



## The Abstracts of the 36th Annual Conference of The Australian Psychological Society

20–24 September 2001: Adelaide Convention Centre, Adelaide, SA

Alice Horan

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# The Abstracts of the 36th Annual Conference of The Australian Psychological Society

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Adelaide Convention Centre, Adelaide, SA

Abstracts Editor: Alice Horan  
*The Australian Psychological Society*

It is exactly ten years ago that the national conference was in Adelaide: 1991's conference was widely acknowledged as a very successful one and it marked the beginning of the Society employing professional conference organisers. This year's conference marks yet another change in the nature of the Annual Conference and this is the introduction of a satellite day, "Saluting the Stars", the result of an initiative by the College of Clinical Psychologists. We may see similar initiatives as part of the Annual conference by other Colleges and Interest Groups in the future.

The main conference program offers a wide selection of workshops, symposia, forums, posters and keynote addresses, not to mention the social events and meetings! The invited keynote speakers are: Professor Peter Suedfeld of the University of British Columbia, who is known internationally for his work on behaviour in extreme environments; Associate Professor Helen Winefield of the University of Adelaide who is an internationally renowned Health Psychologist with wide interests; Associate Professor Cheryl Koopman of Stanford University who is well known for her expertise in psychological issues related to cancer and HIV/AIDS and Professor Les Morey of Texas A & M University is well known as the designer of psychometric instruments, in particular, the Personality Assessment Inventory.

The Conference Organising Group and its Advisory Committee both trust that their efforts will be rewarded with providing for you a terrific experience with your participation. Let the Odyssey begin!

*Associate Professor Jacques Metzger*  
*Conference Chair*

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## Written informed consent: Patient comprehension and contributing factors

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**S**tudies assessing patient comprehension of written consent documents often conclude that it is generally poor, and question the relevance of this particular health-care practice. However, very few studies have examined the issue using appropriate measurement methods and empirical controls, leaving this open to debate. The present study employs a matched-control group, pretest-posttest design, matching for gender, age and verbal intellectual functioning, to determine if comprehension by cancer patients consenting to the use of chemotherapy differs to that of well individuals. It also seeks to establish if comprehension varies as a function of the test procedure used, and to examine possible contributing factors at the time of illness and consent, including mood, cognitive and attitudinal factors. Results are discussed in terms of a model of normal memory, and with reference to previous findings.

## The dramatic corporation

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**F**rom the beginning of time people have told and responded to stories which express the meaning of their lives. Theatre creates visual stories and promotes collective experience and meaning. The use of drama can assist members to understand and support the organisation's vision and values and appreciate the importance of corporate strategy. Furthermore drama with staff can foster creativity, encourage choices and decisions, increase self-respect and self-esteem, help develop self-awareness and understanding, assist in channelling emotions in a constructive way, allow expression of feelings and increase concentration and effort. Albert Ellis in his review stated that 'Psychotheatrics has far greater application and potential than Psychodrama'. In particular the Psychotheatrics process creates a visual framework depicting challenges, strategies and outcomes that become an Organisational Dramatic Story. Psychotheatrics assists staff to create stories from their personal and organisational experiences to demonstrate how they fit into the organisation and contribute to the change process. An applied example of the use of Psychotheatrics in an organisational environment will be provided along with an illustrated summary of the model.

## What is 'speed' anyway?

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**F**or the past 30 years speed of processing has been the dominating cognitive construct for research into the mechanistic basis of general intelligence. And yet the construct itself is poorly understood often being confused with its measures (inspection time, reaction time, evoked potentials etc). This paper will present data that shows that confusing the construct with its measure has muddled the water in research on the developmental of intelligence. However, taking the construct seriously (that is developing a theory of intelligence that has the construct at its core) can lead to useful insights into the nature of cognitive abilities.

This will be illustrated from data on the cognitive abilities of children born prematurely.

## The effect of neuropsychological deficits on quality of life 6 months after cardiac surgery

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**T**he impact of postoperative neuropsychological (NP) deficits on quality of life (QOL) after cardiac surgery is not well understood. The aim of this investigation was to determine the relationship between NP deficits and QOL 6 months after cardiac surgery. With informed consent and institutional approval, 77 patients undergoing cardiac surgery were administered a NP battery preoperatively and 6 months postoperatively. NP deficits were defined using reliable change criteria. QOL was assessed preoperatively and 6 months postoperatively using standardised instrument (SF-36, Depression Anxiety Stress Scale [DASS], and Beck Depression Inventory [BDI]). Approximately 10% of patients exhibited deficits on at least 2 NP measures 6 months postoperatively. Significant improvement at 6-month follow-up was evident on all QOL measures. After controlling for preoperative QOL scores, 6-month NP deficits correlated significantly with 6-month measures of general health, physical, physical role, and social functioning, DASS anxiety, and BDI depression. NP deficits were a significant multivariate predictor of 6-month physical functioning ( $p = 0.005$ ), physical role functioning ( $p = 0.038$ ), and DASS Anxiety ( $p = 0.04$ ). Other significant multivariate predictors of 6-month QOL included preoperative QOL scores, perioperative myocardial infarction, and length of stay. These findings suggest that NP deficits detected 6 months after cardiac surgery have a negative impact on QOL.

## Dispositional optimism, stress appraisal, and adjustment: A prospective study

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**T**he current research examines the influence of dispositional optimism on later perception of stress and indicators of psychological and physical adjustment, while controlling for trait negative affectivity. Higher levels of pre-existing optimism were hypothesised to be associated with lower perceived stress, and greater life satisfaction, and lower depressed mood and physical symptoms. A direct effect of optimism on life satisfaction was predicted, while perceived stress was expected to mediate the relationship between optimism and both depressed mood and physical symptoms. Participants were 269 undergraduate university students aged 17 to 50 years, who completed 2 questionnaires, 6 weeks apart. Hierarchical regression analyses reveal a direct effect of optimism on life satisfaction, and a partial mediating effect of perceived stress in this relationship. A full mediating effect in the relationship between optimism and depressed mood was found. No moderating role for optimism existed for predicting life satisfaction or physical symptoms. The theoretical and practical implications, and limitations of this research are discussed, and future research directions are suggested.

### Maps to care: Family resource, education and support in Victoria for carers of people with mental illness

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The current research had two components with corresponding aims. The difference between two carer specific psycho-educational programs and their effect on the quality of life of participants was examined as measured pre, post and post post program participation, using a quality of life measure with seven domains: material well-being; health; productivity; intimacy; safety; place in community; and emotional well-being. One hundred and twenty-three participated in the programs and 114 formed a non-carer group. No significant differences were found between the effect of quality of life on participants between the two program groups. However, the findings highlight the reduced subjective quality of life of carers of people with mental illness, significantly in the domains of health and emotional well-being. A qualitative approach was used to consult with public mental health clinicians (85), and family members/carers (110) in a series of group specific forums statewide. The data were collapsed with four major combined themes of: better care for carers; need to address stigma and isolation; more appropriate and resourced professional support; and the need for carer education. The findings provide an evidence base to further develop a mutual support and self-help model for carers, including a strong education component and recognises the importance of family sensitive/inclusive practice.

### Older gay males and midlife adjustment

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This qualitative research explored midlife adjustment of gay males. Major factors likely to impact on gay midlife are reviewed. The present sample comprised 20 gay men aged 40 to 60 years living in Melbourne who were individually interviewed. An interview schedule drawing on previous research was developed, including: demographics; connection with others; personal reflection (satisfaction, integrity, acceptance); impact of HIV/AIDS; and expectations and problems for old age. The research indicated that normative crisis models are not directly applicable to gay midlife. The research suggested that engagement with the gay community and self-acceptance are both positive influences on gay midlife adjustment. Nonetheless, whether gay midlife is generally a positive or negative experience requires further examination. Implications for further research and counselling practice are discussed, particularly in terms of the importance of relationship formation, loneliness and future health and dependency concerns.

### Gender differences in anxiety: An investigation of the symptoms, cognitions, and sensitivity towards anxiety in a nonclinical population

ARMSTRONG, KA., & KHAWAJA, NG. (Queensland University of Technology).

Past research has demonstrated that anxiety disorders represent a significant mental health concern. A review of the literature in the area indicates that there is limited information regarding gender differences on the basis of cognitions in clinical or nonclinical samples. The current investigation sought to determine whether any observable gender differences existed in the expression of symptoms, cognitions, and anxiety sensitivity for a nonclinical sample of 48 males and 49 females. Multivariate analyses of variance revealed support for gender differences in the expression of physiological hyperarousal, catastrophic cognitions and a general level of anxiety sensitivity in a nonclinical population. The strengths, limitations, and directions for future research are discussed.

### The relationship between children's psychological well-being and other species

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Based in evolutionary theory, the biophilia hypothesis proposes that an innate attraction to life, including other species and the natural environment, continues to exist today, and as such, facilitates psychological well-being. Results from two separate, yet related studies indicate that children aged between 8 and 11 years are attracted to animals and this attraction is associated with positive affect and self-esteem. The first study comprising 157 participants addresses the question of 'what stimuli facilitate good feelings in children' resulting in a 40 item Positive Affect Schedule for Youth (PAS-Y), of which 8 (20%) items were animals. The second study included a total of 320 children completing a questionnaire set including the PAS-Y, demographics and established psychological measures. As hypothesised, positive affect and self-esteem were significantly associated with how children felt about animals. Further, no association was found between negative affect and animals. Sex yielded significant differences, which are discussed in relation to the hypotheses and findings for the overall sample. The presentation will include a discussion of the results of both studies in relation to the biophilia hypothesis and evolutionary proposals.

### Hypnosis for anxiety and pain management in post-operative knee surgery patients

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This study investigated effects of a pre-operative hypnosis session and a hypnotic audiotape on post-operative anxiety and pain in surgical patients. Twenty-eight patients undergoing knee replacement surgery were randomly assigned to either experimental ( $n = 13$ , hypnotic technique) or control ( $n = 15$ , no hypnotic technique) conditions and measured against two indices of recovery: pain, and anxiety. After a live hypnosis session the experimental group took home an audiotape containing a hypnotic relaxation induction and suggestions for post-operative pain and anxiety reduction. They were instructed to listen to the hypnosis tape each day for the seven

days preceding the operation. The control group received no hypnotic intervention. One surgeon, who was not aware of patient group assignment, performed all of the operations. The psychometric instruments used were the Short Form McGill Pain Questionnaire and the State Trait Anxiety Inventory. A repeated measures ANOVA revealed no significant post-operative difference in state anxiety between the experimental and control group. In relation to post-operative pain an ANOVA revealed no difference between the experimental group and the control group on the McGill Pain Questionnaire. However, post-operatively requested analgesics were significantly reduced in the experimental group. The results and their implications are discussed.

### Individual differences in personal remembering and forgetting: Repressive copers' avoidance of negative, self-referent information

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Autobiographical memory normally involves shifts in the accessibility of memories to conscious awareness; in other words, we remember some parts of our past and forget other parts. As some theories recognise, forgetting past events is not simply a failure of memory, but may serve an adaptive purpose. Relatedly, recent research indicates that there are individual differences not only in what people remember, but also in what they forget. This paper focuses on the relationship between one important individual difference factor — the 'repressive coping style' — and memory for personally relevant information and events. I review a series of studies that compared the memory performance of individuals with a repressive coping style (i.e., those with low levels of expressed anxiety and high levels of social desirability/defensiveness) with 'nonrepressors' across a range of tasks including: (a) cued recall of positive and negative childhood and recent events; (b) directed forgetting of positive and negative trait words; and (c) strategic suppression of thoughts and feelings associated with positive and negative autobiographical events. These studies highlight that some individuals are better able and/or more likely to use inhibitory processing strategies to selectively manage their awareness of (i.e., forget) negative personal experiences and self-referent information.

### Posthypnotic amnesia for autobiographical events: The challenge of measuring forgetting

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Posthypnotic amnesia (PHA) involves suggesting to a hypnotised person that following hypnosis they will be unable to recall particular material until they receive a reversibility cue. For hypnotisable individuals, this suggestion leads to: (1) an inability to consciously access the targeted material (i.e., disrupted explicit memory); (2) a continuing influence of the forgotten information on behaviour, thoughts, and action (i.e., a dissociation between implicit and explicit memory); and (3) reversibility of the effect. Research on PHA has focused overwhelmingly on relatively simple, nonpersonal material such as word lists, and in this paper I describe a series of studies that extended PHA to autobiographical memories. In particular, I focus on attempts to appropriately index the differential effect of PHA on explicit and implicit autobiographical memory.

Since most available implicit memory measures were designed for relatively simple stimuli, we developed, adapted and tested a range of measures (including a social judgement task, word association, and homophone spelling) that might capture the ongoing influence of the 'forgotten' events in the absence of conscious recollection. These methodological challenges are discussed in the context of theoretical approaches to posthypnotic amnesia, functional amnesia, and autobiographical memory.

### Aggression and social motivation among Australian adolescents within a school context

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One hundred and sixty eight secondary school students completed a modified Attribution Questionnaire to assess intentionality attributions, affect, and behaviour for eight hypothetical school scenarios containing a negative situation caused by a hypothetical peer provocateur. Negative situations included either: damage to property; physical harm; goal obstruction; or social rejection. Scenario endings were manipulated to allow students to infer the provocateur's intent, i.e. either pro-social, accidental, ambiguous, or hostile. Teachers rated students on their aggressive behaviour in lessons. Teacher rating scores were used to identify 20 male and 20 female aggressive students and to determine a matched-sample of non-aggressive students. It was predicted that: (i) aggressive students would infer greater peer intentionality, more anger, and endorse more hostile responses than non-aggressive students for ambiguous scenarios, and (ii) anger would mediate perceived intentionality and behaviour. No differences were found between aggressive and non-aggressive students in intent, affect, or behaviour. However, students inferred more hostile intent and reported more intense anger in the ambiguous and hostile scenarios than the helpful and accidental scenarios, there were no order effects, however, main effects for sex were found. Anger mediated the relationship between intent and aggression for the ambiguous and hostile scenarios.

