



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**A comparison of the self-concept and motivation of pupils with dyslexia and pupils without dyslexia in the elementary schools**

*Zeinab Mihandoost (Azad Ilam, Iran University)*

The purpose of this research is to compare self-concept and motivation in pupils with and without dyslexia. In this research to identify dyslexia pupils' researcher employed Dyslexia Screening instrument and Reading Text. The population of the research included 138 dyslexic pupils studying in schools in Ilam, Iran. In these population researcher selected randomly 30 pupils for pilot study. The remaining 108 dyslexic pupils were selected as the sample size but 80 pupils with dyslexia participated in this research as the parents of the other and 28 parents' of students with dyslexia did not permitted their children to participate. The researcher also selected 80 without dyslexia pupils who had been homogenized and compared using the self-concept and motivation scales. The reliability and validity of the scales were confirmed. The analysis demonstrates a significant difference among the pupils with and without dyslexia.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **An economic psychology inquiry into consumers' willingness-to-pay for market bads**

*Tony Tan and Jason Mazanov (University of New South Wales)*

This study investigates the systematic behavioural bias consumers exhibited when being exposed to market bads by measuring their willingness-to-pay (WTP) for the reduction of such economic externality in the context of anti-doping policies in sport. While it is relatively well established that, when facing a trade-off between two goods, consumers' WTP usually differs sizably from their willingness-to-accept (a "kink" in one's indifference curve), a phenomenon known as the endowment effect, few studies have tested whether a similar effect exists when consumers were required to make a trade-off between a good and a bad. This study has been designed in the context of the sport market because most consumers perceive sport spectacles as entertaining (goods) while consider their by-product, scandals involving performance-enhancing drugs, disappointing and condemnable (bads). This logic readily connects itself to a vast array of applications such as the current debate on carbon tax (balancing economic growth (goods) and environmental consequences (bads)) and government debt issues (social stability (goods) and severe deficit (bad)). Extending the good-good trade-off to a good-bad plane involves more than the mere relabelling of the axes. While the former can be understood in the usual context of diminishing marginal rate of substitution, indifference curves of the latter bowed away from the origin, making most analyses no longer familiar. As a result, a good estimate of consumers' WTP for abatement of economic bads becomes important for guiding practice and policies. An additional layer of complexity in forming anti-doping policies in sport comes from financing issues. While there is consensus amongst different stakeholders that anti-doping efforts clearly need to be preserved and strengthened, practitioners reached no agreement about who should be billed for such effort. On one hand, drug-abatement in sport, as a "commodity", falls into the definition of a public good due to its characteristics of being non-rivalry and non-exclusivity. On the other hand, not all taxpayers self-select into being consumers of sport events. This line of argument suggests that doping carries strong character of "club bad". The behavioural consequence of consumers' systematic underreporting of their WTP is also considered.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**An exploratory investigation of mindfulness, depression, physical activity, and weight in a workplace sample**

*Belynda Evans and Mirella Di Benedetto (RMIT University)*

There is currently minimal research on mindfulness, depression, and physical activity in relation to overweight and obesity. This research aimed to investigate the relationship among mindfulness, depression, physical activity, and body mass index; to determine if overweight and obese people were less mindful than people of normal weight; and to determine if there were any differences among the three weight groups on the combined mindfulness scores after depression was controlled for. Ninety participants (20 males, 70 females) with an age range of 23 to 70 years ( $M = 42.26$ ,  $SD = 12.19$ ) were recruited from RMIT University staff across all Victorian campuses, via an online staff newsletter. Participants completed the Depression Anxiety Stress Scales-21, the Five Facet Mindfulness Questionnaire, and the Stanford Brief Activity Survey using a secure online survey tool. Mindfulness was negatively related to depression for all Five Facet Mindfulness Questionnaire subscales, and positively related to physical activity for two of the Five Facet Mindfulness Questionnaire subscales ( $p < .05$ ). No significant difference was found among the three weight groups on the combined mindfulness subscales, nor after controlling for depression. Consistent with the stress-diathesis model and previous research, the results suggest that mindfulness may provide a coping mechanism for factors that exacerbate overweight and obesity, such as depression and physical inactivity. Future research on sex differences and comparing mindfulness with other weight loss interventions is required.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Awareness of decision accuracy when localising a peripheral target in self-restricted older drivers**

*Jessica Davis, E. Conlon and G. Power (Griffith University)*

As individuals age, developmental changes in physical, sensory and cognitive processes that can affect one's capacity to drive safely occur at different rates. Many older adults self-regulate their driving behaviour because of safety concerns by making strategic and tactical decisions about when, how and in what circumstances they drive. For example, a restricted older driver may avoid driving at peak hour or in inclement weather, and choose to drive more slowly. Decisions to adapt driving depend on awareness of personal limitations and are made over time using information from many sources. However, accurate self-monitoring is also essential for the appropriate guidance of moment-to-moment decision making and action when driving. The current study had two aims. First, to determine whether self-restricted older drivers could be discriminated from non-restricted older drivers on a measure of peripheral localisation ability, providing indirect evidence of older drivers' awareness of functional limitations. The second aim was to determine whether these driver groups could accurately self-monitor their peripheral localisation performance as they were performing the task. Nineteen non-restricted (8 males,  $M$  age = 70.68,  $SD$  = 6.75) and 18 self-restricted older adults (2 males,  $M$  age = 72.89,  $SD$  = 6.98) participated, with self-regulatory status determined using a self-report questionnaire. Self-restricted older drivers had poorer accuracy than non-restricted drivers on the peripheral localisation task. Using Type 2 Signal Detection analysis, it was found that both driver groups had a similar response criterion across trials. However, self-restricted older drivers had poorer ability to monitor their peripheral localisation accuracy than non-restricted drivers. These findings suggest that driving self-regulation via strategic and tactical adaptations is more likely to be initiated by drivers with greater functional impairment, and therefore, it is possible that both groups may be able to accurately assess their functional capacities. However, driving self-regulation may not support both mobility and increased safety in all driving environments. Sometimes drivers are presented with hazardous situations that require an immediate response, in these situations self-restricted older drivers may be at greater risk because of reduced awareness of the accuracy of their responses to stimuli perceived in their field of view.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Barriers to repeated assessment of verbal learning and memory: A comparison of ISLT and RAVLT on build-up of proactive interference**

*Shahin Rahimi-Golkhandan (RMIT University), Peter Wilson (RMIT University), Paul Maruff (Cogstate) and David Darby (Cogstate)*

Repeated neuropsychological assessment has become a common practice in recent years. However, most conventional tests are designed to assess cognitive impairment on a single occasion, and do not necessarily have ideal properties for frequent repeated assessments. Tests of verbal learning and memory are not exempt from such limitations. A major problematic issue, capable of confounding interpretation of performance, is proactive interference (PI) which refers to the deleterious effect of prior learning on the memory for new information. Lowered recall over successive trials and intrusion of words from earlier lists are the main measures of PI. PI seems to depend on characteristics of the words on a test. A recently developed verbal learning test, known as the International Shopping List Task (ISLT), outperforms other tests of verbal memory in that it provides sufficient alternate forms and is applicable to different cultures. However, it was not yet clear how it differed to other tests in terms of PI effects. Therefore, this study aimed to compare the build-up of PI under conditions of repeated testing with a conventional (Rey Auditory Verbal Learning Test, RAVLT) and a novel verbal memory test (ISLT). Given the differences between type of items on these tests, and associated learning strategies, it was hypothesised that repeated administration of the ISLT would result in significantly less PI than repeated administration of the RAVLT. The sample consisted of 61 (50 females, 11 males) adults aged between 18 and 40 years. Both tests were administered to all participants. Each test had three parallel forms, and each form was recalled three times. The analysis of correct recall indicated that significant PI effects were observed for the RAVLT, only. Minimal intrusion errors for both tests was attributed to use of a sample of high functioning young adults, as well as the response format. The low diversity (i.e., intra-individual variability) of young adults in task performance, enabled this study to argue that the type of items on a verbal learning test influences PI effects. It was concluded that vulnerability to PI across different verbal learning tests should not be a characterising feature of different populations.



# 46<sup>th</sup> APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Beacon: A database of online applications for mental and physical health**

*Kristen Murray, Alison Calear, C. Moller, L. Farrar, H. Christensen, K. Griffiths, K. Bennett and A. Bennett  
(Centre for Mental Health Research)*

The internet is an innovative and effective medium for providing mental and physical health interventions. Given the rise in available e-health applications, it is important the community has access to information about their efficacy. Beacon is a free web portal listing and evaluating online applications for mental and physical health disorders. 169 websites in 34 categories (27 specific to mental health and psychosocial support) have been rated on a 7-point scale (-1 to 5) based on the level of scientific evidence assessing their efficacy. At present, 41 sites have been rated as having weak supporting evidence (score=1), 38 some evidence (2), 6 good evidence (3), 4 very strong evidence (4), 1 site with excellent evidence (5), 79 sites no research evidence (0) and no site has been rated as ineffective (-1). Beacon also allows users to provide feedback and ratings on sites they have visited. Analysis of user data in February 2011 revealed that 1,456 people (501 male, 955 female) from 58 countries have registered for Beacon, with 19.8% of users from rural or remote areas. 1.4% were aged below 16 years, 13.9% aged 16-25 years, 61.5% aged 26-50 years, and 23.3% aged over 50 years. 28.1% of users reported looking for information for themselves, 7.2% reported seeking help for others, 38.4% identified as health professionals, 18.8% as researchers and 7.5% as college/university students. Analyses of mental health symptoms revealed that those seeking information for themselves showed significantly elevated scores on the Goldberg Anxiety Scale ( $M = 6.38$ ,  $SD = 2.22$ ) and the Goldberg Depression Scale ( $M = 5.99$ ,  $SD = 2.15$ ) compared to the other groups of users. 32.2% of users endorsed a measure assessing social anxiety, and few have provided feedback or ratings of the sites on Beacon. The Beacon database provides information about the efficacy of web-based mental and physical health programs to the community. Results indicate a greater need for user engagement and consumer ratings.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Blinded by the self? Narcissism and emotional sensitivity: Facial Affect Processing in the overt and covert narcissistic subtypes**

*Matthew Blake, M. Jovev, H. Jackson, C. Hulbert, L. Zugno, K. Hoey and J. Boldero (University of Melbourne)*

