careful'.

The importance of Edworthy's work in saving lives is indicated by the fact that 700 children die through accidents each year in England and Wales. Her work can be applied to designing warning signs and labels that are more likely to indicate danger and thus save lives.

Research in cyberspace

YAARA DI-SEGNI-GARBASZ *reviews presentations on internet use and on virtual environments.*

WITH tens of millions of internet users and relatively easy access to computers and the internet (at least in the Western world), it is not surprising that research into online interactions and behaviours is becoming quite widespread and is generating considerable interest in the media. Two of the talks at the London Conference reported research on online phenomena.

In the first talk, Helen Petrie (University of Hertfordshire) discussed a survey of internet usage, beliefs and attitudes. Over a period of three months, a self-selecting sample of 445 internet users responded to an online questionnaire, producing some surprising data on the characteristics of the respondents and patterns of their internet use. The questionnaire included some demographic questions, a series of questions about use of and attitude to the internet, a Beck Depression Inventory and the Eysenck introversion/extroversion scale.

Of the participants, a staggering 46 per cent defined themselves as 'addicted' to the internet, spending an average of 60 hours per week online, as opposed to the average 28 hours per week reported by participants who did not define themselves as addicts. Of the self-defined internet 'addicts', 51 per cent were women — an interesting finding considering that it is assumed that the majority of internet users are men. The sex split among all respondents was also even.

Perhaps surprisingly, the mean age of respondents to the survey was approximately 28 years, with no significant differences between men and women and between respondents who defined themselves as addicts and those who did not. These findings are in sharp contrast to the



stereotype of the internet 'addict' as a male in his teens.

Attitudes to the internet were more positive among 'addicts' than among 'non addicts', women rather than men and younger rather than older respondents. Perhaps worryingly, the study also showed higher levels of internet use were related to higher levels of depression and introversion.

Petrie noted the various methodological difficulties of conducting research in a virtual environment and cautioned against sweeping interpretations of the data. However, even a cautious interpretation of the data provides some very interesting food for thought and is in sharp contrast to some common beliefs based on anecdotal evidence.

In the second talk, Michael Innes (Murdoch University, Australia) discussed two experimental studies of social influence in naturalistic conditions, carried out in a virtual environment. The studies used four variations of the Asch conformity paradigm — where people asked to match the length of lines drawn on cards will tend to give incorrect answers when under group pressure.

The studies were conducted in a Multi User Domain (MUD) — a virtual environment where participants communicate in text within the constraints of the pre-defined 'physical' characteristics of the environment, which includes virtual rooms, virtual furniture and other virtual objects. MUDs are fairly stable, strongly hierarchical environments where regular users assume long term exclusive identities and experienced, skilled users

assume titles such as 'wizard'.

Unlike the physical environment, the virtual environment minimises the effects of social status, location, time, physical appearance and ability. This is believed to result in the empowerment of the user. The lack of physical presence and the decreased level of social context is believed to increase ambiguity and reduce the influence of the majority. However, the clear hierarchy existing within MUDs may produce greater conformity by the newer users who are at the bottom of the social ladder.

In the study, experimenters were introduced to the MUD by collaborators who had 'wizard' status and thus achieved a high status themselves. It was hypothesised that participants in MUDs will be less likely to conform than participants in the original Asch study, but more likely to conform to authority figures because of the hierarchical nature of the environment.

Female users were thought to be more likely to conform than male participants while long-term participants would be less likely to conform than new users.

These hypotheses were all supported, though Innes cautioned that in an online environment, it is impossible to determine whether the reported gender is indeed the real gender of the user.

Overall, the results suggest that though users of virtual environments in normal conditions feel less pressure to conform and have more freedom to express their opinions a hierarchical environment can still have a great effect in encouraging conformity and repressing individuality.

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