### Cognitive ergonomics of personal investment appraisal from past investment performance

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Personal investors choosing investments from prospectuses make decisions under uncertainty. Future investment returns and risk must be inferred, often from data that conceals the underlying distribution of past returns. The current study examines how historical investment performance is intuitively interpreted, and whether particular data presentations might facilitate decisions. MBA students ( $N = 109$ ) completed a survey in which they evaluated 21 hypothetical 10-year compound interest investment scenarios that varied systematically in terms of mean return, volatility, and sequence of high and low returns. Subjects rated the scenarios in terms of perceived earnings, risk and suitability for future investment. Appraisals of historical returns expressed as yearly percentages, mean percentages, annualised percentages and the changing value of a \$1,000 investment are compared. Results were analysed using multiway factorial MANOVA and ANOVA. Findings show that subjects typically based their appraisals on the ostensible characteristics of the scenarios that do not always reflect

true levels of return and risk. Yearly percentages provide useful sensitivity to risk, whilst \$1,000 investment histories provide sensitivity to returns. Framing effects predisposed subjects to maladaptive appraisals such as preference for high volatility over low volatility for investments expressed as mean and annualised percentage returns when returns improved with time.

## Managing intercultural relationships

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Understanding the value of developing genuine two-way relationships between Australian and international students is not always immediately apparent to students commencing study programs. Years of empirical research in this Faculty have demonstrated that commencing students have other priorities. In the Master of Business (MBA) program at this university a very successful 'peer pairing' program was developed in which international and 'local' students were paired in the first semester of the first year of their program. All students were, or had been, employed at managerial level. Working via 'learning contracts' each pair was required to learn from their partner what they needed to learn, know and do to manage successful relationships in both formal (business) and informal (social) settings in their partner's culture. This was an elective subject in the MBA program and thereby attracted academic credit. Results obtained over a three year period demonstrated acquisition of knowledge and understanding of intercultural relationships and a genuine valuing of relationships formed between members of the peer pairs.

## 5'-ectonucleotidase: A new marker of stress induced immune suppression

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Psychoneuroimmunology examines the relationship between psychological stress, the brain and the immune system. In this paper the relationship between psychological stress and lymphocytic 5'-ectonucleotidase, an enzyme marker for lymphocyte differentiation, is examined. Research will be described showing that lymphocytic 5'-ectonucleotidase was decreased significantly by about two fold in persons experiencing psychological distress, with a corresponding change in Total Mood Disturbance scores on the Profile of Mood States. Enzyme values were reversible in that they returned to normal once the stress had been reduced. Administration of high doses of antioxidants to depressed patients also normalised 5'-ectonucleotidase activities, and implied that low enzyme values in stressed persons may be mediated by oxygen radical damage. The primary cause of lowered 5'-ectonucleotidase during stress may be the breakdown in the homeostatic mechanisms of the hypothalamic-pituitary-adrenal axis and immune system resulting in lymphoid tissue resistance to corticosteroids. It is suggested that this lowering of lymphocytic 5'-ectonucleotidase may contribute to stress-mediated immune suppression by inhibiting lymphocyte maturation. The implications of these findings for clinical psychological practice will be discussed.

## Neuropsychological performance in children who snore compared to non-snorers

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Studies have shown that neuropsychological performance is adversely effected in children with sleep related breathing disorders (SRBD). Children with diagnosed SRBD have shown attentional and memory deficits, cognitive impairment and increased behavioural problems. Since snoring is a possible indicator of SRBD, it remains to be established if similar deficits exist in community samples of children who report a history of snoring. From an epidemiological survey in progress, a subset of 39 children (age range 6-16 years) (27 non-snorers, 12 males) underwent psychometric testing using age appropriate standardised instruments [i.e., intelligence (Wechsler Abbreviated Scale of Intelligence - WASI), memory (Numbers subtest, Children's Memory Scale-CMS; Word pairs subtest, CMS), attention (Auditory Continuous Performance Test - ACPT; Code Transmission subtest-CT, Test of Everyday Attention in Children-TEACH), behaviour (Child Behaviour Checklist-CBCL) and sleep (Sleep Disturbance Scale for Children-SDSC)]. Preliminary data analyses reveal that snorers show significant impairment compared to non-snorers (ANOVA) for WASI ( $p < 0.001$ ), ACPT ( $p < 0.001$ ), CT ( $p = 0.05$ ) and CBCL tests ( $p = 0.01$ ). Memory scores did not differ between groups. These preliminary results support previous findings that children who reportedly snore show poorer performance and increased behavioural problems than children who do not.

## Gender differences in the affective, behavioural, and cognitive dimensions of anger in first year high school students

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This study examined gender differences in the affective, behavioural, and cognitive dimensions of anger in 102 students completing their first year of high school. Results supported not only the supposition that girls and boys do not differ in their levels of anger intensity (affective) but also the belief that girls are more likely to positively express (behavioural) their anger than boys. Additionally, results supported the assumption that boys were more likely to have higher levels of hostility (cognitive) towards school than girls.

## Effects of pessimism and explanatory style on development of anger in children

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In this project, 102 students in their first year of high school responded to questionnaires assessing their levels of dispositional optimism and pessimism, explanatory style, and anger in relation to the school setting. A Partial Least Squares (PLS) path analysis examined relationships among these variables. Male students with helpless explanatory styles were more likely to experience higher levels of anger intensity and

were more likely to resort to destructive school behaviour. Male students with a pessimistic disposition were also more likely to report higher levels of school hostility and destructive school behaviour. For females, helpless explanatory style and dispositional pessimism were related but overall level of anger intensity did not appear to relate to destructive and aggressive behaviour. Overall the results suggest that anger management programs focusing on cognitive restructuring and related strategies can be a powerful means for reducing aggressive behaviours at school. The content and specific focus of such programs, however, may vary depending upon participants' gender and other considerations.

### Narcissism, fantasy, and hostility

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The aim of this study is to examine the way in which narcissists use fantasy and hostility as a defence against threatened self-esteem. It also attempts using cluster analysis to distinguish two groups of narcissists: overt and covert that, respectively, represent a grandiose/exhibitionistic and a vulnerable/sensitive form of narcissism. One hundred and eleven university undergraduates completed a questionnaire pack assessing their levels of narcissism, fantasy, hostility, overt and covert self-esteem, anxiety, and depression. Correlations and regression analyses established a relationship between narcissism and both fantasy and hostility, but not between narcissism and overt or covert self-esteem. The four dimensions of narcissism are characterised by particular fantasising and hostility styles. The study suggests that high narcissism scorers adopt an aggressive, vengeful, and self-adulating 'coherent narcissistic *fantasy and hostility* style' in order to protect themselves against narcissistic injury. Subtle differences emerge between the four dimensions of narcissism, with one dimension more hostile and maladjusted (*Exploitativeness/Entitlement*), another dimension more fantasy-prone (*Self-absorption/Self-admiration*), and yet another dimension more competitive and self-assured (*Leadership/Authority*). Males and females also differ, with women high on narcissism appearing more fantasy-prone, and also engaging in a broader variety of fantasy themes and forms of hostility than their male counterparts.

### Perceptions of change and coping: Grounded and theoretical explanations explored

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The aim of this research is to explore similarities and differences between change and coping. A literature search of the current models and operationalisation of coping and change reveals that there are clear differences between the ways that these two constructs are conceptualised. By contrast a qualitative study of lay responses to the comparison of how the individual changes compared with how the individual copes and vice versa indicated that there are few conceptual differences between these two constructs. An explanation of the differences in the comparisons is based on the acceptance that psychological knowledge is specialised, abstract and theoretical and therefore a more complex conception than would be expected from the novice. The development of a schema linking the construct of coping and change that is relevant for a range of settings is presented for discussion.

### Ethical issues confronting probationary psychologists

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This study investigated whether principle and virtue ethics provided useful explanatory frameworks for examining probationary psychologists' reasoning about ethical dilemmas. Sixty-two probationary psychologists read vignettes depicting whistle blowing incidents and indicated what action they thought would be appropriate, and how likely they were to take that action. Their decision making ability and willingness to act ethically was related to type of dilemma and the emotional context. Results supported prior studies showing that early career psychologists generally have good ethical decision making skills. Findings also demonstrated a strong relationship between context and emotion, and partly supported prior research suggesting that the willingness of psychologists to act ethically is related to their emotional experiences. Results supported the utility of both principle and virtue ethics in conceptualising and understanding psychologists' ethical behaviour. Findings were discussed with regard to methodological issues, implications for ethics education and potential areas for future research.

### Memory for crime perpetrators: Factors affecting eyewitness identification confidence and the confidence-accuracy relation

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People who witness a crime are sometimes asked to attempt an identification of a suspect from a live or photospread lineup, thus testing their recognition memory for the crime perpetrator. A positive identification is sometimes the principal evidence against a suspect and can exert a significant influence on the ensuing police investigation and any subsequent trial outcome. There is now abundant evidence from forensic DNA exoneration cases indicating that mistaken identification is a major factor underlying wrongful convictions, and, consequently, there is renewed focus on finding independent markers of identification accuracy. An eyewitness's confidence in their identification has for a long time guided police, lawyers' and jurors' assessments of the likely accuracy of identifications, but psychologists have emphasised that the relationship is tenuous and unreliable. Recent evidence from our own and other laboratories indicate that, when the confidence-accuracy relation is examined using calibration, rather than correlation, there are conditions under which confidence is an extremely useful indicator of identification accuracy. Here we describe some of our current research on eyewitness identification confidence and accuracy. These studies investigate forensically relevant variables that exert an important influence on eyewitness confidence, and the confidence-accuracy relation.

### When the bough breaks: Family law and the role of the psychologist

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This paper examines the implications of the Family Law Act 1975, together with its Regulations and Rules, case precedents and the Commonwealth Evidence Act, for the



practicing psychologist. These Acts, Regulations, Rules and precedents share the way we prepare reports for the Court in contested children's matters and whether the report, if it relates to a child, may or may not be admitted into evidence in a case before the Court. The legislation and case precedents also impacts on the psychologist's role as clinician assisting one or more family members through what is often a period of high conflict and stress for separating parents and their children. One or sometimes both parents seek the assistance of health professionals during this period and some will go on to litigate and attempt to involve their treating psychologists in their battle over the child or children. The difference between the counselling and forensic roles of psychologists will also be discussed.

### Needs, psychosocial resources and well-being of spouses of cardiac patients over a three-month period

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The current study employed a longitudinal design to examine the needs and physical and emotional well-being of spouses of cardiac patients over a three-month period. Forty-two female and 14 male spouses were initially assessed regarding their needs, levels of optimism, perceived social support, and indices of physical and emotional health, approximately one month after their partner's cardiac event (Time 1). Three months later (Time 2) 38 female and 14 male spouses were reassessed regarding their needs and well-being. Gender differences existed at both times for need satisfaction and emotional well-being, with female spouses reporting fewer needs met and displaying greater psychological distress than male spouses. A theoretical model using demographic and psychosocial variables significantly predicted spouses' well-being at both Time 1 and Time 2, but the pattern of independent predictors differed over time. Spouse's sex and perceived social support were the best predictors of both physical and emotional well-being at Time 1, while total needs met was the best predictor of both physical and emotional well-being at Time 2.

### Presleep cognitions in good and poor sleepers

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The influence of cognitive activity on sleep onset latency has attracted increasing emphasis in insomnia research and therapy, however there have been few systematic investigations into thought content before sleep (Fichten, Libman, Creti, Amsel, Tagalakakis & Brander, 1998; Wicklow & Espie, 2000). There is also little known about differences in thinking between good and poor sleepers. In this study, 16 good sleepers and 16 poor sleepers recorded thought topics using voice activated tape recorders, prior to falling asleep. Subjects completed sleep diaries to establish sleep parameters and questionnaires of pre-sleep thoughts and dysfunctional thinking inventories based on Beck and Ellis theories (Lefebvre, 1981; Malouffe & Schutte, 1986). Preliminary findings indicate that poor sleepers scored significantly higher on measures of dysfunctional thinking, even when anxiety scores were controlled: Cognitive Error Questionnaire  $F(1,28) = 2.37, p = .0003$ ; Irrational Belief Scale

$F(1,28) = 2.74, p = .04$ . Any differences and/or similarities in proportions of cognitive themes between good and poor sleepers will be analysed. Findings will contribute to the our understanding and treatment of insomnia — A common and complex disorder.

### 'Acute Stress Disorder: Should We Keep it in DSM-V'

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Acute stress disorder (ASD) describes acute trauma reactions that are predictive of chronic PTSD. An overview of the theory of ASD, and the emphasis on dissociation, will be provided. A critique of the available evidence challenges the utility of the ASD diagnosis. The evidence for providing early intervention after trauma is reviewed, and it is concluded that early treatment has important public health benefits. Possible alternatives to the ASD diagnosis for identifying people who are at risk of PTSD are discussed.

### Reality monitoring in hypnosis

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Three experiments investigated reality monitoring in hypnosis through subtle projection of a visual image during simultaneous suggestion for a visual hallucination that resembled the projected image. In Experiment 1, 23 high hypnotisable participants were administered a suggestion to see a shape on a wall. Participants who had the projection absent and then present reported comparable reality and vividness ratings when the projection was absent and present. In Experiment 2, 24 high and 24 low hypnotisable participants were administered either a hypnotic induction or wake instructions, given a suggestion to hallucinate a shape, and then the projected image was subsequently introduced. Highs in the hypnosis, but not wake, condition made comparable reality ratings when the projected image was absent and present. In Experiment 3, 20 real, hypnotised and 20 simulating nonhypnotised participants were administered a hypnotic induction and given a suggestion to hallucinate a shape, and then the projected image was introduced. Real, but not simulating, participants made comparable reality ratings when the projected image was absent and present. These findings are discussed in terms of the cognitive and social factors that mediate attributing reality to hypnotically suggested experiences.

### Speed of information processing and cognitive abilities

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Ongoing debate in the literature addresses the relevance of speed of information processing to explanation of human intelligence. A central issue is whether chronometric tasks with low knowledge requirements, often referred to as elementary cognitive tasks (ECTs) and used to operationalize processing speed, relate to general ability, as defined by psychometric tests. Our recent studies find that relationships between chronometric and psychometric measures are complex, with different ECTs relating to different psycho-



metric group factors. The term ECT may be misleading insofar as such tasks are psychologically complex, rather than elementary in a basic, biological sense. In particular, inspection time (IT) reliably correlates with nonverbal IQ scores but this only reflects fluid ability before practice on the IT task. However, a moderate relationship between IT and speed on intellectually simple psychometric tasks is not influenced by practice.

