

diversity. Via oral and video presentations and small-group discussion, they were familiarised with the expressions of community solidarity displayed by the residents of Billings in response to the attacks. Participants then responded individually to a questionnaire addressing the feasibility and possible effects of similar strategies in the Northern Irish context.

Analysis: Qualitative analysis indicated that participants were encouraged and yet held significant reservations. Sources of encouragement included the inspiring example of resistance to bigotry; major reservations derived from perceptions that the violence in Northern Ireland is more intense and that the rivalry, having a more extensive history, is more entrenched.

Conclusions: The theoretical core of the Billings response, grounded in contemporary conceptualisations of normative influence and community change, was not disputed. Much of Northern Ireland, however, would require a more impenetrable implementation. Advisable, for example, would be recognition of the increased perceptions of danger and of intractability, clarification of parallels between the two cases and identification of Northern Irish examples of past Billings-like successes.

The role of semantic transparency in Chinese compound word representation

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Objectives: This study investigated the role that semantic transparency – the degree of transparency in the semantic relationship between a compound word and its constituents – plays in Chinese compound word representation.

Design: Bimorphemic (bicharacter) compounds were classified as either fully opaque, i.e. semantically opaque at both constituents (OO), partially opaque (TO, or OT), or fully transparent (TT). Word frequency (high or low) was manipulated and both character positions were tested. Inferences about lexical organisation were made within a modified Reicher-Wheeler paradigm, in which the word-superiority effect (word–non-word) has been observed. Both words and reversed compounds were compared to non-words in Experiments 1 and 2, respectively.

Methods: Participants were university students (aged 18 to 34 years) and proficient in Chinese. Stimuli were Chinese compounds, their reverse and matching nonwords. Each stimulus was tachistoscopically presented and the task was partial report (of the character at the designated position).

Analysis: Percentage correct was calculated and difference scores (word/reversed compound–non-word) were cast as a three-way ANOVA. In Experiment 1, the word-superiority effect obtained, regardless of semantic transparency, word frequency and character position, especially for low-frequency words with at least one opaque constituent. In Experiment 2, there was an advantage to the first constituent of reversed compounds, but only for high-frequency words with two opaque constituents.

Conclusions: These results suggested that the degree of unitisation in lexical representation goes in the decreasing order of fully opaque compounds, partially opaque compounds and then fully transparent compounds. They were explained using a graded approach to morphological representation within a modified interactive-activation framework.

Word fluency deficits among users of MDMA ('Ecstasy')

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Aims & Objectives: Word fluency is a long established measure of executive functioning. As well as depending on executive resources (localised in the pre-frontal areas), word fluency is also thought to load on the temporal lobes. Users of MDMA ('Ecstasy') exhibit deficits in recall tests,

which also load on the temporal lobes, and in measures of executive prefrontal functioning. This raises the possibility that MDMA users will also exhibit deficits in a word fluency task.

Design & Method: 25 ecstasy users and 31 non-ecstasy users were recruited. A multivariate design was implemented with user group (ecstasy user/non-user) as the between participants variable, and the three word fluency measures as the dependent variables. The task consisted of three parts: Firstly participants were given four minutes to write down as many animal names as they could. Secondly participants were given five minutes to write down as many words beginning with the letter 'S' as they could. And finally, participants were given four minutes to write down as many four-letter words as they could beginning with 'C'.

Results: MANOVA revealed that the ecstasy users performed significantly worse on all three word fluency measures relative to non-MDMA user controls. The overall effects of ecstasy on word fluency remained significant after statistical controls for the use of cannabis during the three months prior to testing. Control for measures of verbal working memory reduced the MDMA related variance by almost one half, but the effect remained statistically significant.

Conclusion: The results provide additional evidence of executive impairment among MDMA users.

Social anxiety and its relation to self-evaluations of social performance in early adolescence

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Objectives: This study addressed the effect of video feedback on changes in socially anxious children's self-evaluations of their social performance. It was hypothesised that socially anxious children who were exposed to video feedback of their performance on the Behavioural Assertiveness Test for Children (BAT-C) would change their evaluation of their performance.

