



## RESEARCH IN BRIEF

### Contributions wanted

If you read a paper published in a peer-reviewed journal (or at proof stage) and think it would be of relevance and interest to our wide audience, send a lively and informative review (up to 400 words) to Tom Stafford on [tom@idiolect.org.uk](mailto:tom@idiolect.org.uk).

# Tired findings?

*Interracial contact cognitively fatigues those with unconscious racial biases.* **TOM STAFFORD**

**S**Ocial cognitive neuroscience findings are being widely reported of late, particularly a brain imaging study in *Nature Neuroscience* which purports to reveal a cognitive resource depletion effect among those with unconsciously revealed racial biases. However, a commentary in the same issue gives some of the reasons for caution when interpreting these findings.

Jennifer Richeson (Dartmouth College, New Hampshire) and colleagues measured the ease with which white participants associated typical white and black names with positive or negative words (e.g. 'Good' or 'Bad'). This Implicit Association Test (IAT) gives a score of racial bias (shown by a pattern in which people take

longer to associate the white names with negative concepts and black names with positive concepts).

Participants were then interviewed by a black experimenter. It was hypothesised that those with racial biases would find the interview more draining on their cognitive resources because of the need to inhibit a socially unacceptable racial bias. In line with this, IAT scores correlated with a measure of cognitive control (the Stroop task) given after the interview – those with higher IAT scores were able to exert less cognitive control, suggesting that, for the more racially biased, a common 'executive' resource was more fatigued by the interracial interaction. Subsequent brain imaging showed that activation in the

lateral prefrontal cortex and anterior cingulate cortex correlated more highly with the Stroop effect than with the IAT scores. But, as an editorial also in the same issue of *Nature Neuroscience* makes clear, the relation of the IAT to real-world behaviour is uncertain and controversial. The study also says nothing about the innate determinants of racism – dealing just with the neural correlates of racial bias in adults and ignoring developmental mechanisms.

The commentary, by William J. Gehring (University of Michigan) and others, calls into question the 'effort' explanation, and discusses the interpretation of the IAT scores. Indeed the paper's authors themselves note that 'many individuals who generate high scores on subtle measures of racial bias endorse egalitarian values and aspire to behave in nonprejudiced ways'. Most blacks, like whites, show an IAT bias against black as opposed to white names. It may be that the IAT measures a context-relative salience effect of black names compared with white names. IAT experiments with non-racial stimuli show that higher salience names can generate comparable IAT scores. Another possibility is that the IAT scores may reflect a subject's implicit awareness of cultural stereotypes.

Given this possibility, Gehring *et al.* suggest that the effect found by Richeson and her co-researchers may be due to anxiety about displaying socially unacceptable racial bias – an anxiety that high IAT scorers will be more prone to feel and of which interracial contact will make them hyper-aware.

The paper is sure to generate more research and more attention, a heady brew of the scientific and the political, as well as of social, cognitive and neuroscientific perspectives on psychology.

Gehring, W.J., Karpinski, A. & Hilton, J.L. (2003). Thinking about interracial interactions. *Nature Neuroscience*, 6, 1241–1243.

Richeson, J.A., Baird, A.A., Gordon, H.L., Heatherton, T.F., Wyland, C.L., Trawalter, S. *et al.* (2003). An fMRI investigation of the impact of interracial contact on executive function. *Nature Neuroscience*, 6, 1323–1328.

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*Here's an extract, by the Digest editor **CHRISTIAN BERESFORD JARRETT**.*

## IN THE MEMORY BANK

Eyewitness testimony continues to play a central role in the conviction of many criminals. But might our expectations about what a given type of crime involves affect our memory for such a crime?

Michelle Tuckey and Neil Brewer (Flinders University of South Australia) asked 234 students to complete a free-recall questionnaire in order to identify what most people tend to think a bank robbery involves – their 'bank-robbery schema'. Typical elements included two male robbers with guns, a getaway car, and so on. Next, participants were shown a video of a fictional bank robbery before being quizzed on what had happened. Some participants were interviewed about the robbery once (after three days, three weeks, or three months), others were quizzed up to four times over the next three months.

Participants' memory for schema-consistent (e.g. there were two men) and schema-inconsistent (e.g. but they didn't have guns) information was both more accurate and less likely to be forgotten over successive interviews than schema-irrelevant information (e.g. the bank floor was carpeted).

The authors argue their findings have

important practical implications. First, when witnesses report details of a crime that you might expect, or details that seem bizarre – like a masked robber or a smart-suited robber, respectively – this information is more likely to be accurate. Second, the accuracy of their overall memory should not be judged on their inability to recall irrelevant detail.

Tuckey, M.R. & Brewer, N. (2003). How schemas affect eyewitness memory over repeated retrieval attempts. *Applied Cognitive Psychology*, 17, 785–800.

### Abstract weblink:

[www3.interscience.wiley.com/cgi-bin/abstract/106562551/ABSTRACT](http://www3.interscience.wiley.com/cgi-bin/abstract/106562551/ABSTRACT)

**Syllabus advice:** Eyewitness memory is the AQA spec A (AS) cognitive psychology 'critical issue'. See Edexcel (AS) 'Eyewitness testimonies' part of the 'Cognitive approach' section of Unit 1. See AQA spec B (AS) 'Eyewitness testimony' part of the 'Cognition and law' section of the 'Cognitive psychology' module.

# Couples feel the heat

*The ups and downs of marriage comparison.* JON SUTTON

**Y**OU might think you enjoy reading about Posh and Becks's perfect marriage in *Heat* magazine each week, but the chances are your spouse suffers via the comparison. Bram Buunk (University of Groningen, The Netherlands) and Jan Ybema (Free University Amsterdam) asked 135 women about their own marriage quality and then gave them reports ostensibly from other women, describing either strong or weak marriages along with either high or low effort put in to maintain them.

After reading about the good marriage ('upward comparison'), women – particularly those who claimed that their own marriage was good – reported feeling more positive affect (such as feeling 'cheerful' or



'inspired') than after reading about the weaker marriage ('downward comparison'). However, they also tended to evaluate their own marriage more negatively after reading how rosy

life could be for others.

The authors say: 'Given the fact that couples are often confronted with comparisons with other couples, it seems somewhat surprising that the impact of such comparisons has received relatively little attention from relationship and social comparison researchers.'

Buunk, B.P. & Ybema, J.F. (2003). Feeling bad but satisfied: The effects of upward and downward comparison upon mood and marital satisfaction. *British Journal of Social Psychology*, 42, 613–629.

## OUT NOW IN BPS JOURNALS

Reconviction of sexual offenders; violent behaviour and risk assessment; witnesses with intellectual disabilities; investigative interviews in suspected child sexual abuse; criminal thinking styles; motivation for offending; courtroom questioning style; beliefs about deception; confessions and denials; Eysenck's theory of crime – *Legal and Criminological Psychology*, February.

Family well-being and disabled children; the Cardiac Depression Scale; theory of planned behaviour and ecstasy use; unrealistic optimism; humour and health; fatigue and coping; intersex women; negative affect following vaccination; communicating cervical screening results – *British Journal of Health Psychology*, February.

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