### Gender differences in body image dissatisfaction among young adults

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Two studies examined gender differences in body dissatisfaction and its prediction by psychological and physiological variables. In Study 1, 74 men and 84 women completed schematic and body-parts measures of body dissatisfaction, BMI, dieting, exercise and sociocultural indices including social physique anxiety. Women demonstrated greater body dissatisfaction than men. Separate multiple regression analyses for men and women revealed that dissatisfaction for both genders was most strongly predicted by social physique anxiety on body-parts measures. For schematic measures, different predictors for men and women were observed, namely body mass index and dietary restraint respectively, suggesting that the different indices measure distinctive aspects of the body dissatisfaction construct. Study 2 examined how externally and internally mediated psychological variables predicted body dissatisfaction, solely from a body parts questionnaire completed by 66 men and 87 women. Only one externally mediated factor, social physique anxiety, contributed significantly to prediction of body dissatisfaction in both genders, but accounted for almost twice the variance in body dissatisfaction scores for women compared to men. A single internally mediated factor, body image guilt, contributed body dissatisfaction but only in women. The findings clarify the important role of sociocultural influences in body image dissatisfaction, and highlight women's greater vulnerability to such influences.

### The recognition of rotated and scaled images: Shape and its internal representation

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Generally speaking, models of object recognition can be categorised in one of two ways. On the one hand, there are models that propose the stimulus image is transformed in an analogue manner until it matches an internal template of a particular view of that object. On the other hand, there are models that propose recognition relies on stimulus information that is invariant to changes in viewing conditions, such as the size and orientation of the image. Several hypotheses are suggested regarding the nature of object recognition; namely that both mechanisms are used alternately by human perceivers and that certain properties, such as practice and the type of distractor images, influence the use of one strategy over the other. Two empirical studies are presented that generally support these hypotheses, although an additional hypothesis, regarding the influence of stimulus duration, was not supported. In addition, the unusual effects of size are discussed in terms of alternative perceptual mechanisms. The application of this theoretical research to

areas such as air and road safety as well as the impact of brain trauma on visual processing are discussed.

### A diagnosis of breast cancer: Perceived control and making meaning as core themes in adaptive coping

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Despite substantial research into psychosocial factors associated with adjustment to a diagnosis of breast cancer, contradictory or limited evidence exists in certain areas. Questions arise concerning the coping reactions of acceptance and denial and their relationship to personality factors and social support. Using as a conceptual framework the Lazarus and Folkman (1984) cognitive-phenomenological model of psychological stress, the present study explores these questions through analysis of two cycles of in-depth interviews. Participants were 19 women with a relatively recent diagnosis of early-stage breast cancer. The aim was to chart their coping reactions over a six month period. Measures of personality (optimism, sense of coherence, perceived control) and mood were also completed at initial and follow-up interviews. Major themes associated with healthy adjustment include high levels of acceptance, low denial, an expressed positive outlook, creation and acceptance of constructive emotional support, increased self-care, and drawing on a life philosophy. These themes reflected underlying tasks for the women, that is, making meaning of their experience with cancer and seeking to regain control over life. At follow-up these themes/tasks are still present although less salient for those without ongoing physical difficulties. Findings from the quantitative and qualitative data are consistent. Implications for practice/future research are discussed.

### Mental health in rural primary care practice in Tasmania

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There are different ways of providing mental health services to Australians living in rural and remote areas. Most involve visiting mental health specialists providing consultancy or clinical service to local medical practitioners or generic health professionals. Few involve the location of a mental health specialist in the community to provide clinical service, consultancy and case management. Yet, such a model is generally acknowledged as probably most likely to provide effective service delivery. Approximately four years ago, a general medical practice in a rural community in Tasmania employed a mental health specialist through a one-off Commonwealth grant. The role of this person includes provision of direct clinical service to members of the community, consultancy on mental health conditions to local medical practitioners, and assisting the professional and general community in gaining a better understanding of mental health issues. In 1999, the University Department of Rural Health (UDRH) in Tasmania was asked to establish a research program to evaluate the model. The UDRH agreed to undertake the research and added to the model by including rural mental health as part of the undergraduate preparation in Medicine, Nursing and Allied health disciplines. The research is currently in progress and the design involves a mix of qualitative and quantitative methods. This paper

presents the results of the initial phases for the quantitative method, which involved three stages of data collection, and explores the implications for service provision to rural areas by mental health specialists.

### **Attitudinal gender bias: Individual differences in implicit self-esteem and gender identity override gender differences in implicit same-sex favouring**

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Recent evidence suggests that gender attitudes have a substantial implicit component that may operate beyond conscious control: men and women may express gender-related judgements that are quite different from their implicit beliefs (Banaji & Hardin, 1996; Blair & Banaji, 1996; Rudman, Greenwald, Mellott & Schwartz, 1999). According to the Balanced Identity model (Greenwald et al., 2000), these implicit gender attitudes should be predictable from a multiplicative function of the strength of the in-group association (self-identity) and self-positivity (self-esteem). The study examined whether the magnitude of same sex-favouring implicit gender bias (Farnham, Banaji, & Greenwald, 1999) is modulated by individual differences in self-esteem and gender identity as theorised by Greenwald et al., (2000). Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) was used to measure implicit self-esteem, gender identity, and gender bias. Self-report questionnaires were used to measure explicit self-esteem (Tafarodi & Swann, 1995) and gender identity (adapted from Greenwald & Farnham, in press). IAT revealed a strong female favouritism in 34 female undergraduates but, unexpectedly, no significant gender bias in 32 males. Individual levels of this gender bias were predicted in both sexes by IAT-derived implicit measures of self-esteem and self-identity (as well as their interaction). Neither declared gender identity nor declared self-esteem added to the prediction. The results are discussed in terms of Heider's (1958) balance theory.

### **The role of attention in stabilising interlimb co-ordination dynamics**

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The present study investigated the interrelationship between the dynamics of hand co-ordination and attention. Using dual-task methodology whereby hand-circling tasks (Stucchi & Viviani, 1993) were paired with reaction-time (RT) tasks, 15 university students (aged 18–23) performed unimanual, in-phase, and anti-phase circling patterns at low and high frequencies while responding to either one or two auditory tones. Results indicate that probe RT, rather than co-ordination mode, incurs an attentional cost, and that more attentional resources are required at low than at high movement frequency. The data do not support the claim that less stable co-ordination patterns are maintained at the cost of attentional resources (e.g., Temprado, Zanone, Monno, & Laurent, 1999). Results are explained in terms of a higher attentional demand when visual monitoring is feasible at lower movement rates.

### **Co-operative computer-based instruction and language in mathematical word-problem solving: A Singaporean study**

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The efficacies of two Computer-Based Instruction methods: Individual and Co-operative, in Mathematical-word-problem-solving are compared. Additionally, Co-operative learning conditions comprise mixed-ability pairs and equal-ability pairs. The association between English Comprehension and Chinese Language proficiency in bilingual students in relation to Mathematical-word-problem-solving achievement is also examined. Six hundred and thirty-nine grade-3 and grade-5 Singaporean students completed Mathematical-word-problem-solving pre- and post-tests, Raven's Standard Progressive Matrices (a measure of fluid intelligence), and an English Comprehension test. Chinese Language scores and language dominance information were obtained. Children received 12 hours of Computer-Based Instruction over one semester. The results showed that for grade-5s Co-operative structures provide better learning outcomes than Individual structures. But, for grade-3s, no significant learning difference between overall Co-operative-structures and Individual structures was noted. More specifically within the learning conditions, the greatest increase in learning occurred for less competent peers in mixed-ability pairs. The practical implications of this study for Mathematical-word-problem-solving are that co-operative learning in mixed-ability pairs provides the optimal learning environment. The findings for the association between language and Mathematical-word-problem-solving, controlling for fluid intelligence and prior mathematics levels, are inconclusive; however, a trend suggests that the strength of the association increases with development.

### **A study of executive function in externalising behaviour disorders**

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The thesis examined the nature and specificity of executive function deficits in adolescents with externalising behaviour disorders. Using four groups of 12- to 15-year-old adolescents with Attention Deficit Hyperactivity Disorder (ADHD) only, oppositional defiant disorder (ODD) or conduct disorder (CD) only, co-morbid ADHD and ODD/CD, and a normal control group, a number of hypotheses were tested. First, findings of clinical significance supported the hypothesis that executive function deficits are specific to ADHD. Second, a factor analysis was conducted to identify and interpret hypothesised separable subcomponent processes of the executive system. The Supervisory Attentional System, a theoretical model originally developed by Norman and Shallice (1986), provided a useful conceptual basis for interpreting the subprocesses of the executive system, and in particular, the executive deficits associated with ADHD, and an adaptation of the model was proposed. It was argued that adolescents with ADHD, but not those with ODD or CD, have difficulty in generating strategies to guide their behaviour efficiently or effectively, and in monitoring their thoughts and behaviour in a similarly adaptive way. Finally, evidence of an association between executive function and adaptive socialisation

and communication skills, and between executive function and reading ability was also found.

### The establishment of a psychiatric day patient program in a rural community

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This paper addresses the process of establishing and conducting a psychiatric day patient group therapy program in a special unit of a rural private hospital, supported by acute (in-patient) facilities at an adjoining regional public hospital. The Southern Highlands is located 125km south-west of Sydney, with a population of approximately 35,000. Psychiatric day only group therapy programs are an integral part of current trends in psychiatric services, especially in private hospitals. These programs reduce in-patient length of stay and help to prevent in-patient admissions and/or readmissions. Day programs provide psychological treatment interventions, within the security of a hospital setting, supported by clinical supervision from the patient's treating consultant psychiatrist and general practitioner. This provides a continuum of care which has many advantages to the patient as it is less intrusive and disruptive to their normal living situations. Programs for Anxiety and Depression are conducted one day or evening per week for eight weeks, however PTSD programs can be up to three days per week. The main treatment method is Cognitive Behaviour Therapy. Programs (Living Skills) for people with psychotic illnesses can also be conducted. Outcome measures demonstrate an improvement in symptomology and overall mental well-being and are presented for the first 18 months of the unit's operation.

### Flash point in the Third Sector: A longitudinal study of the 'battle' within The Salvation Army — Unpacking the findings from stage one and discussing the implications for clergy care universally

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Clergy employment has been repeatedly identified as a highly stressful occupation. Specifically, the current low retention and recruitment rates experienced by The Salvation Army have cause for alarm. The aim of this study therefore is to examine the well-being, productivity and satisfaction of Salvation Army officers. Identification of issues that officers experience will assist in developing recommendations and strategies for intervention. The significance of this applied study is that it uses a range of research methods, both quantitative and qualitative data and a longitudinal design to overcome problems with previous research. Participatory methodology will actively involve The Salvation Army and will be informed by the following contemporary theories: The Demand-Control-Support (DCS) Model (Karasek, et al., 1990); the Effort-Reward Imbalance (ERI) Model (Siegrist, 1996); and The Dual-level Social Exchange Model (Schaufeli, et al., 1996). Not only will this study have significant importance for The Salvation Army, but it will also have significant implications for the

church universally, in increasing the awareness and importance of clergy well-being. The findings from stage one of the study will be discussed.

### Posthypnotic amnesia for autobiographical memories: Forgetting your first romantic relationship is easier than you think

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A suggestion for posthypnotic amnesia (PHA) can lead some individuals to forget selected events or information. Drawing on Conway's hierarchical model of autobiographical memory (which distinguishes between lifetime, general, and specific memories), this study investigated PHA's effect on autobiographical memory; specifically, memories of a first romantic relationship. During hypnosis, 24 high and 24 low hypnotisable participants recalled specific memories from this period in response to 10 cue phrases. They then received a PHA suggestion that targeted either the specific memories (specific version) or the entire period of their first romantic relationship (lifetime version). Following hypnosis, explicit memory was tested by cued recall before and after PHA was cancelled, and the dissociation between explicit and implicit memory was tested by a social judgement task. Consistent with previous research, highs rather than lows showed impairments in explicit memory, a dissociation between explicit and implicit memory, and reversibility. Notably, for highs, the 'lifetime' version of the suggestion led to poorer recall and longer response latencies than the 'specific' version. These findings indicate that the focus of the PHA suggestion determines its ability to alter the accessibility of memories, and are discussed in the context of current models of autobiographical memory and posthypnotic amnesia.

### An investigation of gender differences in empathic ability during early adolescence: The relationship of puberty, expressivity, and instrumentality to individual differences

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Previous research has identified gender as an important variable in the development of empathic ability in early adolescence. This study examined the relationship of puberty onset and the traits of 'expressivity' and 'instrumentality' to gender and individual differences in empathic ability during early adolescence. Individually administered Emotion Recognition Scales were administered to a cross-section of 192 children aged 9 to 14 years. Concurrently, they completed self-report instruments of expressivity, instrumentality, and pubertal status. As predicted, a significant female advantage for the empathic ability component of 'emotion comprehension' emerged by 14 years of age, but no other significant gender differences were observed. A decline in the rate of empathic ability development in both genders was found to be related to the onset of puberty. Contrary to prediction, the rate of empathic ability development in girls was not significantly different to that of boys. No significant relationships between empathic ability and gender traits were found. However, post hoc analysis revealed significant relationships between gender traits and the empathic ability components of 'emotion comprehension' and 'emotion vocabulary' in adolescent boys, and, to a lesser extent, in adolescent girls. An explanation of the

findings in light of methodological limitations is discussed, as are future directions for research.