Design: Social performance was measured through observation of children's social skills on an adapted version of the BAT-C, a role-play task designed to assess children's social skills. Changes in children's self-evaluations of their social performance were then examined after viewing video feedback of their performance on the task.

Methods: The sample consisted of two groups of 28 children either high or low on social anxiety, as measured by the Social Anxiety Scale for Adolescence (SAS-A), aged 11 to 13 years. These two groups were then subdivided into two conditions, receiving either video feedback or a distraction task. Children rated their expected (pre) performance and their evaluated (post) performance on the BAT-C using a performance ratings questionnaire.

Analysis: Results showed that socially anxious children display specific social skill deficits. In addition, they had lower expectations and lower evaluations of their social performance compared to non-socially anxious children. Video feedback did not have differential effects on anxious and non-anxious children's self-evaluations. However, overall it was found that children whose utterances were short, and who received video feedback of their performance, subsequently lowered the evaluation of their performance.

Conclusions: The implications of these findings for understanding the cognitive characteristics of social anxiety in children, and in further examining the link between social behaviour and self-appraisal processes are discussed.

Burnout in the South African Police Service: The influence of job stress and coping strategies

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Objectives: The objectives of this study were to determine the construct validity and internal consistency of the Maslach Burnout Inventory – General Survey (MBI-GS), and to test a causal model that includes burnout, job stress and coping of police officers in the South African Police Service.

Design: A cross-sectional survey design was

used. Structural equation modelling (SEM) was used to address the problems associated with this design.

Methods: A stratified random sample ($N=340$) was taken of police members in the Western Cape of South Africa. The Maslach Burnout Inventory – General Survey, Police Stress Inventory and COPE questionnaire were administered.

Analysis: Descriptive and inferential statistics were used to analyse the data. Pearson, Spearman and canonical correlations were computed to determine the relationships between variables. SEM was used to test a causal model of burnout, job stress and coping strategies.

Conclusions: Structural equation modelling confirmed a three-factor model of burnout, consisting of exhaustion, cynicism and professional efficacy. It was shown that job stress leads to higher levels of exhaustion, which in turn leads to higher levels of cynicism and lower levels of professional efficacy. Coping strategies can moderate or mediate the relationship between job stress and burnout. Active coping can mediate the relationship between seeking social support and professional efficacy. Exhaustion moderate the relationship between avoidance coping and cynicism, and cynicism moderate the relationship between avoidance coping and professional efficacy.

Mathematical knowledge among UK psychology undergraduates

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Objectives: In common with other subjects, there is growing concern over the mathematical competence of students entering psychology courses. Such knowledge has important implications for the teaching of statistics. This research assesses levels of mathematical knowledge in a wide sample of UK psychology undergraduates.

Design: An independent groups design was used with gender and mathematics qualification as independent variables.

Methods: 1000 first-year students in nine UK psychology departments were assessed. The test comprises 32 items representing six broad components of mathematical knowledge relevant to the learning of statistics – calculation, algebraic reasoning, graphical interpretation, proportionality and ratio, probability and sampling, and estimation.

Analysis: Males performed significantly better than females on a majority of components. Results revealed a highly significant linear trend in total test scores as a function of highest mathematics qualification. Scores were particularly low for the probability and sampling component. There were differences between institutions.

Conclusions: Educators can no longer assume that students come equipped with even the basic mathematical knowledge to benefit from the teaching of statistics. Any teacher or researcher involved in supporting students' learning or use of quantitative research methods, as well as authors of textbooks and other learning resources, should be especially conscious of potential gaps in students' knowledge of core components of mathematical reasoning, such as estimation, probability, sampling and algebra. Additionally, it should not be taken for granted that students are necessarily comfortable with use of decimals, square roots, operations with negative numbers, and scaling of measurements.

Social cognitive predictors of sun protection intention and behaviour

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Objectives: We investigated sunbathing behaviour and intention prospectively using the Theory of Planned Behaviour (TPB). Previous studies have asked about behaviour and intention at the same time. The problem with this method is that, given the TPB framework, we must assume that current reported behaviour is the same as future reported behaviour.

Design: The present study was designed to avoid this assumption by investigating sun