Recently, social and personality psychologists have argued that narcissism should be reconceptualised as a dimensional phenomenon with two subtypes - overt and covert narcissism. If overt narcissism is characterised by an underlying emotional insensitivity, individuals with these traits would be expected to identify emotional expressions at later stages of expression (i.e., at higher thresholds of facial expressivity). Conversely, if covert narcissism is characterised by an underlying emotional sensitivity, individuals with these traits would be expected to identify emotional expressions at earlier stages of expression (i.e., at lower thresholds of facial expressivity). One hundred and thirty two undergraduates (with a mean age of 19.39 years) completed self-report inventories of overt and covert narcissism, along with a measure of emotional sensitivity - the Facial Morph Task. In this task, faces morph from neutral to each of six basic emotional expressions. High overt narcissism did not predict insensitivity to any of the six facial expressions of emotion, and high covert narcissism did not predict sensitivity to any of the six facial expressions of emotion. Therefore, overt and covert narcissism traits may not be associated with underlying deficits or enhancements in emotion perception. Rather, any differences in sensitivity between the subtypes may reflect motivational biases to disregard (overt narcissism) or avoid (covert narcissism) the feelings of others, or may only be apparent in individuals with clinical levels of narcissism.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Cognitive, behaviour and emotion processing changes in amyotrophic lateral sclerosis (ALS) patients and their impact on caregivers**

*Michelle Schilders, A. Pavlis (Victoria University), R. Lichter (Calvary Health Care Bethlehem), M. Staios (LaTrobe University) and F. Fisher (Calvary Health Care Bethlehem)*

Motor neuron disease (MND) including its most prevalent clinical variant amyotrophic lateral sclerosis (ALS) is now widely accepted to be a multisystem disorder where pathological changes extend beyond the motor cortex. There is emerging evidence that frontal and / or temporal lobe atrophy also occurs in ALS patients, which manifests as a range of cognitive, behaviour and emotion processing changes characteristic of the behavioural variant of frontotemporal dementia (bvFTD). The precise nature and prevalence of these changes remains controversial. It is well recognised that functional impairment resulting from ALS can impact on caregiver burden; however, limited research has assessed the impact of FTD-like symptomatology in ALS patients on caregivers. Evidence of increased burden and feelings of incompetence have been reported in caregivers of FTD patients, highlighting the importance and need to assess the impact of FTD-like symptomatology in ALS caregivers. The current study aimed to investigate whether persons with ALS exhibit cognitive, behavioural and emotion processing deficits characteristic of bvFTD. A second aim was to identify whether the bvFTD-like symptomatology in addition to functional impairment contribute to care-giver burden. Forty-one ALS / caregiver dyads, 28 controls and 27 informants participated in the study. Analysis of cognitive, behaviour and emotion processing variables demonstrated numerous significant differences between the ALS and control groups. The ALS cognitive profile was characterised by verbal fluency and language impairments, with questionable attention / orientation deficits and mainly preserved memory and visuospatial skills. Apathy, disinhibition and alterations in mood, sleep, everyday skills and self care characterised the behaviour profile. The ALS group also demonstrated significant emotion processing deficits. The results indicated that behavioural disturbances and emotion processing deficits may be more sensitive indicators of FTD-like symptomatology in ALS patients than cognitive impairment. Furthermore behaviour disturbances (including alterations in motivation, eating habits, memory / orientation, mood, beliefs, everyday activities, self care, sleep, abnormal and stereotypic behaviours) were found to be

significantly correlated with increased caregiver burden. In contrast greater cognitive, emotion processing and functional impairments in ALS patients were not found to be associated with higher levels of caregiver burden.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Correlates of depressive symptoms in fathers pre- and post birth: A systematic review and future research directions**

*Kim Yiong Wee, Helen Skoutersis, C. Pier, B. Richardson and J. Milgrom (Deakin University)*

The aims of this presentation are twofold: (1) to present the findings of a systematic review of studies that have focused on paternal depression pre- and post birth; and (2) to describe a project that is currently underway that aims to explore and identify factors that predict men's depression during these periods. Findings from 30 reviewed papers suggest that the most common correlate of depressive symptoms pre- and post birth was having a partner with elevated depressive symptoms or depression. The studies to date have several methodological limitations including small sample sizes; the use of cross-sectional designs; varied measures of depression; a focus on depression in the postpartum only; and in the few longitudinal gestational studies, the inclusion of only one assessment point in the postpartum. Furthermore, the association between coping and depression has been over-looked. Researchers have previously identified pregnancy and the postpartum as a stressful time for men, yet little research has focused on how fathers cope and adapt to these circumstances. This is surprising given that coping responses or strategies have been shown to be the best long-term predictor of psychological outcomes in men pre- and post birth. Therefore, to test the relationships between proposed risk factors and to address some of the limitations stated above, our current research project is recruiting fathers-to-be and their partners. The study tracks the couple from mid-pregnancy (18-20 weeks gestation) to 12 months post birth. There are seven data collection time points: 18, 25, 33 weeks gestation and 6 weeks, 12 weeks, 6 months and 12 months postpartum. The predictor variables include: neuroticism; history of depression; ante- and postnatal anxiety, psychopathology; antenatal affect; sleep quality; maternal anxiety/ depression; marital quality; social support; emotional support; life events; parenting stress and skills; and infant's health, development and temperament. The findings of this study are expected to help identify factors of paternal depression pre- and post birth which is currently an area in which research is lacking. Also new intervention programs targeting paternal depression pre- and post birth may be a result of this research.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Deep brain stimulation mechanisms in treatment-resistant depression: Modulation of transient dopamine neurotransmission**

*Rodney Anderson (Deakin University), Kendall Lee (Mayo Clinic, MN USA), Helen Mayberg (Emory University School of Medicine Atlanta GA USA), Mark Frye (Deakin University), Charles Blaha (University of Memphis TN USA), Paul Garris (Illinois State University IL USA) and Susannah Tye (Deakin University and Mayo Clinic, MN USA)*

Introduction. Following the success of deep brain stimulation (DBS) for individuals with movement disorders, trials for treatment-resistant neuropsychiatric indications, including treatment-resistant depression (TRD) have recently been undertaken. The DBS trials for TRD have demonstrated the efficacy of the treatment with a large percentage of patients showing a sustained recovery from a severely debilitating form of depression. One of the mechanisms underlying these therapeutic effects may be modulation of the mesolimbic dopamine system which has been implicated in the neuropathophysiology of TRD. Aim. The aim of the current study was to elucidate the effects of DBS on transient dopamine neurotransmission in the mesolimbic dopamine system. Procedure. Using fast-scan cyclic voltammetry, transient dopamine neurotransmission in the core of the nucleus accumbens (NAcC) was assessed during 90 minutes of clinically-effective high frequency and clinically-ineffective low frequency DBS of the infralimbic cortex in urethane-anaesthetised male Sprague Dawley rats. The effects of high frequency DBS on NAcC dopamine neurotransmission were also assessed in an animal model of antidepressant treatment-resistance. Results. High frequency DBS of the infralimbic cortex of healthy Sprague Dawley rats was found to attenuate dopamine efflux in the NAcC, whereas low frequency stimulation was found to have a negligible effect. Attenuations of transient dopamine efflux induced by high frequency DBS were maintained a minimum of 2 hours post-DBS, indicating a form of synaptic plasticity had been induced. Conversely, infralimbic high frequency DBS potentiated dopamine efflux in our animal model of treatment resistance. This potentiated response rapidly returned to baseline levels on cessation of DBS. Conclusions. The results suggest that one of the mechanisms by which DBS exerts its therapeutic effects in TRD is in the modulation of dopamine neurotransmission in the mesolimbic pathway, possibly restoring balance to dysfunctional cortical and limbic drive through the NAcC. The results also suggest that alterations in neuroplasticity in the mesolimbic dopamine system may be one of the processes involved in antidepressant treatment-resistance. There is a clear need to

develop appropriate animal models of antidepressant treatment-resistance to assess the efficacy of novel therapeutics for severe forms of neuropsychiatric illness.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Dietary Omega 3 Fatty Acid requirements following minor Traumatic Brain Injury (TBI)**

*Jacques Duff (Behavioural Neurotherapy Clinic)*

Psychologists are often faced with clients who presents with a range of symptoms including mood disorders, seizures, attention deficits, dizziness and chronic headaches. Some of these patients may have been involved in accidents resulting in minor TBIs, with or without loss of consciousness and psychologists need to probe their clients for a history of TBIs and be aware of the need for a biological intervention. Abnormal profiles of polyunsaturated fatty acids in the plasma phospholipids have been observed in patients with such closed head injuries, indicating that the metabolic response to injury encompasses changes in the metabolism of polyunsaturated fatty acids which are rapid in onset and qualitatively similar to those seen in Essential Fatty Acid deficiency. Following a brain injury, there is a rapid accumulation of free arachidonic acid (AA) and docosahexaenoic acid (DHA) in CSF, released from membrane phospholipids. Although both of these fatty acids are derived from dietary essential fatty acids, only DHA is concentrated in phospholipids of cells of the brain, retina and olfactory bulb. DHA accounts for 25% of the phospholipids in grey matter and Synaptic membranes and photoreceptors share the highest content of DHA of all cell membranes. Given that DHA is primarily involved in the trafficking of neurotransmitters in synapses, and is largely responsible for the synthesis, transport and release of neurotransmitters in synapses. DHA has been shown to be involved in memory formation, excitable membrane function, photoreceptor cell biogenesis and function, and neuronal signaling, and has been implicated in neuroprotection. Many of the membranes that contain significant amounts of G-protein-coupled activity, such as neuronal and retinal tissues and the olfactory bulb, contain high levels of DHA. DHA deficiency leads to the replacement of 22:6n-3 phospholipid acyl chains with 22:5n-6 acyl chains in these membranes, leading to dysfunction. The functional significance of DHA deficiency in animal studies has been amply demonstrated by impaired visual response, learning and attention deficits and mood disorders. Neuroprotectin D1, (NPD1) is infused during ischemia-reperfusion and inhibits oxidative stress-induced brain damage. NPD1 also inhibits the expression of COX-2 enzyme, reducing inflammation and further resultant brain damage. NPD1 bioactivity demonstrates that DHA is not only a target of lipid peroxidation, but rather is the precursor to a neuroprotective signaling

response to ischemia-reperfusion, thus opening newer avenues of therapeutic exploration in stroke, neurotrauma, spinal cord injury, and neurodegenerative diseases. Mood disorders, learning difficulties and attention Deficits and other neurodegenerative damage following TBI are ameliorated by supplementation with the Omega 3 fatty acids, EPA and DHA, from fish oil. Consequently it makes sense to aggressively treat patients with TBIs as soon as possible with fish oils and associated nutrient cofactors.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Do past relationships influence present perceptions: Transference from a social-cognitive perspective**