### An evaluation of psychological services provided to children with physical disabilities and problem behaviours

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The Crippled Children's Association (CCA) of South Australia provides therapy services to children who have physical and other disabilities. CCA employs psychologists to provide a clinical psychology service to its clients, and their families. The research project will evaluate the outcomes of psychological interventions for CCA clients over a six month period. In particular, the study will assess the efficacy of behavioural family interventions for children with physical and other disabilities who also present with externalising-type behaviour problems. Children referred for psychological assistance with aggressive, oppositional or similar behaviours, between the ages of 2 and 10 years, will be selected to participate in the study. Parents will be asked to complete standardised measures pre and post intervention to assess changes in the extent and severity of problem behaviours, and in parenting style. A tailored satisfaction questionnaire will provide additional information about the experiences of families seeking psychological assistance. The research projects aims to support the work of the Psychologists within CCA in identifying appropriate measures for routine service evaluation. This is important as we move into an environment of increased accountability and greater competition for government funds.

### Empowerment therapy

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In the Summer 1997/98 issue of *Clinical Psychologist*, Journal of the Clinical College of the APS, Bill Saunders argued that psychologists working in the area of substance use need to go 'beyond CBT'. Suggesting that psychotherapy is both art and science, he asked, 'Would CBT be even more effective if it embraced those aspects that the psychotherapists tell us really matter?'. Empowerment Therapy is a new approach to psychosocial treatment for individuals who have problems associated with alcohol or other drug use. The model has been developed over the past five years by Dr. Michael Crowley, Senior Clinical Psychologist at the Tasmanian Alcohol and Drug Service, and has been used by the psychologists and community workers at the Service with very positive outcomes. Empowerment Therapy is a brief, structured and collaborative approach, which uses some cognitive behavioural therapy strategies but seeks to go, as Bill Saunders suggested, beyond CBT in that it addresses not just irrational or negative thought processes, but how the client came to have those negative thought processes in the first instance. Empowerment Therapy has been used with a range of clients with substance use and related problems, and often co-morbid anxiety and/or depression. In fact, the approach has broader applicability as it has also been used successfully with mental health clients with no substance use issues. The

Empowerment model was an integral part of two intensive programs with Tasmanian Vietnam veterans. These programs have been evaluated at six month follow-ups with very positive outcomes.

### Dynamic Systems Theory as a scientific model for considering spirituality

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From its precursors in pure mathematics and engineering, Dynamic Systems Theory (aka Complex Systems Theory and Chaos Theory) has been recognised as appropriate as a metaphor for an increasingly wide range of phenomena including, more recently, the area of Developmental Psychology. The concept of 'magician systems', which was developed in that context, proposes the idea of systems which integrate all human functioning (and that of other highly complex systems like churches, and nations) by entraining the behaviour of subordinate systems. Serendipitously, this parallels biblical concepts of 'spirits', and other elements of the theory allow for models of human behaviour and development which both explain human consistency and individuality. This session explores these connections in the exploration of spirituality within psychology.

### The development of critical item scales for the MMPI-2

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The Critical Item sets of the second edition of the Minnesota Multiphasic Personality Inventory (MMPI-2) have been the focus of relatively little research since this test's restandardisation. The primary role of these items has been to alert clinicians to any specific areas of concern that should be further pursued with a client, hence the term critical. However, interpretation of these sets is extremely limited due to the complete lack of any normative data or any knowledge regarding their psychometric characteristics. The current study, therefore, examined these concerns in a sample of more than 3000 clinical and normal cases to determine the viability of Critical Item sets as potential MMPI-2 scales. Protocols for the normal sample ( $N = 1406$ ) were derived from university students and applicants for civil service positions while those for the clinical sample ( $N = 1801$ ) were from individuals being assessed medicolegally for various personal injury claims. Internal consistency measures identified a number of Critical Item sets with moderate to high reliability. Of these, some had superior internal consistency to existing MMPI-2 scales. Normative tables were created to permit computation of T-scores and all Critical Item set raw scores for each case were converted into gender-specific T-scores. Intercorrelations between these new Critical Item scales were examined to provide some insight as to the likely constructs they measure and to indicate the likelihood that these new scales would contribute anything new to MMPI-2 interpretation. Examination of these high-probability correlates indicated that many of the Critical Item scales were offering redundant information. However given the superior internal consistency of some of these scales to their MMPI-2 counterparts, they were found to be better measures than some of the established scales.

### Teaching ethics in schools and departments of psychology in Australian universities

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In 2000 the Ethics Committee of the APS conducted a survey of ethics teaching in all Schools and Departments of Psychology in Australian Universities. Data for the survey from each University were compiled in two ways. All Schools and Departments of Psychology received a letter from the Chair of the Ethics Committee requesting copies of all curriculum materials pertaining to their teaching of ethics. Thirty separate responses to the letter were received from 23 separate Schools and Departments. Data for Schools and Departments from whom no response was received were obtained from accreditation documentation lodged by them with the APS as part of the 5-year APS course accreditation cycle. Data from 11 Schools and Departments were obtained in this fashion. All data were analysed in order to ascertain (a) the levels at which research and professional ethics were being taught, and whether at different levels ethics teaching was integrated with or separate from other psychology curricula, (b) the prevalence of philosophical, problem-based, code-based and other approaches to the teaching of ethics, (c) frequent and infrequent themes and topics in the ethics curricula, (d) frequently used texts and references, and (e) the methods used to assess students' performance. Results of those summary analyses are reported. The results are discussed in relation to published findings on the efficacy of different approaches to teaching ethics in psychology education.

### Developmental and systemic issues in packaging clinical processes for the young and their families

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Clear, substantive and meaningful descriptions of psychotherapy procedures and their expected outcomes are increasingly sought, by clinical psychologists wishing to more deeply understand the processes of psychotherapy from a scientist-professional perspective, and by public and private agencies responsible for funding mental health services in the most cost-effective manner. Special challenges arise in the attempt to articulate standardised descriptions of psychotherapy for the clinician working with children, adolescents and their families. Firstly, the fast moving processes of psychological development evident within each child or young person require great flexibility in applying any particular method of intervention. Appropriate responsiveness to shifting levels and quality of cognitive, affective and behavioural functioning is an essential part of successful psychotherapy with the young. Secondly, the complexity of interpersonal systemic processes within and indeed beyond the family often demand a highly individualised case formulation and intervention plan. This paper explores how these issues impact upon the design of standardised (even manualised) descriptions of psychotherapy by clinical psychologists and suggests some principles that may assist in achieving the desired outcome. The implication that a psychotherapy program can be manualised to the point that any clinical worker can apply it effectively, currently active in many quarters today, is challenged.

### Triage in Drug and Alcohol Services: Criteria for outpatient or inpatient detoxification

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As with many other health services, there are waiting lists and stretched resources in Drug and Alcohol Services. Thus, there is a need to provide some level of triage assessment to most effectively prioritise individuals to various treatment options. However, there is a paucity of research regarding the appropriate criteria least of all the effectiveness of triage in D&A services. This presentation provides a brief description of the various levels of triage assessment activity and criteria within a D&A service. It focuses on triage assessment for detoxification services. In the D&A service under study, referrals for service are assessed by a single point of contact service (Contact team). One hundred triage assessments conducted by the Contact team are reviewed. Detailed analysis of those cases requiring triage for detoxification services are provided, including; triage criteria, priority ratings, decisions regarding outpatient or inpatient detoxification, and those other drug specific or psychosocial variables which relate to triage decisions. The implications of these findings for refinement of triage in D&A services are discussed.

### Phonological awareness training for reading at risk children aged 4 to 6 years using selected computer software

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Research has found that a number of cognitive skills are associated with problems learning to read, write and spell including phonological awareness, auditory short term memory, rapid naming, and orthographic processing. A number of assessment tools have been developed in recent years to identify young children aged 4 to 6 at risk of these problems. Early intervention in pre-school and the first years of schooling can lessen later problems. This poster will explore the remedial benefits of using carefully selected computer software on a daily basis either in the home or in the classroom, to provide the repetition required to build phonological processing skills for children aged 4 to 6 years. The 6 or so recommended software programs which are suitable for this at-risk group (out of the 90+ which have been examined) will be described, and handouts provided.

### Anxiety across the lifespan: The power of parents in shaping our sense of control

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This presentation examines the relationships between childhood experiences of parenting and the sequential development of an individual's sense of control, which in turn may enhance resilience against anxiety disorders across the lifespan. In particular, it is proposed that parenting experiences characterised by low care/affection and overprotection ('affectionless control') may, to some degree, impede the development of an optimal sense of control, whereas a parental style characterised by high care/affection

and low overprotection ('optimal bonding') may enhance such. Expanding on this conceptual link, this study proposes two models. First, early experiences of 'affectionless control' parenting in childhood may foster a cognitive template of uncontrollability that leads to a manifestation of anxiety psychopathology (mediational model). Second, as an offspring's sense of control template becomes more stable with age, this cognitive style could amplify or diminish the impact of parental style on anxiety (moderational model). Data comprise voluntary reports from 721 individuals from a non-clinical population across four age categories; 8–11, 12–14, 15–18, 29+ years old. Participants completed self-report inventories measuring anxiety, perceived control, and experiences of parenting. Results of regression analyses testing both the mediational and moderational models in the development of anxiety and depression across the lifespan will be presented.

### The Bindaree Streamwatch Project

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**B**indaree provides a rehabilitation service to people with long term mental illness who are living in the community. Streamwatch is part of a nation wide community development program (Waterwatch) which monitors the water quality of local waterways. There is increasing evidence that a personal sense of social connectedness and participation in cultural events is associated with increased well-being and survival. The Bindaree Streamwatch Project pilots an evaluation of the effect of involvement in the Streamwatch program on the rehabilitation of psychiatric clients. Between April 1997 and April 1999 14 clients of Bindaree, all with diagnoses of a chronic psychotic disorder or manic depressive illness, were enrolled in the project. The retention rate was high, with 8 clients staying an average of 93 weeks. Streamwatch sessions were held fortnightly with an average of 6 clients attending. The evaluation of the project was challenging, with both quantitative and qualitative measures being used. The COTE Scale was successfully used by staff to monitor clients' disability levels. Small sample size and high within and between subject variation prevents meaningful grouped statistical analyses. However, individual descriptive statistics show trends of improvement for 6/8 clients. This is reinforced by qualitative data collected by structured interview in a group setting. These simple observations provide an insight to the value of the program that could easily be missed by quantitative measures: 'When people ask me what I do, I'm less embarrassed about not having a real job when I can say, 'I'm involved in a Streamwatch group'. Streamwatch remains an integral part of the rehabilitation program at Bindaree.

### A model for improved health of rural and indigenous Australians through education, support and training for psychologists

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**E**quitable access to mental health and social services is a recurrent problem for rural communities. Specifically high levels of need for psychological intervention have been identified. However, only recently have strategies concerning rural psychological services been specifically flagged to receive funding (the \$45 million allocated to rural allied

health). A relatively small number of projects funded by the Commonwealth Government's Rural Health Support, Education and Training (RHSET) scheme have begun to explore mechanisms to increase psychological services in the bush. These preliminary efforts have informed the present proposal, which is aimed at tackling rural psychological workforce issues at multiple points along the professional career chain, from the recruitment of students through to the retention, development and career diversification of psychologists in rural and remote locations. In this process, it is held that this will synergistically require the development of a stronger knowledge base concerning a variety of aspects of rural psychology and rural psychological practice in Australia.

### The political context of social impact assessment

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**T**his paper describes the decline of deference, an important element of the socio-political climate within which SIA is conducted at the Federal, State and Local level in Australia. While some excellent work in SIA is being conducted, in general the institutional and government support for SIA in Australia remains sporadic at best. There has been a significant loss of trust and confidence in elected and public officials since, at least, WWII. Laird (1989) referred to this as the decline of deference, unwillingness on the part of community to defer to public officials in matters of decision making. There is considerable evidence of the decline of deference in Australian political life. The evidence is discussed with reference to milestone events on the Australian political landscape such as WA Inc. One of the consequences of declining deference has been a shift away from reliance on democratic elites (Wright, 1981) towards more participatory approaches to government decision making. This has a direct impact on SIA at all levels. One way to reinvest trust is to attend to matters of procedural fairness in decision-making processes such as SIA. This does not mean that decision-makers need relinquish decision control, quite the contrary. Research shows that when decisions are seen to be procedurally fair, people are more likely to accept them even if they are contrary to what they want. Opportunities for SIA at the interface between stakeholders will be discussed.

### Sex differences in children's reading

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**T**here is increasing evidence that boys' literacy skills are lagging behind those of girls. Children's reading ability is related to a wide variety of cognitive, behavioural, educational and family background variables, some of which show sex differences in favour of girls. The major aim of this study was to investigate factors associated with sex differences in Grade 2 children ( $N = 87$ ). We assessed the relative contributions of the component processes involved in word recognition skills on the basis of reading in boys and girls. We also assessed the relationship of these to cognitive variables and teacher ratings of various measures of behaviour and cognitive abilities. Girls' mean scores were consistently higher than those for boys on all ability



measures with significant differences established in spelling. Teachers rated girls significantly higher on reading variables, co-operation, and ability to remain 'on task'. Boys were rated by their teachers as displaying significantly more hyperactivity and aggression to their peers. The data suggest that intervention aimed at increasing concentration, attention, and interest in reading may contribute to increasing reading achievement for the class. On the other hand, intervention aimed at co-operation, aggression and overactivity may have a substantial impact in specific cases.

### Gender and personality as factors in therapists' emotional experience

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The therapeutic relationship shares with other, more prototypical, relationships, several defining features. One such feature is that both participants experience emotions in the course of the relationship. Therapist affect is increasingly acknowledged as influential to the process and outcome of therapy but it has not been researched extensively, and therapist training programs inadequately address its impact. Two studies examined the effects of therapist personality and gender on state affective experience when observing videotaped, simulated interviews with clients. Personality was assessed using a measure of the Five Factor Model, and trait affect was assessed by the PANAS-X. In the first study, psychology students were asked to think as therapists during interviews with four clients and to report, using an adjective checklist, their state affective experience. Both gender and level of Neuroticism contributed to variance of state affective response although, when trait affect was controlled, the effect for Neuroticism was no longer apparent. In the second study, practising therapists from a variety of professional groups viewed the same simulated client interviews. Here, no gender differences were found, but Neuroticism again contributed to variance in state affect. Controlling for trait affect did not alter the contribution of Neuroticism to state affect. Possible explanations for the results are explored and the implications.