*Wesley Tan (Macquarie University)*

The present study examined a small but intriguing body of research by Andersen and colleagues into the psychoanalytic concept of transference (Freud, 1912/1958; Sullivan, 1953) from a social-cognitive perspective. In a much cited (but little replicated) first empirical demonstration of transference, Andersen and Cole (1990) demonstrated that mental representations of significant others are stored in memory and can be activated and applied to new people encountered in social interactions, biasing inferences and memory. In an experimental paradigm, descriptions participants generated were used to create target profiles which they had to learn. Through subsequent memory tests, it was discovered that participants were more likely to infer characteristics about a target resembling their significant other than a stereotype. The first aim of the present study was to be the first non-American study to replicate Andersen and Cole's (1990) findings in a sample of 98 university-recruited and online-recruited young female participants by using a specially designed computer program, which required small changes to the original paradigm. Recent research has applied this paradigm to investigating the continuation of patterns of adult attachment across time and context (Brumbaugh & Fraley, 2007). The second aim of the current study investigated whether individual differences in attachment style influenced the degree to which memory inferences occurred. Hypotheses arising from both aims were not supported. It seems possible that those small, necessary changes implemented had significant impact on the results. These findings are discussed with reference to possible methodological and theoretical factors which influenced these results, providing greater insight into the operation of the paradigm and directions for further research connecting psychoanalytic, attachment and social-cognitive theories.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Effects of electronic media use on children's behaviour: Website survey for mothers**

*Mari Hasegawa (Yokohama-City University)*

Children in the modern era are exposed to electronic media such as TV and video games for many hours. Does contact with electronic media affect children's pro-social behavior or anti-social behavior? In this research, we conducted a two-wave panel study targeting mothers who have elementary school children in order to consider whether media contact affects children's behavior. We also examine the differences in media influences by socio economic status. Research subjects were 2,406 mothers who have elementary school children. We asked for candidates from the registrants of an Internet research company. The subjects participated in 2 website surveys of the identical questions. The first survey was conducted in March 2009, and the second survey in May 2009. We measured the length of time a child was exposed to TV, video games, mobile phone and computer as media contact (weekday and holiday), type of involvement of the parent and child during media contact (e.g., "There is a limitation at the television watching time", "My child watches television alone"), the parent's feeling towards media (e.g., "It is possible to become happy easily", "It is possible to be impressed"), household's annual income, and children's SDQ (Strength and Difficult Questionnaire, Goodman, 1998). As a result, the group with high annual income had high pro-social scores and low difficulty scores. Mothers of higher income group tended to control the child's media use, and were involved in media together. Then, as we conducted a pass analysis on annual income, children's SDQ-scores (difficulty scores and pro-social scores) and media contact condition, annual income influenced the type of media contact, and type of media contact influenced children's SDQ-scores (each difficulty scores and pro-social scores). It was indicated that SDQ-scores related types of involvement of the parent and child during media contact, the parent's feeling towards media, and household's annual income. The result of this study also showed that annual income influenced the type of media contact, and type of media contact influenced children's anti-social behavior and pro-social behavior.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Embodied meaning in offline and online cognition: Using the ‘heal’ concept to enhance the placebo effect**

*Nuwan Leitan and G. Murray (Swinburne University)*

There are a number of common elements in the human experience of ‘healing’; one of these being the ‘up’ bodily state. People generally display an ‘up’ bodily state when healed, both physically and psychologically, and a ‘down’ bodily state when they are in pain or when depressed. According to theories of ‘embodied cognition’ the meanings we attribute to concepts are constituted of these sensory and motor states which are represented modally in the brain. Thus, according to embodied cognition, the meaning of the heal concept is partially represented by the up bodily state. Embodied cognition theories postulate that when retrieving a concept, the stored modal states in the brain are re-enacted (i.e. the up bodily state when retrieving the heal concept). This process is called ‘simulation’. Simulation is also thought to be further enhanced by being in physically congruent states to those which are to be simulated (i.e. being in a physically up bodily state whilst recalling the heal concept). The aim of the present study is to examine whether access to the heal concept is enhanced by simulating the up bodily state and to examine whether this is augmented by being in a physically up bodily state. The study consists of two tasks; a priming task, which examines whether access to the heal concept is enhanced by simulating/physically being in an up bodily state when healing is not dynamically occurring (offline), and a pain perception task, which examines whether healing is actively enhanced by simulating/physically being in an up bodily state (online). Preliminary results have demonstrated a trend towards enhanced access to the heal concept when simulating/physically being in an up bodily state both offline and online. If full analysis follows suit, these results have important implications for the enhancement of the placebo effect via bodily manipulations and more generally for the enhancement of learning techniques.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Emotion lateralisation and affective appraisal of music: The influence of language on pleasantness and response time**

*Helena Pacitti (James Cook University)*

Humans are not symmetrical. Asymmetries are observed in differences in everything from the size of a person's feet through to hand preferences for motor tasks. Neurological processing asymmetries are also apparent. In neuroscience, strong agreement exists for the left-hemisphere's specialisation for language processing, whereas hemispheric specialisation for emotional processing is controversial. This study investigated the influence of language and hemispheric asymmetries in appraising music. Monolingual English speakers ( $N=40$ ) were presented music clips, with native or foreign lyrics and instrumentals, to the listener's left or right ear and asked to indicate how pleasant they found the clip. Music was appraised as more unpleasant when presented to the left ear and instrumental music was more pleasant than music with native and foreign lyrics. Response times were faster for music with native lyrics compared to instrumentals. These results indicate neurological asymmetries for appraising positive and negative emotions and underscore the influence of language since stimuli with native lyrics were appraised as more unpleasant and were appraised faster than instrumentals. The research supports predictions of the Valence Model for pleasantness appraisals and highlights the importance of controlling language in studies of hemispheric specialisation.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Examining the relationship between media exposure, motivation, materialism and psychological wellbeing**

*Brad Elphinstone (Swinburne University)*

The aim of the study was to explore the relationship between media usage and materialism, and subsequent psychological wellbeing. Participants ( $N = 340$ ) completed an online questionnaire exploring media use, motivation, attitudes towards materialism, and wellbeing. Materialism was conceptualised in two ways; terminal materialism (the acquisition of material goods is the most important goal in life) and instrumental materialism (material goods are tools or resources used to achieve personal goals). Wellbeing was conceptualised from an organismic perspective as the satisfaction of innate, evolved human needs. Corroborating with existing research, a preference for extrinsic motivation (i.e., being motivated by money and material goods) was associated with greater levels of materialism than intrinsic motivation (i.e., striving for personal growth, affiliation with others etc). Furthermore, higher levels of materialism were significantly associated with lower wellbeing. Results also indicated that online and commercial media use were significantly associated with extrinsic motivation. Age however, explained more variance in extrinsic motivation than either form of media exposure and also predicted media use. Thus, the observed relationships may be correlational rather than causative. In accordance with contemporary media theories, it was concluded that media alone is unlikely to cultivate extrinsic motivation and materialism. Individuals who are already extrinsically motivated may be drawn to media which communicate ideologies congruent with existing beliefs.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Exploring the utility of comments from employee opinion surveys in developing organisation-specific questionnaires**

*Hong Eng Goh, S. Olliver and S. Silvonen (University of Southern Queensland)*

An employee opinion survey (EOS) is intended to provide employees with a safe space to express their views of the workplace and allows an upward communication to management. Hence, employees have expectations of positive change as a result of being surveyed. If this does not occur due to inadequate survey design leading to inadequate interpretation of results, employees are likely to judge that management has not listened, with consequences that are beyond discouragement from future participation in surveys. It may breed ambivalence or even mistrust in management. Inherent within a high quality EOS is its ability to provide organisational insights. The characteristics of high quality EOSs as identified by Cotton involve constructs which: (a) are relevant to issues of concern; (b) have strong reliability and validity; (c) are based on a recognised, evidence-based model; and (d) have good face validity. The challenge, therefore, is in developing surveys that incorporate all four characteristics. Survey participants are frequently asked to provide comments in a survey. The space given to participants for comments is a way of capturing neglected issues that employees feel strongly about. Comments are elicited from employees in opinion surveys, however, comments as a valuable source of data for developing organisation-specific inventories has yet to be explored. This study examined the utility of comments from an organisational survey in developing organisation-specific inventories, which are relevant for internal benchmarking and action plans. One hundred items were written from thematic categorising of comments obtained from an organisation employee opinion survey. Responses were obtained from 512 participants in a pilot study. An exploratory factor analysis using principal component extraction method and parallel analysis revealed a four component solution, namely, (a) horizontal and vertical communication, (b) competencies of managers, (c) practices of upper management, and (d) opportunities to train and be trained. Results indicated that the components were internally consistent, measuring concepts currently not measured by the generic survey. As the inventories are organisation-specific, their use may be limited to the organisation, and due to the exploratory nature of this pilot project, validation is necessary.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Expressed emotion and its relationship to anxiety and depression after Traumatic Brain Injury**

*Yvette Always, Adam McKay, Jennie Ponsford and Michael Schonberger (Department of Psychology, Monash University)*

Background and aims: Five decades of research suggests that relatives' levels of Expressed Emotion are associated with a patient's psychological outcome in a range of psychiatric and medical conditions. Expressed Emotion (EE) refers to the degree of criticism and emotional over-involvement (EOI) a relative expresses toward a patient with an illness or disability. This study aimed to examine the relationship between relative EE and patient anxiety and depression following TBI. A further aim was to examine the degree to which TBI patients perceived their relatives as critical and how this related to patient anxiety and depression. Method: Participants were 43 patients from the Epworth Rehabilitation Centre who had sustained a mild to severe TBI three-months to five-years previously, and their corresponding relatives. Measures included the Perceived Criticism Scale, Family Questionnaire and the Hospital Anxiety and Depression Scale. Results: Results indicated that relatives' EE-criticism and EE-EOI were associated with patients' depression levels and EE-criticism was associated with patients' anxiety. Patients' perceived criticism from relatives was associated with patients' anxiety and depression levels, and also relatives' ratings of EE-criticism. Discussion and conclusions: Relatives' EE appears to be associated with TBI patient anxiety and depression in keeping with findings in other psychiatric and medical conditions. Consequently, interventions aiming to reduce levels of relative EE and to foster more effective ways in which the relative and the person with TBI interact, may be effective in reducing the impact of anxiety and depression following TBI. However, future research with a prospective design is required to determine directionality.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Factor structure of Japanese tryout edition of KABC-II**

*Tamaki Hattori (University of Tsukuba), K. Fujita (Kibi International University), T. Ishikuma (University of Tsukuba), S. Aoyama (Hokkaido University of Education), K. Kumagai (University of Tsukuba) and J. Ono (Hosei University)*

The Kaufman Assessment Battery for Children, Second Edition (KABC-II), which is revised edition of the K-ABC, is an individually administered measure of the cognitive abilities and mental processing of children and adolescents. The KABC-II included 18 subtests which are theoretically grounded in the Cattell-Horn-Carroll (CHC) psychometric model of broad cognitive abilities and Luria's neuropsychological model. The 18 subtests were as follows: Atlantis, Conceptual Thinking, Face Recognition, Story Completion, Number Recall, Gestalt Closure, Rover, Atlantis Delayed, Expressive Vocabulary, Verbal Knowledge, Rebus, Triangles, Block Counting, Word Order, Pattern Reasoning, Hand Movements, Rebus Delayed and Riddles. The Japanese tryout edition of the KABC-II was administered in 2006 and 2007 to 534 children aged 3 to 18 around the country. The tryout data was analyzed from the perspective of item difficulties, item discrimination and factor structures of 18 subtests. Confirmatory factor analytic (CFA) methods based on the structural equation modeling with the sample data using covariance matrix with the maximum likelihood (ML) estimation procedure were used to confirm the content of factor structure of that tryout edition. CFA models were evaluated separately for different age groups. At age 3 and 4, confirmatory factor analyses supported the existence of distinct and well-measured factors of Knowledge/Gc, Simultaneous/Gv, Learning/Glr and Sequential/Gsm. At age 5 to 18, analyses supported the existence of distinct and well-measured factors of Knowledge/Gc, Planning/Gf, Simultaneous/Gv, Learning/Glr and Sequential/Gsm. However, the analyses indicated that the Gestalt Closure, which had been expected to measure Simultaneous/Gv, was a stronger measure of Knowledge/Gc at age 3 to 6. After these tryout data analyses, it was planned to develop the Japanese edition of KABC-II suitable for Japanese children and adolescents.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Forensic implications of reported crime and anti-social behaviour amongst employees in Australia's major mining companies**

*Mark England*

This paper explores the negative psycho-social impact of Australia's major listed mining companies on the communities in which they operate, the dynamics involved and means to counteract these forces for more positive outcomes. Australia's major mining companies stand comparable with any in the world in terms of revenue size. They have global reach and exert considerable political influence. An examination of published data associated with major Australian mining companies indicates that their presence in isolated communities results in higher levels of crime and anti-social behaviour than the general communities in which they operate. The evidence and possible reasons for this are explored with a view to proposing corrective actions.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Further definition of the social-emotional profile of Autism Spectrum Disorders using a Novel Comic Strip Task**

*Carmel Sivaratnam, K. Gray and M. Rhinehart (Monash University), P. Howlin (King's College) and K. Cornish (Monash University)*

The Theory of Mind hypothesis posits that focal to the social deficits seen in Autism Spectrum Disorders (ASD) is the inability of individuals to infer, understand and predict the beliefs, intentions, emotions of themselves and others. This study investigated whether the novel Comic Strip Task (CST) could be used to detect Theory-of-Mind impairments in normally intelligent 4 to 8-year-old children with ASD. The measurement of Theory of Mind involved assessing the understanding of beliefs, intentions and emotions. Twelve children with either high-functioning autism or Asperger's Disorder and 12 typically-developing children completed the 21-item measure. Although the overall CST demonstrated moderate internal consistency, the Belief-understanding subscale was excluded from the test due to poor reliability. Consistent with predictions, the ASD group performed significantly worse than controls on the overall 2-subscale CST and on the Intention-understanding subscale. No group differences were found in Emotion-understanding subscale performance. Verbal ability positively correlated with overall CST performance across groups when controlling for age. CST performance in the ASD group positively correlated with age and parent-reports of emotional and behavioural problems. Despite some limitations with the belief-understanding subscale, the CST has promising psychometric features for further development as a clinical assessment tool for normally intelligent children with suspected ASD.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Giving guilt the flick: An investigation of 'guilt-free' morality for mothers in infant feeding discussions**

*Kate Williams, Ngaire Donoghue and Timothy Kurz*

Recently, in their construction of the issue of infant feeding, Australian childcare materials have attended to the possible implications of pro-breastfeeding discourses for mothers' subjective experiences, particularly the issue of guilt. The present study employs Foucauldian Discourse Analysis to analyse the ways in which mothers construct the issue of infant-feeding and related subjective experiences in focus group discussions. In particular, we focus on the ways the mothers draw upon notions of 'guilt', 'choice' and 'emotional self-control' to attend to the possibility of moral judgement over their infant feeding practices. We highlight a construction of choice that dramatically restricts permissible 'valid' reasons for making such a choice, a construction that guilt is a natural and appropriate response for 'good' mothers who *cannot* breastfeed, and a focus on formula-feeding mothers controlling their emotions and not *'feeling'* guilty rather than assertions that formula-feeding mothers *are not* guilty. We argue that the tensions and contradictions arising from such constructions make being 'guilt-free' an unstable position requiring constant attention and renegotiation. The findings indicate that the instruction to not 'feel guilty' does not change the discursive framework of constrained choice that serves as a moral directive for good mothering.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Induced and trait rumination and cognitive performance**

*Jay Brinker and Mel Campisi (Australian National University)*

Rumination has been implicated in cognitive impairments in depressed mood. Research suggests that rumination exacerbates performance decrements if task demands are low by allowing intrusive thoughts to consume cognitive resources. The current experiment examined how trait and induced rumination affect cognitive processes at varying levels of cognitive load. Undergraduate participants completed a measure of trait rumination followed by either a rumination or distraction induction. They then completed a continuous performance task (CPT) with varying blocks of cognitive load and reported on the frequency of off task thoughts. Trait rumination predicted errors of attention (but not inhibition) when cognitive load was high, or low, but not at a medium level. Trait rumination also interacted with cognitive load to predict reaction time, high ruminators showing slower reaction time than low ruminators. Induced rumination did not appear to influence cognitive performance. Trait rumination predicted the frequency of reported general off task thoughts while induced rumination did not. The differential outcomes for trait and induced rumination raise questions about this methodology. Limitations and directions for future research are discussed.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Integrating absolute pitch and absolute identification**

*Babette Rae (University of Newcastle)*

Absolute Identification tasks require participants to identify stimuli that vary only on one physical dimension such as tones of varying pitch. Similarly, absolute pitch is the ability to identify and label individual musical notes in isolation. Accuracy of pitch identification is much higher in tests of absolute pitch, typically using piano tones, than absolute identification pitch tasks, typically using pure tones. Three explanations are considered for this discrepancy: methodological discrepancies, the psychological representation of pitch, and the effect of practice. In Experiment 1, musically trained participants completed a pitch identification task with piano notes and pure tones, and a similarity rating task with the same stimuli. In Experiment 2, six participants completed 10 practice sessions of identifying pure tones. Results showed that absolute pitch is not an all-or-none ability, that a multi-dimensional stimulus representation is correlated with more accurate pitch identification, and extended findings that higher initial accuracy of pitch identification correlates with the learning of pure tones. The findings from the current study extend knowledge on the learning of absolute identification of uni-dimensional stimuli, and also provide support for absolute pitch being a learned ability, which has implications for musical education.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Leadership in Australia: Exploring the lived experiences of current Australian organisational leaders**

*Jien Wei Quek (University of South Australia)*

While the need to better understand cultural influences on leadership has never been greater, the nature of Australian leadership is under-researched. Moreover, most leadership studies have used a quantitative methodology that does not address leaders' insights into the practice of effective leadership. The present study attempted to address the gap in the literature by exploring the lived experiences of current Australian leaders. Drawing on a qualitative phenomenological methodology, 10 leaders from various South Australian organisations were interviewed. Thematic analysis revealed four dominant themes of effective leadership: people commitment, task commitment, emotional intelligence and situational leadership. Participants' lived experiences revolved around access to resources, being led by superiors, peer-to-peer learning and personal leading. Although the findings overlap significantly with the prevailing leadership theories, certain qualities emphasised by participants reflect Australian highly egalitarian culture. This study has extended existing knowledge on effective leadership in Australia, which has implications for both academic researchers and current leaders.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Mental health professional and consumer understandings, use and experiences of mindfulness**

*Debra Harris and J. Brinker (Australian National University)*

Mindfulness training has rapidly gained attention in psychological literature and practice over the past decade, and the expanding evidence base indicates that mindfulness interventions may be useful for a variety of psychological issues. Confusion may surround mindfulness as it is utilised in many forms, and theory and conceptualisations of mindfulness in the academic and popular literature emphasise diverse components and mechanisms of action. Little is known about mental health professionals' and consumers' knowledge and understandings of mindfulness, or the professional and personal patterns of usage and experiences of using mindfulness of these two groups. Such information has important implications for the safe and efficacious use of mindfulness in practice. To explore these issues, an online questionnaire was used to survey 88 professionals (predominantly psychologists) and 98 consumers of individual therapy or mindfulness groups, recruited from across Australia. Quantitative and qualitative data combined were analysed using frequency and content analysis. Findings indicate wide variability in professionals' and consumers' understandings of mindfulness and its mechanisms of action, with a range of sources of information and training drawn upon. Overall, mindfulness is predominantly used with and deemed most helpful for stress, anxiety and depression, as well as grief, pain, addiction, and sleep problems. Professionals using mindfulness in their work come from a diverse range of theoretical backgrounds, and most frequently use mindfulness with middle aged and younger adults and less often with males compared with females. Nearly all professionals reported using some form of mindfulness in their personal lives, and reported fewer symptom reduction-based goals in comparison to consumers. Both groups indicated a desire to increase their mindfulness practice, especially formal meditation. About one third of professionals reported negative or detrimental consumer reactions to mindfulness (e.g., refusal, scepticism, increased anxiety and distress, worsened mood, dissociation). Results show the need for future research exploring the potential impact of varied understandings of mindfulness on intervention outcomes. Implications for professionals using mindfulness in their work are also discussed.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Mental illness stigma and contact among potential mental health professionals**

*Josephine Larkings (University of Canberra)*

Mental health in Australia is an important issue with almost one in five Australians suffering from a mental illness. The negative stigma associated with mental illness can considerably undermine the quality of life for sufferers of a mental illness, and can have many negative consequences.