### Progress towards the development of the Stroke Knowledge Test

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Strokes or 'Brain Attacks' are a major health problem that affects the lives of approximately 40,000 Australians annually (National Stroke Foundation, 2000). Although the risk of stroke can be reduced through preventative strategies, the level of understanding about stroke in the general community is relatively low (Kothari et al., 1997). The aim of this study was to generate a Stroke Knowledge Test (SKT) to assess understanding about stroke. The process of generating items comprised four stages: literature review, expert review, readability analysis, and psychometric testing. First, a review of stroke literature was undertaken to identify content areas to be covered in the questionnaire. A set of items was then created using a criterion-referenced, multiple-choice format. Health professionals, with knowledge of stroke, were subsequently asked to provide feedback about items. A readability analysis was undertaken to measure the comprehensibility of items (Le Bas, 1989). Finally, a pilot sample was given the test to assess item

difficulty and discrimination. Based on results from these stages, the final item set was defined and further psychometric testing of the SKT was undertaken to assess reliability and validity. We anticipate this tool will be useful for psychologists working in the area of stroke rehabilitation.

### The short-term impact of thin-ideal media images on adolescent girls' body satisfaction

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This study examines the influence of individual differences in moderating the impact of thin-ideal media exposure on adolescent girls' body satisfaction. One hundred and sixteen younger adolescent girls and 91 older adolescent girls, ( $N = 207$ ) from four secondary schools in low to mid range socio-economic areas are the subjects of this study. Participants completed questionnaires measuring tendency for body comparison (TBC), stable body dissatisfaction (SBS), BMI, thin-ideal internalisation (TII), self-esteem (SE), self-concept clarity (SCC), and depression (D) approximately one week before viewing ten images from popular female fashion magazines. Participants were randomly assigned to observe either ten idealised images of the female body or ten magazine images not containing a person. Participants indicated *state* body image satisfaction, depression, anxiety, and anger prior to, and after observation. Results highlight the importance of considering individual differences. For exposed younger adolescents, SBS and TBC were moderators of effects on state body satisfaction, while TBC was a moderator of effects on older adolescents' state body satisfaction. No moderating variables were found for the control group. For both younger and older adolescents, TBC and TII moderated the effect of exposure on state depression, anxiety and anger. The findings demonstrate that thin-ideal media images do not affect all adolescents similarly.

### Application of Meyer and Allen Model of organisational commitment to volunteering organisations

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Considerable theoretical and empirical attention has been devoted to the examination of the relationships between employee attitudes and behaviours, producing a valuable wealth of information available for use as the basis of volunteer research. This study was designed to provide some insight into the concepts associated with improvement of volunteer commitment. The study examined the applicability of the three-component model of organisational commitment developed by Meyer and Allen (1991). This research revealed the dimensionality of organisational commitment in volunteers demonstrating support for the three components of commitment, affective, continuance and normative as proposed by Meyer and Allen (1991). The study further provided an initial set of antecedents and consequences of each component of commitment. A large number of variables, which have previously been identified in a paid setting to be causally antecedent to organisational commitment, were analysed and demonstrated differential main relationships with the three forms of commitment, which in turn established the discriminant validity of the components in a volunteer setting. Confirming predictions, satisfaction was found to be the most significant predictor of affective



commitment, and only obtaining a high school level of education was the main determinant of continuance commitment. Contrary to predictions, confirmation of pre entry expectations was the most important precursor of normative commitment. Furthermore, all three elements predicted intention to leave, and continuance commitment was a significant predictor of absenteeism. The study reveals that if volunteer associations wish to reduce absenteeism levels, and the withdrawal behaviours of their members, it is imperative that they acquire a broad understanding of the development of commitment, and how the most suitable form of commitment can be fostered. Hopefully, future research will be able to further delineate the role of organisational commitment in volunteers.

### Working with subgroup negotiation to achieve superordinate consensus

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Research has shown that the introduction of a superordinate category can be beneficial in encouraging disparate groups to work together. However under some circumstances this strategy can also lead to intergroup discrimination. Recent evidence suggests that the key to harmonious intergroup relations may be the presence of simultaneously salient subgroup and superordinate identities. Along these lines, our research suggests that an emphasis on subgroup identities may be a useful first step in achieving consensus and commitment in groups over time. Based on social identity and self-categorisation theories, we argue (a) that the most important feature of a negotiation process is its capacity to represent distinct subgroup positions but that (b) an initial emphasis on these positions paves the way for issues to be framed in superordinate terms. Results supporting this argument are presented. Our findings are discussed in the light of their application to a workplace context, in which the achievement of both subgroup diversity and a shared organisational identity may be desirable.

### Personality and volunteering: A review of the literature

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This paper reviews a number of studies that provide support for the existence of consistent personality characteristics representative of people who volunteer within organisational samples. Studying volunteering within organisational settings allows for the analysis of sustained and ongoing helping, which is voluntary rather than obligatory (i.e., as opposed to volunteering for research projects, organisational citizenship behaviour, etc.). Consequently, the results of such research may provide an indication of whether one's traits and dispositions have some influence on sustained helping behaviour. Although some variations are evident, the available literature comparing volunteers to non-volunteers provides some consistency in describing volunteers as being characterised by personality traits that may be grouped under the general headings of extraversion and agreeableness. Identifying personality characteristics that may be associated with volunteering has practical implications for volunteer organisations, both in terms of volunteer recruitment (e.g. advertising, campaigning, etc.) and

retention (e.g. increasing satisfaction, reducing turnover, etc.). Future directions may expand on the current literature by implementing a comprehensive model of personality to examine whether personality characteristics differ significantly between volunteers in a wide variety of organisational settings.

### Contrasting the ironic monitoring and goal activation models of post-suppressional rebound

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The paradoxical effects associated with thought suppression have been demonstrated in a diverse range of contexts. Suppressing a thought often results in post-suppressional rebound, that is, an increased accessibility of the inhibited item. While Wegner's (1994) ironic monitoring theory remains the most dominant explanation of rebound, a recent account by Liberman and Forster (2000) suggests that rebound may be due to an individual's inferring a goal to express the suppressed item. This study provides a contrast between these two accounts, it being predicted that the goal activation model would be supported. Undergraduate psychology students ( $N = 123$ ) participated in two tasks: the suppression and expression of thoughts of a white bear. One group completed the expression task first, while all others completed it second. In the remaining five groups, the effects of a delay between the tasks was investigated, as was the effect of attributing the difficulty of suppression to either the thought control requirement or a concurrent memory task. While rebound is not found, an unintentional time delay between suppression and expression is found to maintain the frequency of white bear thoughts experienced during the expression task. Furthermore, a positive relationship is found between expression frequency and attributing difficulty to the thought control requirement. These results provide support for the goal activation model of rebound.

### The direct role of oral vocabulary in childrens' visual word recognition

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The possibility of a direct role of vocabulary knowledge in the development of word-level reading was investigated by this study, which examined the direct effect of oral vocabulary knowledge on young readers' ability to decipher words they encounter in print. An experimental design was utilised, whereby 72 Grade 2 students were exposed to completely novel regular and irregular pseudowords, which were embedded in short stories. Three days later the children were found to be more likely to correctly pronounce the visually presented pseudowords which they had heard before than those which they had not. As such, the current study demonstrated the significant and direct role which oral vocabulary knowledge plays in the ability of beginning readers to read single words which they are encountering in print for the first time. It is proposed that the contextual information provided by having knowledge of a word in one's oral vocabulary aids in phonological recoding, by helping determine the pronunciation of that word on the basis of partial or approximated decoding.

## Disturbed eating, sleeping difficulties and negative mood reported in women and men

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The association between eating disorders and sleeping difficulties has been addressed infrequently in the literature. Evidence exists that sleeping difficulties occur in a substantial group of individuals with eating disorders, it is unclear, however if the eating disturbance, high levels of exercise, or negative mood are impacting on sleep. Three hundred and eighty one participants were asked to complete the BULIT-R, the drive for thinness and body dissatisfaction sub-scales of the EDI, the Pittsburgh Sleep Quality Index (PSQI), other measures of sleep, the Profile of Moods Schedule, other demographic and weight information and a self-monitoring log over two consecutive days recording exercise, sleep and eating behaviour. Analyses, using hierarchical regression equations, conducted on the group of participants who completed all data ( $n = 373$ ) and separate analyses on 291 women and 82 men indicate that significant relationships between BULIT-R scores and the PSQI exist for women but not for men. This relationship between eating disturbance and sleep quality is reduced (partially mediated) when negative mood is controlled for. The implications of experiencing a sleeping problem and the relation sleeping has to mood, for women with eating disorders, is discussed with suggestions for treatment.

## A new measure of closeness and intimacy

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Based on qualitative research of Monsour (1992) and Parks and Floyd (1996) who were seeking to investigate the operational components of intimacy and closeness, a 15 item scale was developed to measure these factors. Data were provided by 118 males and 118 females. They completed the new scale as well as other measures. The 15 items yielded a single factor of intimacy/closeness. The love styles of agape and eros are positively associated with the measure of closeness/intimacy while the styles of ludus and pragma were negatively associated with this construct. Feelings of closeness/intimacy were also positively associated with relationship satisfaction, positive affect and general well being and inversely related to negative affect and distress. There was no association between the new measure and age or length of relationship.

## Changes in athletes' moods from injury to recovery

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Emotional states can change in quality and intensity at every rapid rates. Of interest in the present study are changes in emotional states from injury onset through recovery in a group of 136 athletes who played their sport at either the international or national levels. Using a version of the Profile of Mood States which had been modified especially for a sports setting, the athletes responded to the scales on four occasions: as soon as possible after injury, and on three other occasions with the final occasion being

when the athlete was ready to resume their involvement in sport. The negative moods of anger, tension, depression, confusion and fatigue reduced from injury through recovery while the positive moods of vigour and esteem-related affect increased from injury through recovery. The paper will also report on which demographic, medical appraisal and psychological variables were predictive of the mood states on each measurement occasion.

## Rural youth homelessness: Has the bough broken?

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The paucity of research surrounding rural and remote youth homelessness is clearly evident. The needs and issues of indigenous rural youth is becoming increasingly recognised as an area requiring examination and intervention however, few studies have investigated the concept of homelessness in indigenous communities and lacking still is research in the area of rural indigenous homelessness, particularly those issues affecting indigenous young people. Rural youth have many stressors to contend with and these can be quite different to those experienced by metropolitan youth. The lack of availability and access to health services and support in remote locations coupled with the disadvantage of higher unemployment rates, distance and isolation add to the burden faced by rural youth. Indigenous rural youth issues have seldom been addressed, yet indigenous rural youth often over represent rural youth in the juvenile justice system, live in overcrowded housing, experience higher incidences of family eviction and display higher rates of drug and alcohol abuse. This paper will discuss the current literature surrounding rural youth and indigenous homelessness prior to the commencement of a comprehensive study of youth homelessness in rural and remote South Australia. The research aims to clearly identify issues underpinning rural youth homelessness and the ability to offer culturally appropriate services together with preventative and intervention strategies to rural youth and their families.

## Reference list accuracy in five experimental psychology journals

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Alarmingly high error rates have been detected in published reference lists in medical journals. While this poses significant problems for both readers and authors of academic literature, similar investigations have not yet been reported in the experimental psychology literature. This shortcoming was addressed in the present study, which sampled 355 reference list citations across the five experimental psychology journals published by the American Psychological Association in 1999. At least one error was detected in 32% of the sampled reference list citations, with errors in the article title (15%) and the authors (12%) the most common. The error rates across the five journals surveyed did not differ significantly. It appears that the psychological literature is not immune to the inaccuracies which have been reported in medical and other academic journals.

## Psychophysiological and cognitive measures of anxiety during a speech task in social phobia

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Cognitive, physiological and personality variables were examined in 28 social phobics during a speech task in order to determine which variables best predicted subjective anxiety and whether cognitive factors were related to physiological measures of anxiety. Subjects completed a series of self-report inventories about their social and speech anxieties during assessment stage. Following this, patients who fulfilled criteria for social phobia were recruited into a CBT group program, and a subgroup had ambulatory recordings of heart rate and electro dermal activity before, during and after the delivery of a brief speech during one of the therapy sessions. Cognitive variables were significantly related to self-reports of speech anxiety, however, no significant relationships were demonstrated between cognitive and physiological variables. The pattern of physiological arousal demonstrated the expected increase in arousal prior to the speech, a further increase in arousal at the commencement of the speech, a gradual decline during the course of the speech, and a further drop in arousal following the speech. Cognitive factors, especially fear of negative evaluation, was significantly related to subjective appraisal of speech performance. In general, these results are consistent with the postulates of cognitive-behavioural models concerning speech and social phobia.

## Children's understanding of blood

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Very little research has examined children's understanding of the circulatory system, despite its importance for biology and health. The present study therefore aimed to investigate children's beliefs about the existence and functional significance of blood. In the first part of the study, children aged 3 to 11 years and adults were asked whether blood is responsible for 15 different bodily functions. The results showed that only 9- to 11-year-old children were able to discriminate between biological functions in terms of the role of blood, and even their level of accuracy was quite low. In the second part of the study, these same children were asked whether various animals, plants, and nonliving kinds possess blood. The findings showed that even the youngest children attributed blood to animals, and not to plants and nonliving kinds. Thus, there seems to be a discrepancy in the development of children's knowledge of entities possessing blood and of the functions performed by the blood. Since both ontology and causal understanding need to be satisfied before a biological theory can be inferred, the present findings support the proposal that a clear understanding of biological systems does not emerge until at least 9 years of age.