Unfortunately, health professionals working with the mentally ill can also exhibit stigma. This may not only perpetuate mental illness stigma but it can also have adverse effects on treatment. Although contact with people with a mental illness is thought to provide the best chance of changing prejudicial attitudes, mental health professionals, who presumably have ample contact with people with a mental illness, still exhibit stigma. Therefore, this study aims to gain a greater insight into mental illness stigma through examining stigma among psychology students (potential mental health professionals). In particular, this study will explore the role that education, contact, and causal explanations of mental illness have on stigma among potential mental health professionals, with the hope of understanding more about mental illness stigma in this group. Participants included psychology students enrolled in undergraduate and post graduate psychology units at the University of Canberra. Participants voluntarily completed a questionnaire measuring attitudes towards people with a mental illness, which took approximately 15 minutes to complete. Results indicated that contact, education, and causal explanations had an impact of mental illness stigma among potential mental health professionals. Understanding the role that education, contact, and causal explanations have on mental illness stigma among potential mental health professionals is an important step in improving the services that are provided to consumers of mental health services. Future research would benefit from exploring methods of reducing stigma among health care professionals.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**MO-Index, a transformed score to present and compare results of Likert response format scales**

*Hong Eng Goh (University of Southern Queensland)*

Evaluation of employees' opinions about work-related issues is commonly practised in organisations. Regardless of whether the surveys are conducted on a large-scale, e.g., organisation wide, or on a small-scale, e.g., work area, the mainstay is to develop initiatives to address challenges and build on achievements so as to benefit both the employees and the organisation. With resources invested in action plans to address problematic areas, organisations look for meaningful interpretation and maximum information from surveys, using follow-up surveys to facilitate better informed decision-making by management. The main focus of this paper was to address how best to accurately communicate results and assess change in scores. The Likert response format (e.g., 5-point ranging from strongly disagree to strongly agree) and summated scales are commonly used in surveys. The coding of Likert responses from the items with sequential integers and then summing them to produce a raw score percentage is widely practised as a means of presenting results and the comparison of scores from different survey cycles to employees and management. However, percentage scores are not interval measurement, which makes comparisons between scores (e.g., from two survey periods or two measures) inaccurate. It is proposed that there is a vast improvement in the interpretability of change scores when organisations adopt the MO-Index, a transformed score. It applies the log of odd ratios of the percentage of cumulative item endorsement to an inventory with a Likert response format to transform scores into an interval scale of logits. The interpretation of logits was made more meaningful and comprehensible to all stakeholders through the linear transformation of logits to a scale of Outcome Units that ranged from +100 to -100.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Mood variability and experiences in relationships**

*Sarah Fraser and G. Murray (Swinburne University)*

A cyclothymic temperament is closely related to bipolar II disorder; therefore, it is critical that we both advance our understanding about the aetiology of this mood manifestation, and draw attention to the potential pathways that may contribute to relationship disturbance in cyclothymic individuals. In this study, a cyclothymic temperament and an anxious attachment profile are implicated as two primary risk factors that may predict reduced relationship quality and psychological well-being in the general population. A core feature that is shared by these two concepts is the inability to effectively regulate emotion. A web-based survey described as 'Mood variability and experiences in close relationships' is currently ongoing. It is anticipated that approximately 500 prospective respondents (aged 21 to 65 years with experience of at least one committed relationship) will volunteer to participate. The survey consists of nine psychometric measures with a total of 194-items. The 17-items in the cyclothymic temperament scale are operationalized in the form of questions that relate to mood lability, variations in sleep, energy, self-esteem and socialization, intensity in emotions and romantic tendencies. The Mood Disorder Questionnaire (MDQ) was administered to eliminate those with a potential Bipolar I disorder. The Hypomanic Personality Scale (HPS) aims to assess sub-affective temperamental tendencies associated with the bipolar spectrum. The Cyclothymic Relationship Scale (CRS) was designed to encapsulate cyclothymic characteristics and relationship disturbance. A shortened version of the General Behaviour Inventory (GBI) was incorporated to assess for mood fluctuations between depressive and hypomanic poles. The Relationship Assessment Scale (RAS) was administered to tap several relationship dimensions (e.g., love, problems and expectations). The Experiences in Close Relationships revised version (ECR-R) is a 36-item measure used to assess adult romantic attachment. Finally, the satisfaction with life scale (SWLS) is a brief five-item measure of global life satisfaction. Structural equation modelling using AMOS will be used to test whether the presence of a cyclothymic temperament and an anxious attachment profile contributes to reduced relationship quality and psychological well-being in the general population.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Problematic alcohol consumption in relation to alexithymia, drinking motives, drinking restraint, parental alcoholism, and reward sensitivity**

*Bonnie Albrecht (CNAPIS, Gold Coast Drug Council)*

Given the high rate of mortality and hospitalisations resulting from Australian alcohol consumption, the following factors were investigated in relation to drinking behaviour: alexithymia, drinking motives, drinking restraint, parental alcoholism, and reward and punishment sensitivity. Participants were 99 young adults (70.7% female) aged 18-30 years ( $M = 22.15$ ) who completed a counterbalanced test battery. Contrary to expectations, overall alexithymia score was not associated with drinking behaviour, however the externalising facet (EOT) was related to drinking;  $r = .25, p = .014$ . Moreover, two of three alexithymia facets weakly predicted drinking behaviour, with EOT differentiating problematic drinkers from low risk drinkers. Alcohol preoccupation (CEP) was the most important predictor of alcohol consumption, and demonstrated the highest specificity in differentiating alcohol related risk. CEP and parental alcoholism were the most important predictors of earlier age of drinking onset. Limitations of the study and future research directions are discussed.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Problem-solving and mental health: A longitudinal investigation into the development of a graduate attribute**

*Logan Harvey (University of Southern Queensland) and Gavin Beccaria (University of Southern Queensland)*

Despite all universities publishing lists of graduate attributes, many of them are poorly defined and inadequately assessed. Problem-solving has been identified as one such attribute. Within the psychological literature Problem Solving Appraisal (PSA) has been shown to strongly relate to problem solving skills. Furthermore, although PSA is not identical to problem solving skills it is much more efficient to measure. Higher education research has found that students with higher levels of PSA are more intrinsically motivated and have fewer mental health concerns. Research has also demonstrated that older students have superior PSA to younger students. It is arguable however that if problem solving is truly a graduate attribute then it should improve over the course of studies. The current study aimed to assess changes in problem-solving within university students. It was hypothesised that changes in problem-solving would occur over time and that these changes would be related to the amount of further study completed. It was further hypothesised that problem-solving would predict future depression and anxiety. A longitudinal design was utilised, drawing on data from a previous study. Data were collected through an online survey on two separate occasions and 29 students participated in the study over an average period of 10 months. PSA was assessed using the Problem-Solving Inventory – Form B (Heppner & Peterson, 1982) and depression and anxiety were assessed using the short form of the Depression, Anxiety and Stress Scales (Lovibond & Lovibond, 1995). No significant changes in problem-solving were identified, and there were similarly no significant relationships between changes in problem-solving and the amount of further study completed. Part-time and full-time students were also not found to differ in terms of changes in problem-solving. There were no relationships identified between Time 1 PSA and Time 2 depression and anxiety. While the small sample size may have contributed to the lack of findings, this was one of the very few studies utilising a longitudinal design in the social problem solving area. It is hoped that this study will initiate further longitudinal research into social problem-solving in university students.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Selected impulsivity facets with alcohol and substance use**

*Angela Curcio (University of Canberra) and Amanda George (University of Canberra)*

Impulsivity has been identified as a risk factor for alcohol and illicit substance use. There are numerous facets of impulsivity (e.g., sensation seeking, positive urgency, and negative urgency). This study sought to determine whether sensation seeking and the urgency traits would differentially predict alcohol use and illicit substance use. Unique drinking motives were expected to mediate the relationships of the personality variables with alcohol use. Respondents to the online survey were 372 university students (74.3% female, 25.1% male; aged  $\leq 18 - 40+$ , 89.6% were current drinkers, and 18.4% had used illicit drugs since the beginning of semester). Results showed that sensation seeking was the strongest predictor of alcohol and illicit substance use, with enhancement motives mediating the relationship with alcohol use. Although broadly related to alcohol and illicit substance use, the urgency traits were not significant predictors of either once sensation seeking and demographic variables were adjusted for. These findings suggest that sensation and the urgency traits are unique constructs and should be considered separately in future research and when designing prevention/intervention strategies.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Silenced: Pregnant women, unsolicited attention, and their self-positioning**

*Whitney Darlaston-Jones (University of Notre Dame, Australia)*

Historically motherhood has been revered as a sacred rite of passage due to its purpose of continuing both the species and the culture of the community in which the child is born. Therefore pregnancy becomes an object of concern for the community. Consequently people can come to see themselves as 'societal supervisors' (Fox, Heffernan, & Nicolson, 2009) who ensure the mother *does* pregnancy the 'right' way and complies with the rules and norms of society. Since the early twentieth century the hospital based medical model has been the dominant pregnancy pathway within Australia. This model is primarily concerned with the health of the foetus, therefore the mother's role is that of the incubator, which can cause women to feel sidelined. Due to the perceived responsibility of the community to ensure the health of the child, family, friends, medical professionals and strangers often engage in unsolicited and unwelcome attentions towards the pregnant woman. Often the impact of these social interactions and societal discourses of motherhood on pregnant women are overlooked or ignored completely. This serves to construct a complex environment in which women may struggle to find a place where they feel empowered as mothers to be. The project reported here, critically analysed how women experience and perceive unsolicited attention and how they positioned themselves within society as a result. Eight women in their second and third trimesters were interviewed with transcripts analysed using a thematic analysis within a critical feminist framework. Results indicate that every woman operated within a social discourse that she felt silenced her views and desires. These women felt they were silenced during pregnancy in regards to having the inability to make genuine choices about their care, free from critique. They also perceived the silence in terms of having the inability and lack of freedom to express their views on unsolicited and unwelcome interactions. Considering the potential repercussions of silencing it is crucial to understand how women negotiate their changing social position from an individual to a pregnant woman who is now considered public property.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Social functioning and quality of life in children with or without cerebral palsy**

*Lindsey Felix, J. Kaufman, J. Vinson, S. Warchausky and Katrina Kwan (University of Michigan)*

Children with cerebral palsy (CP) are at risk for lower social functioning and quality of life (QoL). This study examined associations between social functioning and QoL in children with CP and typically developing peers (TD). 101 children ages 6-12 (41 children with CP (41% GMFCS level 1, 93% spastic, 24% hemiplegic, 68% diplegic, 63% premature birth, 23% positive seizure history) and 60 TD controls). Children with CP had significantly shorter gestation length, lower birthweight, and lower receptive vocabulary,  $p < .001$ . The measures used included: Wechsler Intelligence Scale for Children-Third Edition (Vocabulary), Personality Inventory for Children-Second Edition (social adjustment), Friendship Quality Questionnaire-Revised (positive/negative aspects of friendships), Schedule for Evaluation of Individual Quality of Life (QoL). Children with CP had significantly lower social adjustment and positive aspects of friendships,  $p < .05$ . No group differences were observed in negative aspects of friendships or QoL. Neither social adjustment nor negative aspects of friendships were associated with QoL in either sample. In the CP group, positive aspects of friendships were significantly correlated with QoL,  $p < .05$ . While group differences in QoL are not significant, friendships in children with CP are less positive than in TD peers and this is associated with their QoL. Findings highlight the importance of building positive friendships in children with CP.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Spiritually modified Cognitive Behavioural Therapy: Working with Christian clients**

*Christina Comely (Crows Nest Psychology Practice)*

While Aaron Beck developed Cognitive Behavioural Therapy (CBT) from an evolutionary framework, unlike some other schools of psychology such as Behaviourism, it is not incongruent with a Biblical framework. Many Christian clients have a deep distrust of psychology. If Bible verses and principles they are familiar with can be drawn on in therapy this distrust can be minimized. The Bible frequently mentions cognitive restructuring, dysfunctional schemas and maladaptive core beliefs but uses different terminology. For example, the proverb 'as a man thinks in his heart so is he' encapsulates CBT principles. CBT worksheets can easily be adapted to include 'anchors' – core scriptures to help the shift in belief. Outcome research recognises CBT as arguably the most effective treatment available for anxiety and depression. Incorporating the power of scripture into the daily fight against negative automatic thoughts can make CBT an even more powerful tool to use with Christian clients in the fight against depression and other mental health disorders.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Spontaneous recovery of extinguished fear in maternally-separated preweanling rats**

*Thomas Gates, B.L. Callaghan and R. Richardson (University of New South Wales)*

Recent studies in the rat have shown that two distinct systems mediate extinction learning across development. In addition, it has been suggested that exposure to a potent stressor in early post-natal life accelerates the transition from the immature, NMDA-independent, relapse-resistant extinction system to the “adult”, NMDA-dependent, relapse-prone extinction system (Callaghan & Richardson, 2011). The present study extended upon this latter line of research by examining whether infant rats exposed to early-life stress exhibit spontaneous recovery of extinguished fear (i.e., the fear returns with the passage of time), which would indicate that they had switched to the adult, relapse-prone system. Rats were either subjected to maternal-separation (an early-life stressor) for 3 h per day on post-natal days (P)2-14 or standard rearing practices. On P17, rats from each rearing condition were trained to fear a white-noise CS. Fear (measured by freezing) of the noise was extinguished the following day; both groups showed equal, low levels of fear at the end of extinction. However, maternally-separated rats exhibited more fear than standard-reared rats when tested seven days after extinction (i.e., their fear returned; Experiment 1). In Experiment 2 this result was replicated and it was also shown that a systemic post-extinction injection of the NMDA receptor partial agonist d-cycloserine prevented spontaneous recovery in maternally-separated rats without affecting responding in standard-reared rats, further suggesting that the maternally-separated rats had made the transition to the adult extinction system. These findings provide evidence that adverse early-life experiences fundamentally alter the maturational time-course of extinction learning in the developing rat.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Stigmatising attitudes towards individuals with Anorexia Nervosa: An investigation of Attribution Theory**

*Kristy Zwickert and Elizabeth Reiger (Australian National University)*

Guided by Attribution Theory, this study assessed stigmatizing attitudes towards anorexia nervosa compared to obesity and skin cancer. The study also examined experimentally the extent to which manipulating a target character's level of blameworthiness affects levels of stigmatizing attitudes. One hundred and fifty-two female undergraduate students were randomly assigned to one of the three disorders and received either blameworthy or non-blameworthy information relating to the onset and maintenance of the target's disorder. Participants reported a significantly greater desire for social distance from the target with anorexia nervosa compared to targets with obesity or skin cancer. In addition, within the anorexia nervosa condition, stronger attributions of blame and personal choice for the disorder were significantly correlated with a greater desire for social distance from the target. Finally, there were significant increases in negative emotional reactions and desire for social distance in conditions in which the target was described as blameworthy for the disorder relative to conditions in which the target was described as non-blameworthy. Overall, the findings provide insight into the elevated levels of stigmatizing attitudes held towards individuals with anorexia nervosa and some support for Attribution Theory in accounting for this stigma. Given that stigma may exacerbate eating disordered behavior and act as a barrier to treatment, future research should further elucidate the triggers of stigmatizing attitudes, and examine the degree to which stigma can be ameliorated.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Stress levels among principals and senior executive staff in Catholic primary schools in Queensland**

*Richard Hicks and L. Hand (Bond University)*

The Occupational Stress Inventory-Revised has been used extensively to assess stress among members of organizations; its value is that it allows comparisons using the same questionnaire across different occupational groups as to levels and areas of stress most significant for specific groups. While teachers have been examined (and continually have been found to be stressed through role overload in particular), little work has been done examining the stress levels of senior executives of school systems. This paper will provide an understanding of the different stressors facing senior executives in the sample of Queensland Catholic Education school executives, and relate what are the primary role stressors, what the experienced stress effects are, and what are the main reported coping styles used by the executives. Comparisons will be made with results for other executive and professional groups as given in the OSI-R manual.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Supporting men, Supporting women: Needs analysis relating to the development of an online support resource for men supporting women who are undergoing genetic risk assessment for breast cancer**

*Kerry Sherman (Macquarie University), Nadine Kasparian (UNSW and Sydney Children's Hospital Network), K. Tucker (Prince of Wales Hospital) and C. Gore (Macquarie University)*

Genetic testing is currently available to individuals with a strong family history of breast and/or ovarian cancer to identify if a woman carries a gene mutation that will greatly increase her lifetime risk for the disease. Undergoing genetic testing can be stressful, and research has identified elevated psychological distress in these women. Women frequently rely on their husbands for support during this process; however, there is also considerable distress evident among the male support partners and husbands of women undergoing genetic testing. Our prior research demonstrates that the distress experienced by the men can stem from a lack of information as well as a perceived inability to support the woman concerned. The aim of this study was to conduct an in-depth needs analysis of the male support partners of women undergoing genetic testing, with a view to developing an online support resource targeting these men. Genetics health professionals working ( $n=9$ ) and male support partners of women who had undergone genetic testing ( $n=3$ ) participated in semi-structured telephone interviews. Questions covered aspects such as types of questions asked by male partners and information/resources that would best meet their needs, as well as the male partner experience of the genetic testing process. A thematic analysis was undertaken. All participants highlighted the need for a resource to provide men with support, and confirmed that an online modality would be appropriate. Health professionals noted that online information needs to be concise and factual, particularly focusing on the pros and cons of testing, as well as providing guidance for helping the men to cope and in how they can support their partner through the genetic testing process. Male partners reiterated the responses of health professionals, particularly regarding the need for information about the process itself, and reasons for genetic testing. The data indicate that an online support resource would be welcomed by male partners and health professionals alike. The study findings will be used to inform the development of the online resource.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Testing the social discounting model of choice in a prisoner dilemma game**

*Elizabeth Holmes-Truscott and Xochitl de la Piedad Garcia (Swinburne University)*

An altruistic act directly benefits another individual or a group, at some cost to the benefactor. As such, altruism presents a problem for theories which assume the maximisation of self benefit. While maintaining the assumption of maximization, Rachlin and Raineri proposed a model in which the value of the altruistic act is a hyperbolic function of social distance. Thus, the currency of maximization is said to be a function of (a) the amount of reward to the other, and (b) the social distance between the self and the other. Study 1 aimed to further test the hyperbolic social discounting model and its applicability to a multi-person social-dilemma game in an Australian sample. Ninety participants were given the social discounting questionnaire, and the Public Goods Game. The predictions that the social discounting data would be best fit by a hyperbolic curve and that they would correlate with participant contributions in the public goods game were supported. Study 2 aimed to test the applicability of the model in predicting behaviour in a Prisoner Dilemma Game. Two different prisoner dilemma payoff matrices, for which the model predicted diverging levels of cooperation, were used. Twenty-six pairs of participants each played a sequence of 15 trials in one of the two matrices. It was predicted that pairs of participants would display a higher level of cooperation in Matrix B than in Matrix A. While Matrix A resulted in a higher level of proportional cooperation, Matrix B resulted in greater reciprocal cooperation within each trial. The social discounting model did not account for the observed behaviour in Study 2. Methodological concerns, such as the lack of evidence for the model assumptions about the current sample, means a refutation of the social discounting model is not possible. While Study 1 provided further support for the stability of the social discounting function, the utility of the model lies in its ability to predict behaviour under more complex social conditions such as the prisoner dilemma game. This is yet to be confirmed. The current research provides a framework and recommendation for future research.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **The aetiology of depression: How thinking about the future may exacerbate current mood**

*Neil Wilson (University of Canberra)*

This study sought to examine the relationship between imagining the future and mood. Studies to date have focused exclusively on establishing the effect of current mood on the cognitive processes underlying future thinking. The current study turns this assumed causality on its head, by investigating the effect of future thinking on mood. That is, does the act of imagining a personal future influence one's current mood? The findings of this study have substantial implications for the development and maintenance of depression, and link closely with the techniques used to treat depression through cognitive behaviour therapy (i.e., management of negative thoughts relating to the future). University students (N = 217) completed an online study in which they were asked to describe in as much detail as possible four personal events that were likely to occur at four distinct times in their future. The time periods were: within the next week, next month, next year, and within 5-10 years. Three different sets of instructions were given to different participants - to imagine positive future events, negative future events or simply 'events' (forming a neutral condition). Mood measures taken before and after this manipulation assessed the effect of this future thinking. This design allowed the measurement of the effect of 'normal' (emotionally undirected) future thinking on mood, as well as the impact of artificially directed (positive and negative) thoughts on mood. This study has relevance within both research and therapeutic psychology. By investigating the possibility that a specific type of thought (i.e. future thought) can exacerbate mood and possibly unveil depression, the cognitive view of depression development gains unique support. Therapeutically, the conceptualisation of the manner with which an individual client became depressed may become more accurate and focussed, aiding both diagnosis and treatment.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **The “Bougainville Crisis” - the psychological impact**

*David Tierney (St. John of God Nepean Rehabilitation Hospital, Frankston, Victoria)*