## Aggression and social motivation among Australian adolescents within a sporting context

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One hundred and seventy two secondary school students completed a sport-modified Attribution Questionnaire to assess intentionality attributions, affect, and behaviour for eight hypothetical sporting scenarios containing a negative situation caused by a hypothetical peer provocateur. Negative situations included either: damage to property; physical harm; goal obstruction; or social rejection. Scenario endings were manipulated to allow students to infer the provocateur's intent, i.e. either pro-social, accidental, ambiguous, or hostile. Physical education teachers rated students on their aggressive behaviour in physical education lessons. Teacher rating scores were used to identify 22 male and 22 female aggressive students and to determine a matched-sample of non-aggressive students. It was predicted that: (i) aggressive students would infer greater peer intentionality, more anger, and endorse more hostile responses than non-aggressive students for ambiguous scenarios, and (ii) anger would mediate perceived intentionality and behaviour. No differences were found between aggressive and non-aggressive students in intent, affect, or behaviour. Similarly, no order or sex effects were found. However students inferred more hostile intent and reported more intense anger in the ambiguous and hostile scenarios than the helpful and accidental scenarios. With students endorsing more aggressive acts for the hostile scenario. Anger mediated the relationship between intent and aggression for the ambiguous and hostile scenarios.

## Family functioning in childhood dysthymia and major depression

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Childhood dysthymic disorder (DD) and major depressive disorder (MDD) is often characterised by family dysfunction (Birmaher et al., 1996). This study investigates family dysfunction as related to child and parent reports of DD and MDD in a clinical sample. Forty-five children and adolescents aged 3 to 17 years were seen in a Depression and Anxiety Specialist Clinical Program in a public child and adolescent mental health service. Diagnoses were ascertained by child and parent interviews using the Anxiety Disorders Interview Schedule for children. Family functioning was measured by maternal report on the Family Assessment Device. Analyses of variance were performed to determine whether parent and child reported DD and MDD were related to differences in family functioning. Parent reported MDD was related to poorer functioning on roles. Parent reported DD was not related to differences in family functioning. Child reported MDD was related to poorer problem-solving, communication, roles, affective responsiveness and involvement, and general functioning. Child reported DD was related to poorer communication, behaviour control and general functioning. Thus, child reported DD and MDD were more related to poorer family functioning than parent reports. Clinical implications are discussed.

### The effects of a victim impact statement and gender on juror information processing in a criminal trial: Does the punishment fit the crime?

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Using a heuristic-systematic paradigm (Chaiken, 1980), this study examined the effects of heuristic cues, a victim impact statement (VIS) and gender, on juror decision-making. A total of 238 ( $M = 119$ ,  $F = 119$ ) jury-eligible participants from the community, were randomly assigned to one of eight versions of a heinous murder trial, which was based on a real case. Approximately half the participants received a VIS, while the remainder did not. In addition, the design manipulated offender gender and victim gender. After reading the transcript, participants made verdict and sentencing decisions, and rated the future dangerousness and volition of the offender, and their own emotional reactions to the trial facts. Results indicated that the VIS increased sentencing and volition decisions (but not ratings of future dangerousness), particularly when the offender was a female. While female participants gave higher emotional ratings, this did not affect the sentences rendered. It was concluded that future dangerousness ratings were made according to the factual evidence presented, while volition was affected by the heuristic cues. Both future dangerousness and volition were found to affect the sentencing decisions made, providing evidence for an additive effect of heuristic and systematic information processing, on the sentences rendered. The implications of these findings are discussed, along with recommendations for future research.

### Changing coping in the adolescent years: When, how and with what outcomes

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Whilst coping is a dynamic phenomenon which is known to change over time what is of interest is how coping changes at different stages of adolescence and what that tells us about what to teach and when to provide coping skills training. In this paper we draw on a longitudinal study of coping of 168 adolescents over a five year period which guides the implementation of an adolescent coping skills program which has been implemented and evaluated in several metropolitan settings. The first is a teacher as instructor intervention with 88 students (11–14 years) from a secondary school who were divided into treatment and control groups, the second is a school based intervention with an external consultant as instructor with 82 adolescents (14–17 years). The participants completed the Adolescent Coping Scale and the Perceived Control of Internal States inventory. The changes in coping and perceive control reported by the student population are discussed.

### The effect of mentoring on the well being and success of early career women academics

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This study aimed to assess the impact of mentoring on the attitudes, concerns and career success of early career

women academics. Participants in the scheme consisted of 22 women mentees and 24 women and men mentors. A control group consisting of 40 non-mentored women was also included in the study. A combination of dyadic and group mentoring was used. A multifaceted quantitative and qualitative methodology was used to evaluate the possible benefits of mentoring for early career women researchers in relation to career and research attitudes, promotion and research outcomes, and perceptions about mentoring. Results showed that compared to the control group, mentees reported a decrease in worries or concerns about research, an increase in judgements of their capacity as academics, and an increase in job satisfaction. Furthermore, mentees performed very well compared to non-mentees in relation to promotion, grant applications and success in securing grant funding. This trend was not evident in relation to commencing work on publications. However, it seems likely that this will improve as confidence continues to increase and funded grants produce publications. Finally, mentees viewed mentoring as an extremely positive and beneficial process, with general guidance and specific research/career-related support being highly valued. Mentors concurred with this view and also saw benefits for themselves in the form of closer connections to other academics and an opportunity to think about their own careers.

### Relationship between parenting attitudes and child behaviour for school-aged children born extremely premature

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Both biologic risk and environment are salient factors in determining outcomes for premature children. Limited research with mixed results has examined child rearing attitudes among parents of premature children. Evidence of overprotective attitudes, a relationship between perceptions of child vulnerability and pre-school age behaviour, and less child centredness concerning school-age children born very premature has been reported (Estroff, et al., 1994; O'Mara & Johnston, 1989; Zelkowitz & Papageorgiou, 1996). In the study presented, parents of 48, 8 year old children, born extremely premature, and a full-term matched (age, gender) control group completed the Parenting Attitudes to Child Rearing Scale (warmth, strict/overprotective, parent-child conflict), an interview concerning parent and child health and perceptions of child 'specialness', and the Child Behaviour Checklist. Multivariate analyses revealed no significant group differences in parenting attitudes, nor in perceptions of child specialness, however, premature children had significantly more parent reported problematic behaviour than controls. For both groups, a higher parental endorsement of punishment and parent/child conflict were associated with more problematic child behaviour and poorer parental health was related to higher reports of child somatic complaints. Interestingly, while higher child somatic complaints were related to more school absences, poorer parental health was related to less absence.

## The effect of changing conceptual context on skill transfer performance

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An assumption implicit in many skill performance theories is that performance should follow power law extrapolations by continuing to improve as if a change in task conditions had no effect. The aim of this study was to extend Speelman and Kirsner's (in press) research by examining the effect of changing the conceptual context on skill performance. This study employed well-established fact retrieval problems from the six-times table as the test task. The four distractor conditions consisted of problems that were variations of the test task: Operand Change, Operand Reversal, Operation Change, and Symbol Change. Eighty participants repeatedly solved problems from the test task during the training phase, and then solved the same task combined with problems from one of the distractor conditions during the transfer phase. An immediate and prolonged disruption to predicted performance was revealed. This finding supports the premise of the study, such that a change in the conceptual context of a task affects response time performance on an established skill. Consequently, this study demonstrates that power law extrapolations of training performance cannot be used to reliably predict transfer performance. These results have implications on current skill acquisition and transfer theories that have not accounted for this effect.

## Evaluation of performance and anxiety in public speaking situations

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The study aimed to examine factors associated with anxiety in public speaking situations, evaluations of one's performance in speech situations, and discrepancies between subjective- objective performance ratings. Participants included 86 university students who were divided into high ( $n = 24$ ), moderate ( $n = 27$ ) and low-speech anxiety ( $n = 35$ ) groups based on a baseline questionnaire measure of speech anxiety. Social anxiety, personality, coping, fear of negative evaluation, cognitive distortions and history of public speaking anxiety were evaluated prior to subjects delivering a class presentation. Immediately following the presentation, participants and tutors evaluated performance and a measure of performance-disparagement (discrepancy between subjective and objective ratings) was computed. The three anxiety groups differed significantly on personality variables (neuroticism, extraversion), coping styles, conditioning history, generalised social anxiety, and cognitive variables (biases in thinking). Evaluation of one's performance was related to cognitive factors such as fear of negative evaluation, but peer-feedback and levels of subjective anxiety during presentation best predicted it. Levels of speech anxiety and ratings of preparedness for the assignment predicted performance disparagement. The findings are supportive of cognitive-behavioural conceptualisations of speech anxiety, although further research in the area using a clinical sample is indicated.

## Convent girls, feminism and community psychology

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This 'trinity' of three papers in one incorporates reflections by three feminist community psychologists from the Irish Catholic diaspora. Using a narrative approach, we explore the roots of our common commitment to social justice, and the emergence of our feminism from diverse lived experiences across four countries, within a shared spiritual tradition. We argue that building inclusive and just communities is impossible without addressing the complexities of our own communities, cultural identities and spiritual heritages, the latter often underacknowledged within feminism and community psychology. Catholic Ireland in the nineteenth century was a colonised country which became a colonial power by the export of its people and their religion from oppression, famine and poverty to the 'new worlds' of Australia, Canada, New Zealand and the USA. Mixed experiences of internalised dominance as white, English-speaking members of the 'one true Church' and of internalised oppression as Irish Catholic minority women in predominantly Protestant Anglo-Saxon patriarchal societies resonate in our accounts of pressures to 'do good and be good.' Strategies for harnessing energies and fostering commitment for social change are examined, with emphasis on how understandings of feminism, spirituality, culture and community might be acknowledged and incorporated into community psychology theory and practice.

## Demographic, professional and work-related differences between rural/remote and urban/metropolitan Australian psychologists

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This two-part study employs actuarial and survey data to identify differences between rural/remote (rural) and urban/metropolitan (urban) psychologists registered with state and territory boards in Australia. Differences in geographic distribution, demographic, professional and work-related variables are investigated. The first part of the study shows that relative to population size urban psychologists outnumber rural psychologists by approximately three to one. That is, rural and remote psychologists have a potential recipient population three times greater than that of their urban and metropolitan counterparts. The second part of the study reveals that 5 additional professional and work-related variables distinguish rural psychologists from their urban colleagues. These are that relative to urban psychologists proportionally more rural psychologists have a four-year qualification in psychology and more likely to have Indigenous people as clients and are more likely to have relocated for the purpose of their current job. They are proportionally less likely to be currently enrolled in an accredited program of study in psychology, and less likely to have psychological colleagues in place of work. The implications of these differences for professional practice, recruitment and training are discussed.

## Punctuation in parsing: The effect of commas on garden path sentence structures

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The following experiments examine the role of punctuation in disambiguating a syntactically ambiguous class of sentence structures, known as garden path sentences. There has been little, if any, research into the means of disambiguation by punctuation and whether it is equally effective across different types of garden path sentences. Previous experiments have illustrated that punctuation (in these cases the comma) can have powerful disambiguating influence in some structures, yet this phenomenon is by no means universal. In Experiment 1, three categories of ambiguous sentences are examined: early and late closure, prepositional phrases, and reduced relatives. Experiment 2 considers the influence of punctuation on garden path and non-garden path sentence structures, manipulating both plausibility and length of ambiguity. Subjects ( $N = 80$ ) were significantly affected by punctuation, experiencing improved reading speed and comprehension scores across the range of garden path sentences. Findings also indicated that the effectiveness of punctuation in disambiguating is dependent on the complexity of the garden path sentence, as well as the reading skill of the subject. It was concluded that punctuation provides important structural information, which can minimise, or perhaps even avoid, obstacles introduced by backtracking and dealing with misleading starts.

## Abusive relationships between human and non-human animals and their importance for psychologists

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The current paper reviews recent literature examining relationships between domestic violence, child abuse, and animal cruelty. On the whole two hypotheses have been examined. The first is referred to as the 'violence graduation hypothesis' which proposes that childhood abuse of animals predicts subsequent violence toward humans in adulthood. As will be discussed there are several limitations related to the evidence cited as supportive of this hypothesis. The second hypothesis, referred to as the 'deviance generalisation hypothesis', proposes that criminal and anti-social behaviours of a violent and non-violent nature are positively correlated with one another and perhaps share the same underlying causes. The evidence for this hypothesis is much more convincing than that for the first. For example, recent studies have reported that as many as 70% of women who are victims of domestic violence also report that their companion animals are abused. In 30% of these cases it has been found that children who are victims of abuse also abuse their companion animals. The current paper will evaluate the methodology of the various studies that have been conducted and will discuss the implications of these findings for psychological understanding and practice. Recommendations for future research will be made.

## Young children's secure attachment as a resilience factor against the development of internalising disorders

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This study examines the relationships between child reported attachment style and their self-reported symptomatology of depression and anxiety. It is hypothesised that secure attachment is a more powerful predictor of resilience against the development of disorder for children at risk (i.e., high levels of behavioural inhibition) than insecure attachment would be of risk. Measures include Martini et al.'s (1990) symptom self-report measure, the Separation Anxiety Test, a family drawing, a drawing of a person in the rain, and two sub-scales from the Personality Inventory for Youth. The results reveal support for our central hypothesis. These will be discussed along with the limitations of the study.

## A systems approach to modelling social impacts over time

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Much of the work in social impact analysis infers casual links between measured indicators and some general concept of community well being. However, the nature of these links is not always explained and, in the worst cases, the reporting of a social impact analysis is no more than a catalogue of indicators measured at a point in time. This paper reports on an attempt to build a simulation model of the social impact of industry restructuring in the Australian forest industry on small communities that are heavily dependent on forest activity for their economic viability. Building a simulation model forces the assumed casual links between indicators and outcomes to be made explicit. One advantage of the simulation approach is that it throws into sharp relief areas in which theory or data are lacking. In this project we sought to draw on psychological theory and research findings reported in the literature to underpin the model development. The final model was shaped by the available data, available theory and by the political context in which the model was developed. These issues are discussed in the paper.

## TV and body dissatisfaction in adolescent girls

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Sociocultural theorists suggest that body dissatisfaction results, at least in part, from unrealistic ideals of attractiveness transmitted through the media. In the present experiment, 195 female adolescents viewed 20 appearance- or 20 nonappearance-related television commercials. The results show that viewing appearance commercials leads to increased anger and body dissatisfaction, as well as to decreased confidence. Viewing appearance commercials also leads to increased schema activation as measured by two new tasks. But not all adolescents are equally vulnerable to these media effects. In particular, investment in appearance (appearance schematicity) moderates the effect of commercial viewing on body dissatisfaction. These results support the usefulness of schema theory to explain



the process by which the media can affect body dissatisfaction, and to explain why some individuals are more vulnerable to the media's effect.