In the period 1988 - 1998 Bougainville, Papua New Guinea suffered a terrible civil war commonly known as the Bougainville crisis. Described as the most devastating conflict in the Pacific since the Second World War, the crisis resulted in combat and non-combat related deaths, human rights abuses, the displacement of at least one third of the population, the complete destruction of the health and the education systems, the collapse of business and considerable damage to the built infrastructure. While various authors, particularly those describing the peace process, have reported on aspects of the crisis which reflect the psychological impact, there has been no empirically based assessment of this issue and no discussion of this issue in the mental health literature. This paper aims to raise awareness of the psychological impact of the Bougainville crisis by: (1) describing the origins and course of the crisis as this provides the broad context for appreciating the psychological impact and the complexity of the recovery process; (2) drawing together the data which reflects the psychological impact; (3) integrating anecdotal information reported to the author in Bougainville in 2007 and 2009; and (4) highlighting a number of issues which continue to be problematic. The data reported in this paper has a number of inherent methodological weaknesses, which shall be noted. However, the view taken is that a dialogue about the psychological impact of the Bougainville crisis within the mental health literature is long overdue and one needs to start with what is known. While there are remarkable examples of locally driven initiatives developed to address the psychological impact of the crisis, a number of prominent Bougainvilleans have highlighted problems they are having in addressing certain issues that continue from the crisis namely the treatment of traumatized ex-combatants who are causing difficulties in their villages and substance abuse. This paper was driven by their request to have their story told.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **The Contextual Modular Group Psychotherapy of Turkish university students**

Sevgi Guney, MSc in Psych, MAPS, Ankara University, Ankara - Turkey

**Introduction and Aim:** The Contextual modular therapy is conducted in modules of six sessions. It includes cognitive behaviour therapy and the exploration of concealed and unconscious issues. In this study the contextual modular therapy runned into a group format to help the everyday problems, feeling isolation, depressive and anxious feelings and difficulties with interpersonal relationships of our students in Ankara University. The aim of the study was to see the effectiveness of the therapy into a group format in Turkish university students as a community sample. **Method. Participants:** 21 university students aged between 19-21 yrs old from Ankara University were participated in the group sessions. **Materials:** Beck Depression and Beck Anxiety Scales were given to the participants as pre-post test application. **Procedure:** Although the contextual modular therapy originally consists of 6 modular sessions, the group application of the contextual modular therapy is conducted into 6 modules of 10 extended sessions. **Findings and Conclusion:** The Contextual Modular Therapy is a usefull therapy method for everyday problems combined with anxiety and depression scores. Participants reported that they found an opportunity to improve their ability to cope with their problems.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**The effect of binocular disparity and prior knowledge on the perceived depth of the hollow-face illusion**

*Harold Matthews, Harold Hill and Stephen Palmisano (University of Wollongong)*

The hollow-face illusion is the mistaken perception of a convex face when viewing the concave side of the cast or mask of a face. The illusion is difficult to explain in terms of ambiguity in visual information or cue conflict as binocular disparity provides unambiguous information regarding convexity or concavity. It is best explained as a case of mistaken inference where prior knowledge of face geometry biases the perceptual system towards the mistaken convex percept. This study aimed to investigate and model how prior knowledge and information from binocular disparity concerning depth order (from the sign of binocular disparities) and depth magnitude (from disparity magnitude) are combined to determine the perceived depth of the illusory convex percept. The two experiments utilised computer generated hollow-faces with different disparity magnitudes. We also manipulated the influence of prior knowledge using established methods: the addition of facial colouring (Experiment 1) and figural inversion of the face (Experiment 2). Participants estimated the perceived depth of these faces by matching the facial depth to a convex comparison face (Experiment 1) and judging which of a hollow-face and convex face appeared to have the greater depth (Experiment 2) to determine how the experimental manipulations affected perceived depth. Both experiments showed that increasing the magnitude of binocular disparity increased the perceived depth, illustrating a positive influence of disparity magnitude upon perceived depth despite the perceived inversion of depth order. Adding facial colouring had no effect upon perceived depth. Figural inversion reduced the perceived depth providing some evidence that prior knowledge exerts a quantitative influence upon perceived depth. We propose a model of this wherein the depth of the illusory face is determined by a maximum likelihood estimate of depth magnitude derived binocular disparity magnitude. This is then scaled according to a parameter whose value is determined by scene properties that affect the strength of the influence of prior knowledge.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **The effect of mood on the perception of self-report questionnaire items**

*Madeline Pidcock and Jaylene Brinker (Australian National University)*

Introduction: Self-report questionnaires are a standard method for measuring treatment outcomes within clinical practice. In a clinical setting a person's mood is expected to vary over time. For example, a person seeking treatment for depression should ideally be less depressed following treatment. However, the effect of mood on the way people interpret self-report questionnaires has not been systematically investigated. Aim the aim of this research was to examine whether mood affects the perceived tone of items taken from self-report questionnaires. Procedure: Using a mood induction paradigm, participants (n=75) were randomly assigned to either a positive, negative, or neutral mood induction condition. Participants completed a baseline mood measure and then rated a series of items taken from questionnaires, before and after the mood induction. Participants rated the tone of the statements as positive, negative, or neutral. Results: Preliminary results suggest that there is an effect of mood on the way people perceive questionnaire items. Discussion: If mood affects the perceived tone of questionnaire items, this has implications for the potential effect of mood on the way people endorse questionnaire items. Further research is needed in order to determine whether mood may bias participant responses as this may compromise the ability of a questionnaire to measure its targeted behaviour or concept.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**The evolution of Borderline Personality Disorder: From categorical to dimensional assessment**

*Kirby Moerth and Philip Greenway (Monash University)*

Throughout the twentieth century Borderline Personality Disorder (BPD) has been conceptualised and researched within a framework of virtually all psychological theories and orientations. Early researchers considered it a disorder on the border of neurosis and psychosis, and a formal diagnostic formulation of such presentations first featured in the DSM-III in 1980. BPD is currently described in the DSM-IV-R as a pattern of instability in interpersonal relationships, self-image, and affects, and marked impulsivity (DSM-IV-TR, 1994), however in the advent of the forthcoming DSM-V scheduled for release in 2013, the disorder is set to be reconceptualised again, and in a dimensional diagnostic framework for the first time. This study examines five-factor model (FFM) dimensional personality assessment, and the BPD diagnostic criteria proposed in the DSM-V. The aim of this study is to evaluate the clinical utility of the proposed criteria, and to evaluate a self-report screening measure has been developed to assist clinicians and researchers to assess the presence and severity of borderline characteristics in the normal population. The outcomes of this study are expected to provide support for dimensional assessment of BPD, and to indicate the degree to which borderline traits impact upon one's self and interpersonal functioning.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **The impact of sleep on bipolar vulnerability**

*Simmone Poullos*

Bipolar Disorder (BD, also known as Manic-Depressive Illness) is a complex mood disorder. Approximately 2.5% of the Australian population is diagnosed with BD. Current literature has identified two main predictors of outcome in BD, bipolar vulnerability (mood, circadian rhythms, behavioural activation and inhibitory systems) and coping (coping styles and personality), outcome viewed as consumers reported satisfaction with life. Of all the circadian rhythms, the most affected in BD is the sleep-wake cycle. The onset of manic or depressive symptoms in BD appears to be directly related to the amount of sleep individuals have. Although sleep has been found to directly relate to mood in BD, few studies have actually investigated the mechanisms of sleep in BD and its treatment. The present study aims to identify associations between sleep and coping whilst also examining other known vulnerabilities to BD such as personality, mood, behavioural activation and behavioural inhibitory systems, and satisfaction with life, in the general population. Based on previous literature the researchers have developed a model of BD that incorporates biological traits, psychological traits and state variables. An online questionnaire has been developed. This questionnaire is comprised of already validated questionnaires measuring sleep, vulnerability to BD, personality, mood, behavioural activation and inhibition systems, coping styles, and satisfaction with life. Data has been collected. A total of 638 individuals completed the questionnaire. Data is currently being analysed using structural equation modelling, so that patterns of moderation and mediation can be identified. Identifying which variables have the most impact on ones vulnerability to BD will ultimately improve or help develop therapeutic techniques currently employed in the treatment of BD.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**The influence of assessment method on the expected symptoms of postconcussion syndrome**

*Shannon Edmed and Karen Sullivan (Queensland University of Technology)*

Postconcussion syndrome (PCS) is a potentially debilitating and chronic complication of a mild traumatic brain injury (mTBI); however, its aetiology is debated. The expectation-as-aetiology hypothesis is one of the explanations that has been put forward to account for PCS. This hypothesis suggests that people's preinjury beliefs about the consequences of a mTBI contribute to their incorrect attribution of normal every-day symptoms to the mTBI postinjury. This study examined the expectation-as-aetiology hypothesis using three different methods of assessment. After exposure to an established vignette, 51 university students with no history of brain injury or neurological disease reported symptoms they would expect to experience six months after a car accident which had resulted in a mTBI (expectation condition). A week later participants reported their current symptoms (baseline condition). In both conditions, symptoms were elicited using an open-ended question; a prompted interview; and an established PCS questionnaire, the British Columbia Postconcussion Inventory (BC-PSI). All of these outcome measures were administered in a paper-and-pencil format. Results revealed that participants expected more PCS symptoms following a mTBI compared to the number of symptoms they currently experienced (baseline) when symptoms were elicited on the prompted interview and the BC-PSI. However, this expectation effect was not present when symptoms were elicited using an open-ended question. Therefore, people who have never experienced a mTBI typically expect negative and chronic consequences as a result of a mTBI. However, we conclude that support for the expectation-as-aetiology hypothesis may be partly dependent on the method used to attain symptom information.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**The Multi-dimensional Rumination in Illness Scale: Development and validation of a measure of rumination in illness**

*Heather Soo (Macquarie University) and Kerry Sherman (Macquarie University and Westmead Breast Cancer Institute)*

Research suggests that the cognitive style of rumination, the activation and recursive rehearsal of cognitive content, represents a key extension to existing cognitive models of emotional distress in illness. Given limitations with existing rumination measures and the absence of a measure specifically for use in the context of illness, we developed the Multidimensional Rumination in Illness Scale (MRIS). The MRIS is designed to incorporate both general and illness-specific dimensions of rumination and meta-cognitive beliefs about rumination. In Study 1 an exploratory factor analysis of an initial pool of 60 items was undertaken. This was followed by confirmation of the hypothesised factor structure in Study 2. In Study 1, participants diagnosed with a chronic physical or mental illness (n=251) completed an online pilot version of the MRIS comprising 60 items generated from an extensive literature review and existing rumination measures. Exploratory factor analysis and parallel analysis were conducted to identify common factors and facilitate item reduction. Factor structures were also examined for consistency across gender and illness type. In Study 2, participants with a chronic physical or mental illness (n=266) completed a revised version of the MRIS comprising 41 items. Confirmatory factor analysis assessed the adequacy of a proposed four factor model of rumination, concurrent and discriminant validity was evaluated, and test-retest reliability examined. In Study 1, exploratory factor analysis of a reduced 36 item scale with oblique rotation suggested a four factor solution for rumination in illness (intrusiveness, brooding, instrumental and searching for meaning). Internal consistency reliability indices were satisfactory. The factor structure was found to be coherent both for gender and health condition. In Study 2, confirmatory factor analysis confirmed the adequacy of the multi-dimensional model of rumination in illness. The MRIS demonstrated good internal consistency, for the full scale and sub-scales, as well as good test-rest reliability over two weeks, and good concurrent and discriminant validity. The MRIS is a reliable and valid measure that should provide a comprehensive assessment of the cognitive style of rumination in the context of both physical and mental illness.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**The provision of psychological care for caged and captive animals in Australian zoos and wildlife parks**