### **The master is the employer, the servant is the employed psychologist: Implications for professional practice**

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Many psychologists are appalled to learn, after the Mevent, that all is not what is appeared to be when working for an employer. The terms and conditions of employment govern what a psychologist can and cannot do in management and professional practice, and these may override the APS Code of Ethics, confidentiality, an individual's values, personal preferences, *modus operandi* and any other consideration in relation to the individual 'client'. In industrial law, your employer is your client. The terms and conditions of employment, and the mutual rights and obligations of an employer and employee are contained in the (written) contract of employment, which among other things, incorporates legislative requirements arising from federal and state industrial legislation, awards and enterprise agreements (certified agreements), and the employer's policies and procedures. Recent case history underlines that a psychologist must understand, agree to and work within his or her contract of employment and that the best way of ensuring that he or she can work legally, ethically and effectively is to negotiate the relevant terms and conditions in advance of signing the written contract, before starting work with the organisation.

### **Implicit theories of attention-deficit/hyperactivity disorder held by primary school teachers and allied health workers**

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Attention Deficit Hyperactivity Disorder (ADHD) is a controversial disorder that has attracted an enormous amount of attention in recent times from the professional community as well as the popular press. Despite extensive research no study has yet looked at the implicit theories held by professional and non-professionals involved in the diagnosis and treatment of ADHD. This study aims to fill this gap in the professional knowledge by looking at the underlying factor structure of the implicit beliefs of 611 medical practitioners, psychologists, health workers, teachers and parents in relation to cause, characteristics and treatment of ADHD. Factor analytic results reveal clear and interpretable factor structures that overlap considerably with explicit theories found in the literature. In recognition of the key role teachers and health workers can play in assessment and management of ADHD and the varying conditions under which they encounter children with ADHD, the implicit theories of 140 teachers and 151 health workers are compared using a series of Mann-Whitney U tests. A degree of concordance is found in relation to implicit theories about causal factors. However, significant differences are observed in the endorsement of a wide range of characteristics central to ADHD and support of a multimodal approach to treatment and management. Teachers view the family environment as a more important causal factor than do health workers. Teachers also see behavioural problems relating to hyperactivity-impulsivity and aggression as more

characteristic of ADHD compared to health workers. Health workers believe medication to be more effective as a treatment strategy than do teachers whereas teachers view psychological interventions involving parents and the child as more effective

### **Contribution of patient defense mechanisms, coping styles and therapist interventions to the development of working alliance in brief dynamic psychotherapy**

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Defense mechanisms and coping strategies are ways of controlling emotional discomfort, internal and external stress. Both are expected to change to a higher adaptive level through brief dynamic psychotherapy, BDP ( $N = 43$ , max 40 sessions, Norwegian Multisite Study on Process and Outcome of Psychotherapy). Defenses are rated (from transcripts) with Defense Mechanism Rating Scale, DMRS (clinician-rated. Perry), and Defense style Questionnaire, DSQ (self-rated. Bond). Overall defense functioning level (ODF) is calculated from both scales. Ways of Coping Checklist, WCCL (self-rated. Vitaliano), comprises five coping styles from highly adaptive to maladaptive. Whether ODF and coping are interrelated and represent different aspects of the same phenomenon is explored, e.g.: does initial ODF predict coping styles at the end of treatment? Therapist interventions are rated from complete transcripts, on the expressive-supportive dimension, according to Psychodynamic Intervention Rating Scale, PIRS (Cooper & Bond). The expressive therapist interventions comprise transference and defense interpretations. ESIL is a calculated level of expressive-supportive interventions. Adjustment ratio (AR) of interventions (ESIL) according to the patients' ODF level is expected to have impact on the working alliance between therapists and patients.

### **Tactical decision making in fire fighting**

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Fire fighters need to make complex decisions under considerable time pressure. The current study examines the way in which novices learn to make tactical decisions. NSW Fire Brigade recruits are being used as participants (final  $N$  expected to be 60). Participants are presented with a lecture explaining the principles that should be used when deciding whether to use an offensive or defensive attack. This is followed by 8 examples of structural fires. Participants make a series of tactical decisions, and are then given feedback in the form of an expert narrative. In the test phase, participants are given a set of new examples, some of which closely match the training examples that they have seen earlier. Preliminary results suggest that the participants use prior exemplars as the basis for decision making when the test item closely matches a training item. However, participants appear to use general principles as the basis for decision making when the test item does not visually resemble a training item. These findings suggest that decision strategies may vary according to the conditions of training and the conditions of transfer. Implications for training and the development of adaptive expertise are discussed.



## Preliminary results of a school-based program to address homophobia

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Two key determinants of mental health are freedom from discrimination and social connectedness. Same-sex attracted youth subjected to homophobia, violence and discrimination are at risk of mental health problems, including suicide. As a significant site of homophobia is the school, a 6-week school-based program called 'Pride & Prejudice' was developed to help students explore their attitudes to gays and lesbians and evaluated in a co-educational Year 10 class. Students' beliefs about gender roles, social desirability, attitudes to gay men and lesbians, social connectedness, self-esteem, and attitudes to race were assessed before and after participation in the program. Attitudes towards gay men were significantly more positive after the program, and was predicted by the number of sessions attended. A significant positive change also occurred in attitudes towards lesbians. Pre- and post-intervention scores did not change on any of the other variables. Process evaluation showed that students viewed the program positively. School-based programs delivered to individual classes in which students explore their attitudes towards lesbians and gay men can lead to a significant reduction in homophobia. It is hoped that school-wide implementation of such a program will reduce the discrimination same-sex attracted youth experience, and improve social-connectedness for all students.

## Behavioural science applications in cancer control and prevention

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It is now well established that a vast proportion of the burden of disease in countries such as Australia is attributable to behavioural risk factors. Cancer features prominently among the diseases in which voluntary behaviour plays an important role in causation. Whilst there are distal influences that underlie individual actions, ultimately, the unit of analysis for disease and death rates and prevalence of risk factors is the individual. Psychology can make key contributions to reducing the prevalence of risk factors in populations. It has valuable theoretical concepts and measurement tools to use in the formulation and evaluation of interventions to reduce risk of chronic illness. Two case studies in which psychological tools were used in cancer prevention are discussed — health promotion programs to reduce the risk of skin cancer and smoking related disease.

## The consequences of concussion in contact sport, and other great hits

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Concussion is frequently rated as one of the most common forms of traumatic brain injury. Moreover, contact sports appear to account for the majority of concussions recorded. However, surprisingly little is known about the sequelae of such injuries. The investigation of concussion in contact sport provided an opportunity to examine the effects of the injury in a high-risk population, and in particular, the effects of repeated trauma. Over 3 years more than

200 players took part in the project. The major findings of the project were as follows. First, players tended to down-play the presence of symptoms following the injury, probably to expedite a return-to-play. Second, taking only one pre-season measure of cognitive ability tended to underestimate the effects of the injury, as practice effects were not sufficiently taken into account. Third, the use of a Reliable Change Index assisted in determining the presence of impairment and recovery in individuals on sensitive neuropsychological tests. Recovery estimates varied from less than 2 days to approximately 1 month. Fourth, early indices of concussion severity did not appear to be related to subsequent recovery of cognitive function. Fifth, no strong evidence was found to support the notion that concussion in contact sport leads to long-term problems, or that the effects of repeated trauma are cumulative. The implications of these findings will be discussed in relation to possible changes to the management and assessment of concussion, highlighting the role of psychological testing. The findings of this project challenge popular notions of concussion both on and off the sporting field.

## The role of social comparison practices and negative affect in predicting body dissatisfaction, problem eating and muscle concerns among children

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The present study examined the utilisation of social comparison practices, and the role of negative affect in predicting body dissatisfaction, and problem eating, exercising, and muscle concern among young children. Participants were 236 children aged eight to ten years. Children's eating, exercising, and muscle concerns were examined using a modified version of the Children's Eating Attitudes Test (ChEAT). The factor structure of the modified ChEAT identified differences in problem eating, exercising, and muscle concern for boys and girls. Consistent with past findings, body mass index (BMI) was found to be the sole unique predictor of body dissatisfaction for both boys and girls. Utilisation of social comparison practices with adults was the main unique predictor of the modified ChEAT factors for boys, while BMI was the main unique predictor of the modified ChEAT factors for girls. In addition, negative affect predicted bingeing and food preoccupation for boys and dieting and muscle preoccupation for girls. Finally, a moderate relationship was found between utilisation of social comparisons and negative affect for girls but not for boys. Findings are discussed in relation to previous studies with adolescents and adults.

## Anxiety and depression in postpartum women

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Although there is much debate on the relationship between anxiety and depression in clinical populations, this debate is lacking from research on postpartum depression. Currently, the most widely used instrument for identifying postpartum depression is the Edinburgh Postnatal Depression Scale (EPDS), a scale that sums items assessing both depression and anxiety. Accordingly, many women who are identified, by their EPDS score, as suffering

'depression' may, in fact, be predominantly experiencing the symptoms of anxiety. Participants in this longitudinal controlled study were women in the third trimester of pregnancy, at six to twelve weeks, and at five to six months, postpartum (a non-pregnant, non-postpartum control group was also assessed simultaneously). Instruments used in this study include the EPDS, State-Trait Anxiety Inventory, the Depression, Anxiety and Stress Scale and the Mood and Anxiety Symptom Questionnaire. This study aims to ascertain the role of anxiety and depressive symptoms in the identification of postpartum 'depression' by looking at the symptom profiles of normal ( $< 9$ ) and high ( $\geq 10$ ) scoring women on the EPDS. The inclusion of the control group will determine whether women having babies have different symptom profiles to other women of childbearing age.

### The use of EEG Biofeedback in the treatment of attention deficits prevalent in ADHD and learning disabilities: A brief review of the literature and presentation of case examples

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Learning disabilities and Attention Deficit Hyperactivity Disorder (ADHD) are amongst the most common problems of childhood. In both conditions, problems with attention are commonly reported along with very high comorbidity with behavioural problems, learning disabilities, language disorders and anxiety disorders. Estimates of comorbidity between ADHD and learning disabilities range from 11% to 92%, with a mean of around 43%. The most common treatment for problems in attention and concentration has been stimulant medication in the case of ADHD, along with educational strategies such as self-monitoring. A new and promising approach to the remediation of attention deficits is EEG biofeedback or Neurofeedback. This paper will briefly report on the EEG Biofeedback approach, research concerning the approach and examples of case studies from the author's own practice.

### Auditory event-related potentials in ADHD: Developmental and clinical aspects

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This thesis examined the developmental aspects of auditory stimulus processing in children and adolescents with Attention-Deficit Hyperactivity Disorder (ADHD) and age-matched control children via event-related potentials (ERPs). A simple auditory oddball task was used for each study. In addition to four studies addressing ERP data in the time-domain, which extended previous research via consideration of (i) topographic analyses, (ii) components to standard stimuli, and (iii) two subtypes of ADHD as defined by DSM-IV, an additional two studies examined similar considerations in the time-frequency domain. Main results indicated that (a) in healthy children and adolescents the activation and timing of some cognitive processes related to auditory stimulus processing were age-dependent, while others showed age-independence, (b) some topographic differences from controls were common to both ADHD subtypes, while others were unique to a particular subtype, and these group differences showed different age effects, (c) event-related low-frequency activity contributes importantly to the differences in component amplitude and morphology between sites observed in raw ERPs, and (d) the event-

related low-frequency activity of the two ADHD subtypes differed from controls in entirely unique ways, while the majority of the clinical versus control group-differences evident in components from a residual ERP (i.e. the raw ERP minus the low-frequency activity) were similar between the subtype groups. Overall, the results suggest that increased diagnostic specificity would be achieved with concurrent consideration of the low and high frequency components of the ERP.

### Coping with change: Recovery from an anxiety disorder

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Individuals vary in their proneness to experience anxiety. Although some anxiety is normal, many individuals experience anxiety to the extent that it interferes with their daily activities. If severe anxiety is left untreated a large proportion of individuals develop an anxiety disorder. Individuals who have high anxiety sensitivity appear to be more at risk of developing an anxiety disorder than others. Anxiety sensitivity is basically the fear of the anxiety experience. Individuals who have an anxiety disorder usually adopt non-productive coping and use strategies associated with avoidance and an inability to cope. However, during the recovery process such individuals progressively adopt a more productive coping style. Recovery from an anxiety disorder provides individuals with a freedom not previously experienced. The presentation of two case studies demonstrates how an individual with social anxiety and an individual with obsessive compulsive disorder coped with the change in their overall well being as a consequence of recovery from an anxiety disorder.

### Reducing suffering and increasing happiness: Integrating Buddhist principles in psychological practice and professional supervision

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The possibility of integrating Buddhist principles and Western psychotherapy arises in the confluence of two basic unifying themes: reducing suffering and increasing happiness. In this study, a grounded theory framework is used to explore ways in which a Buddhist orientation might influence psychologists' work and professional supervision. In phase one, the Spiritual Orientation Inventory was completed by 203 members of the APS Interest Groups, Psychology and Buddhism, and Christianity and Psychology and the APS College of Counselling Psychologists, and reflected their relative emphasis on nine core dimensions of humanistic spirituality unrelated to perceived religiosity or association with an institutionalised religion. In the next phase two semi-structured, in-depth interviews were conducted with fourteen therapists who share a Buddhist orientation. Findings encompass the influence of Buddhist concepts on how participants view their professional role, how they think about clients, and the aims and scope of therapy. The usefulness of Buddhist techniques as interventions and the ways in which Buddhism is articulated in therapeutic and supervision settings are also examined. Appropriate contexts for the introduction of Buddhist-derived ideas or techniques are considered, and aspects of

Buddhist philosophy that might be less readily utilised in therapy are also identified.

### **Innovative clinical psychology interventions in child and adolescent services in Western Australia**

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In Western Australia in recent years a range of standardised clinical psychology interventions have been developed in group and individual format to target emotional disorder in older primary school age children. The interventions are designed for use in public mental health settings, with children who have been identified as requiring more specialised treatment within the context of a universal health program. This paper describes and explores both the beneficial aspects and the problems encountered in standardising such specialised interventions for use in clinical settings, particularly with regard to addressing the contextual and systemic factors contributing to the development of the individual child's psychological difficulties. To illustrate the complexities of the theoretical and practice issues in this area, the preliminary research results of evaluation of a pilot standardised program for children with a range of particular mental health needs are highlighted.