*Mark England*

This paper explores the care for the psychological needs of caged and captive animals that is exercised by Australian zoos and wildlife parks. Legislative requirements exist for the care of caged and captive animals in Australia. These requirements vary and focus on physical needs. An examination of the legislated physical requirements for the care and containment of caged and captive animals provides a basis for examining the psychological needs of these animals. This basis is explored by considering survey responses from Australian zoos and wildlife parks regarding the attention they provide for the psychological needs of the caged and captive animals. The comparisons between existing legislative requirements and claimed care for the psychological needs of caged and captive animals in Australia provides a basis for identifying and discussing psychological needs of caged and captive animals in Australia and efforts to meet these needs.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Time perspectives, environmental attitudes and sustainable farming practices**

*Methuen Morgan and Donald W. Hine (University of New England, Armidale)*

Efforts to mitigate climate change will invariably require the co-operation of the individuals responsible for the agricultural sector, including farmers. This study investigated the relationships between time perspective, environmental attitudes, self-efficacy, and sustainable farming practices in a sample of 539 rural landowners/managers from across Australia. Higher scores on future time orientation, ecocentrism and anthropocentrism, and lower scores on environmental apathy, were significantly associated with greater adherence to sustainable farming practices. Mediation analysis revealed that the predictive effect of future time perspective on sustainable farming was fully mediated by self-efficacy; future-oriented farmers reported higher levels of self-efficacy for sustainable farming practices, which in turn predicted higher levels of sustainable farming practices. Moderation analyses revealed the negative effect of environmental apathy on sustainable farming practices were strongest for farmers with low scores on future orientation, and that the effects of ecocentrism and anthropocentrism were strongest for farmers with low scores on present time orientation. Our results help explain results reported in the literature linking future time perspective and pro-environmental behaviour, and also extend the literature on the boundary conditions under which environmental attitudes predict such behaviour.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



### **Transitional age on life satisfaction after adolescent traumatic brain injury**

*Katrina Kwan and Lindsey Felix (University of Michigan)*

People who sustain traumatic brain injuries (TBI) are at risk for lower satisfaction with life (SWL). Factors including premorbid levels of cognitive functioning and social support have consistently been shown to contribute to SWL. The current study examined neuropsychological and psychosocial predictors of SWL in a sample of adolescents and young adults who acquired a TBI during adolescence. 43 persons (53% men, 86% right-hand dominant, current age 17-21) with TBIs acquired between the ages of 16 and 20, at a minimum of one year post injury, including 17 participants with complicated mild - moderate and 25 with severe injury (1 undetermined severity). Several measures were administered to participants: Satisfaction With Life Scale (SWLS), Community Integration Questionnaire (CIQ; subscales: home integration, social integration and productivity score), Peabody Picture Vocabulary Test, Third Edition (PPVT-III), Trail Making Test - Part B. The sample performed within the average range on the PPVT-III ( $M = 105.38$ ,  $SD = 9.33$ ) and the low average range on Part B of the TMT ( $M = 117.62$ ,  $SD = 28.53$ ; normative mean = 62,  $SD = 16$ ). Multiple regression analysis was conducted using receptive language skills as a proxy for intelligence (PPVT-III), executive function (Trails B), and the three subscales of CIQ score to predict SWL. Only CIQ (social integration) was a significant predictor of SWL (standardized  $\beta = .345$ ,  $p = .023$ ). Social integration predicts positive appraisal of life satisfaction, which differs from findings with older adults. Therefore with young adults in transitional periods, rehabilitation services focused on social skills techniques may be just as important as academic and work achievement goals in helping patients improve their sense of satisfaction.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Understanding of mental states in late childhood: An investigation of theory of mind in autism spectrum disorder and typical development with a novel task**

*April Philpott and Carmel Sivaratnam (Monash University)*

Theory of Mind (ToM) is the ability to understand that other people have mental representations, consisting of emotions, desires, intentions and beliefs, which influence their feelings and behaviour. The development of ToM in later childhood and into adolescence has not been thoroughly investigated, partly due to a lack of sensitive paradigms that can chart developmental trajectories in typical populations and atypical populations with a core deficit in ToM, such as Autism Spectrum Disorder (ASD). The present study assessed understanding of emotions, beliefs and intentions with a newly-developed age-appropriate Comic Strip task in children aged 9-14 years; 12 with ASD and 12 typically-developing controls matched on chronological age. Performance on the Comic Strip task was compared to performance on a widely-used emotion recognition task and parent-rated measures of behavioural problems. The ASD group had higher scores than the typically-developing group on the intentions subscale of the comics, except when age and verbal IQ were controlled. Performance on the comics negatively correlated with age, and performance on the beliefs subscale negatively correlated with ratings of social anxiety in ASD. It is concluded that children with ASD develop basic ToM skills, which can be applied in concrete scenarios, but they do not generalise these to naturalistic situations. It is suggested that individuals with ASD may employ verbally-mediated strategies that are learnt in middle childhood to complete the task, whereas typically-developing children may rely on trial-and-error. It is also suggested that typically-developing children showed poor engagement with the comic paradigm, but it was a promising approach for younger children and those with ASD.



# 46 APS ANNUAL CONFERENCE CANBERRA

4 – 8 October 2011 National Convention Centre



## **Unwanted pursuit: An exploration of types and outcomes of stalking by a former intimate partner**

*Kim O'Keefe and Sabine Hammond (Australian Catholic University)*

Unwanted relational pursuit is a form of stalking, generally described as the persistent and repeated unwanted communications and approaches initiated by a former intimate partner, typically eliciting fear within the victim. The purpose of this study was to examine factors predicting the development of psychopathology following unwanted relational pursuit, specifically attachment styles, coping styles and coping responses. This paper presents data on the type of unwanted pursuit experienced by respondents and on their psychological status pre and post pursuit. Two hundred and sixty seven females who experienced pursuant behaviour initiated by a prior intimate partner completed an online questionnaire assessing the variables of interest. Participants were principally students with 75% of the sample between the ages of 18 and 21. The unwanted pursuit by the former partner ranged from a few weeks to several years after the female partner (83%) ended the relationship. Approximately one third of participants noted much more anxiety, depression and symptoms of PTSD since being stalked compared to before. High-frequency unwanted behaviours by the former partner included: email, voicemail, texts or other messages (85%), repeated phone calls (81%), repeatedly coming to the former partner's home (71%), attempting contact via watching (67%) or following (66%), making hang-up phone calls (63%), threatening to cause harm to former partners (52%) and threatening self harm (53%). Less frequently reported were; sending unwanted gifts (40%), threats made towards a new partner (38%), attempts to physically harm or inflicting actual physical harm (36% and 23%) respectively. These data indicate the wide range of behaviours involved in unwanted pursuit and that a considerable proportion of participants experience mental health issues following unwanted pursuit. The paper extends theoretical conceptualisations of unwanted relational pursuit, specifically regarding the development of psychopathology post unwanted pursuit and the coping responses utilised throughout the recovery process.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Using reinforcement in a Kindergarten classroom: Reexamining the overjustification effect**

*Steven Little (Massey University)*

This study attempted to replicate Lepper et al.'s (1973) seminal study on overjustification (Study 1) and extend his methodology (Study 2) with a group of Kindergarten children. Lepper found an overjustification effect, but his methodology was limited and data were not collected over an extended period of time, a requirement if one is to make any general behavioral conclusions. A comprehensive analysis of both data sets failed to support Lepper's conclusion of the overjustification effect similar to the findings of others who have examined this topic from a more behavioral perspective. Notably, this is the first study which attempted to replicate the seminal Lepper study. In Study 1, the replication of Lepper's initial study, no child from any of the three experimental conditions (i.e., expected-reward, unexpected-reward, and no-reward) exhibited any negative effect on drawing behavior. Behavior measured pre-test and post-test were not significantly different. In Study 2, a replication of Lepper's study using behavioral methodology (i.e., repeated measures, insuring the reward is functioning as a reinforcer), again, no significant differences were found between Baseline 1 and Baseline 2. Interestingly, for some children in Study 2, the introduction of reinforcers for drawing behavior appeared to have an additive effect (i.e., children exhibited an increase in drawing behavior subsequent to the removal of the reinforcer). Study 2 also included a Follow-Up phase collected after 3 weeks. No significant differences were observed indicating no detrimental effect on children's intrinsic motivation for drawing upon removal of external reinforcers. This poster will present the findings of these studies and the implication for educational professionals and others supporting the use of behavioral technologies. The results of this study suggest that, contrary to some instruction at Schools of Education, school personnel should not be discouraged from using reinforcement procedures, regardless of a student's baseline level of functioning.



**46**  
**APS ANNUAL CONFERENCE**  
**CANBERRA**  
4 – 8 October 2011 National Convention Centre



**Will morality or political ideology determine the response to climate change?**

Sharon Dawson and G.A. Tyson ( Charles Sturt University)

Climate change and the response to it is viewed as a moral and political challenge where individuals' attitudes to climate change will determine public policy in respect of responding to climate change. The relationship between attitudes to climate change, individuals' moral intuitions and political affinity were studied in this sample of 487 Australian adults between the ages of 18 and 86. Patterns of moral intuitions scores which are higher for harm and fairness and lower for in-group, authority or purity correlated with liberalism and self reported left wing political orientation, and predicted a preference for a strong response to climate change irrespective of self interest. Patterns of moral intuitions scores which focus more equally on all five however, correlated with conservatism and self reported right wing political orientation, and predicted a preference for a reduced response. Specifically, intuitions concerned with harm and fairness were predictive of preference for stronger responses, whereas those concerned with loyalty to in-group were the opposite. Overall, moral intuitions predicted attitudes to response to climate change, but the relationship was partially mediated by political affinity. The study is further evidence of the relevance of Moral Foundations Theory to moral issues, particularly those requiring a political response.