### **Phonological and visual coding in vocabulary acquisition**

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Previous research efforts have demonstrated the role of phonological coding in foreign language vocabulary learning. In a series of experiments, Papagno, Valentine and Baddeley, (1991) showed that articulatory suppression disrupted the learning of word-nonword pairs, but did not affect the learning of word-word pairs. However, they used only concrete, highly imageable words. In light of Paivio's dual-coding hypothesis, the present work explores the potential for visual codes in unfamiliar word learning. In a first experiment we demonstrate that articulatory suppression does impair the learning of word-word pairs when the second word of each pair is abstract. Therefore, the contribution of phonological codes to the learning of new words does not reflect the novelty of these words, but can be attributed to the absence of a visual code for the new word. This hypothesis is tested more directly in a second experiment whereby we induce an association between the nonwords and a non-nameable visual image before learning of the word-nonword pairs. This prior coupling is shown to remove the effect of articulatory suppression on paired associate word-nonword learning. These results point to the involvement of both phonological and visual codes in vocabulary acquisition.

### **Packaging good thinking for young offenders: The person and the package**

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Offering intervention to serious repeat young offenders is an enterprise that has shown promising outcomes. A

variety of psychologically based program packages have been derived which target aspects of psychological functioning empirically related to the propensity to re-offend. Much of this work has been informed by the substantial risk and resilience research of the last two decades which has revolutionised the thinking behind interventions with a range of developmental disorders. Outcome research has also revealed that programming process issues are just as important as content issues, leading to an increased emphasis on the concepts of program and treatment integrity. This paper demonstrates that a range of programming approaches, including cognitive behavioural, psychodynamic and multi-systemic packages, are found to work with young offenders. It appears that one of the most important ingredients in all successful interventions is the development of a capacity for 'good thinking' (mind) in the young person, fostered not only by the consistency that packaging promotes but also through the relationship with the therapist, who represents a model of 'mind'. This highlights the importance of the 'person', both therapist and client, and the fact that packaging does not need to imply the notion of psychologist as psychotechnician.

### **Understanding adherence to treatment in adults with Cystic Fibrosis**

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Cystic Fibrosis (CF) is now an adult disease. To maintain health, patients must adhere to an expensive and time consuming regimen of daily treatments. Adherence to treatment in CF varies between 30% and 90% and cannot be predicted reliably from demographic variables, disease severity or knowledge of the disease. This study explores the relationship between beliefs about CF and its treatment routine, a series of situational and family variables and adherence to treatment in adults with CF. The subjects for this study are 42 adults with CF, who completed the Cystic Fibrosis Perceptions Inventory and parts of the Family Environment Scale. Reported adherence is strongly related to beliefs about the importance of CF treatments in maintaining health. A significant relationship between increased rates of adherence and both family cohesiveness and expressiveness emerges, with a lower rate of adherence among those reporting high levels of family conflict. Situational factors such as routines and changes in health are reported by patients to influence their adherence to CF treatments. Beliefs about CF and its treatment appear to be crucial in maintaining adherence. Further studies are needed to test these relationships using more objective measures of treatment adherence.

### **Factor structure and psychometric properties of Frost Multi Dimensional Perfectionism Scale: An investigation on the basis of Australian population**

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The factor structure, psychometric properties and the clinical utility of the Multi dimensional Perfectionism Scale (FMPS) developed by Frost, Martin, Lahart, and Rosenblate (1990) is investigated for the first time on the

basis of Australian population. Results indicate that consistent to the recent studies four factors, instead of the original six, emerge as a result of factor analysis. The overall measure, as well as the four factors, have a high internal consistency (Chronbach's alpha ranges from .83 to .93) and correlate with the other perfectionism scales. Moreover, the scale and its four factors correlate with a wide range of anxiety and depression scales, indicating a relationship between perfectionism and psychopathology. Further investigations highlighted the presence of two purer dimensions, functional and dysfunctional perfectionism, on the basis of a limited number of items. In general, FMPS is a psychometrically sound instrument of potential value and utility in studying the construct of perfectionism and its links with psychopathology in Australia.

### **The role of parental empathy in child maltreatment risk: A new operational definition and a new measure of parental empathy**

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Theoretically, impoverished parental empathy is a core issue in all child abuse and neglect. However, controversy concerning the definition of parental empathy and a lack of reliable and valid assessment tools has resulted in the issue being largely ignored both clinically and empirically. A model of parental empathy is proposed comprising four successive factors: (1). attention to the child's signals, (2). accuracy of attributions made regarding the child's state, (3). child orientated positive emotional responsivity, and (4). helpful behavioural responsivity. The Parental Empathy Measure (PEM) developed from this model is a semi-structured interview able to provide both quantitative and qualitative data. The PEM also includes a 'faking good' scale as well as scales designed to assess levels of parental insight and parents' beliefs about children and child-rearing. A study of 50 registered physically abusive and neglectful parents, 32 matched distressed parents and 21 matched controls, found the PEM to have satisfactory to very good reliability and validity. The PEM correctly classified 92% of abusive and neglectful parents. The parental empathy model demonstrated coherence and efficacy with 73% of the variation in parenting behaviour explained. Additionally, the first three empathy variables were found to totally mediate a relationship between child maltreatment risk variables, parental insight, parents' own childhood abuse history, beliefs about children and child-rearing, drug and alcohol usage, and parenting behaviour. Thus, impoverished parental empathy appears strongly related to the risk of child abuse and neglect. Further, the PEM shows promise as a reliable and valid tool in the assessment of this risk.

### **Body image of closest-in-age adolescent sisters: Role of four theoretical explanations of body image disturbance**

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Few studies have examined familial contributions to female adolescents' body image disturbance beyond the role of parental contributions. Research indicates that sisters share similar levels of body image disturbance and engage in appearance-based social comparisons with each other. Body image disturbance, internalisation of sociocultural

pressures for thinness, sibling appearance comparisons, and parental and sister modelling and encouragement of the pursuit of thinness, as well as negative verbal commentary were assessed through anonymous self-report questionnaires. Participants were 52 closest-in-age adolescent sister pairs aged between 14 and 18 years. Sister pairs were moderately correlated with each other on measures of body dissatisfaction, sociocultural internalisation, familial modelling and involvement, and sister teasing frequency and effect. Sisters were the most potent agents for modelling weight concerns, encouraging the pursuit of thinness, and frequent teasing. The variables body mass index, sociocultural internalisation, teenage sibling comparisons, parental and sister modelling and involvement, and teasing effect combined to predict each component of body image. With respect to body dissatisfaction, body mass index, sister modelling, and teasing effect were significant unique predictors. There may be cultures of weight or body image consciousness within some families and this may have relevance for both prevention and intervention.

### **Rivalry, jealousy, and identification and eating disturbance in anorexics and their sisters**

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Clinical impressions of the relationship between anorexics and their siblings suggest one of rivalry and jealousy. Research has also found discordant siblings describe themselves as being less jealous than their anorexic sister. No study has compared this relationship with controls. Twenty six female anorexics, their closest-in-age sister and 26 age-matched control sister pairs completed the Adult Sibling Relationship Questionnaire (ASQR), the modified Younger Brother – Older Brother Identification Scale, and the Stirling Eating Disorder Scales. Anorexics with discordant sisters were compared with controls on rivalry, warmth, conflict, jealousy, and perception of sisters' jealousy. Discordant sisters perceived their anorexic sisters as more jealous than vice versa. The anorexic sisters' perception was consistent with that of their sisters. These results were significantly different from the control pairs. The anorexic and discordant sisters reported significantly more rivalry than the controls of the discordant sisters but not the anorexics. No group differences were found on warmth, conflict, or level of identification. Concordant sisters were significantly more jealous of their anorexic sister than discordant sisters. Eating disturbance in the sisters was predicted by jealousy. Therefore, anorexics and their sisters have a rivalrous and jealous relationship but the direction is dependent on eating disturbance in the sister.

### **Individual needs assessment and resource allocation in disability services**

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Issues concerned with needs assessment and resource allocation in disability services are presented and reviewed together with preliminary findings from a research project on these topics being undertaken by the Disabilities Research Unit at Adelaide University. The project is designed to evaluate the reliability and validity of a number of currently used instruments for assessing support needs

and to investigate the theoretical basis of such needs for people with a wide range of disabilities. This work is being undertaken in collaboration with the Country and Disability Office of the Department of Human Services in South Australia. Australian and overseas research has indicated a lack of standardisation in needs assessment measures across different types and levels of disability so that decisions concerning the funding of support services tend to rely on different measures, diverse professional opinion and advocacy. An evaluation involving a number of current measures and a range of disabilities will provide a theoretical model for a more empirically based, standardised system that can be used to identify needs and facilitate more equitable funding decisions for support services. Preliminary results from the project involving reliability, user evaluations and training requirements of measures will be presented and discussed.

### Older adults' views of successful ageing and relative predictors

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This paper reports on two studies. Study 1 gives a comprehensive description of what older adults believe successful ageing to be and the possible reasons for their perceptions. The qualitative nature of the study allowed for a number of themes to be explored and related to past literature that investigated the concept of successful ageing. Participants were adults ranging in age from 70 to 101 years. Study 2 examined factors that emerged from Study 1 as predictors of successful ageing. Successful ageing was measured by a number of aspects related to health and psychological well-being. Participants were 340 males and females aged between 70 and 95 years of age and were primarily Australian born. Regression analysis showed that one's attitude toward ageing and one's self-acceptance made a significant contribution to self-rated health and life satisfaction. Self-acceptance also made a significant contribution to personal growth, positive relationships, autonomy and purpose in life. Finally, adaptability and religious commitment contributed significantly to purpose in life, positive relationships and personal growth. Few gender differences emerged although female participants were found to be more flexible. The results are discussed in terms of individual differences in respect of ageing successfully. Highlighted is the need to further explore factors investigated in terms of their relevance to different cultures.

### Adolescents' perceptions of psychology

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This study investigated Year 10 adolescents' perceptions of psychology. The 314 adolescents sampled (185 males & 129 females) attended a coeducational school in which psychology was taught as a Year 11–12 subject. They completed a questionnaire about 7 VCE science subjects, their perceptions of psychology and psychologists, who they consulted for advice regarding subject choice and other sources of information. Results suggested that these adolescents had a generally accurate view of psychology but that they were most aware of occupations for psychologists in the helping professions. Females reported liking psychology and wanting to be psychologists more than did males. Parents were the most common source of advice regarding

subject choices, with males and females preferring to ask their same sex parent. Older siblings, friends and career counsellors were also sources of advice. Results gave some indication as to why psychology is a popular VCE science choice. Males and females perceived psychology to be the second 'softest' science (after information technology). Females strongly preferred psychology to traditional sciences such as physics and chemistry. Both males and females perceived VCE psychology to be one of the most useful subjects for their future education. Psychology was seen as helping to understand others, and females were seen as being more interested in others' feelings and problems.

### Mind-body relationships affecting health and quality of life: Insights from HIV/AIDS research

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The extensive and growing worldwide epidemic of HIV/AIDS has stimulated considerable research on relationships between mind and body. This address discusses the evidence for neuroendocrine-immunological mediation of the impact of psychosocial stressors on health and quality of life. The concept of 'allostatic load' (McEwen, 1998) is used as an organising framework for examining a variety of emotional, behavioural, and social factors in relationship to health in HIV/AIDS. The available evidence suggests several psychosocial factors that may affect health through neuroendocrine-immunological mediation. These include: depression, stressful life events, social support, coping, disclosure of sexual orientation, and emotional repression. Several studies indicate that an additional pathway by which distress and social support may affect health status is through health behaviour such as medical treatment adherence. Furthermore, health status appears to affect distress, indicating that the relationships between mind and body are bi-directional and complex. Several studies indicate that group therapy and other psychosocial interventions for HIV-positive persons can bolster immune status as well as improve health behaviour and reduce distress. Thus, understanding the relationships between mind and body may be critical to developing clinical interventions that can more effectively improve health and quality of life for persons living with serious illnesses such as HIV/AIDS.

### Workbook-journal significantly reduces posttraumatic stress disorder symptoms among rural women with primary breast cancer

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This study examined the effects of a workbook-journal entitled 'One in Eight: Women Speaking to Women,' on PTSD symptoms of women diagnosed with breast cancer living in rural communities. It is based upon the principles of supportive expressive therapy. We recruited 100 women through oncology and radiology clinics who live in rural areas in and nearby Grass Valley, California. Women were randomly assigned to receive either 1) educational materials on breast cancer; or 2) the experimental intervention in

addition to these educational materials. Women were reassessed at a three-month follow-up, with 99 completing their follow-up assessment. Scores on baseline posttraumatic stress disorder (PTSD) symptoms suggest that this sample prior to receiving the intervention reported a moderate to high level of psychosocial distress. Women receiving the workbook-journal showed a significant decrease in PTSD symptoms ( $p < .02$ ). They also showed significant changes in coping in terms of decreased anxious preoccupation with having breast cancer ( $p < .05$ ). These changes were most pronounced in women who had been newly diagnosed with breast cancer, compared with women whose treatment was ending. These results indicate that among rural women newly diagnosed with primary breast cancer, a workbook-journal can effectively enhance coping and reduce PTSD symptoms regarding breast cancer.

### Adolescents' perceptions of 'good' parenting

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Existing research has primarily focused on parenting styles from a parents point of view. However little is known of the phenomena of parenting from the viewpoint of the child. The current study addresses this limitation by exploring adolescent's perceptions of their parents and parenting. Semi-structured interviews will be reported for 40 adolescents (aged 14–16 years). Findings indicate that overall the adolescents consider the setting of explicit rules and boundaries to be extremely important. Furthermore, they indicate that it is important to feel that their parents trust and offer them support rather than dominant control. Some believe their parents' expectations are too high, others considered their parents to be overly protective. Open, interactive communication is identified as the most important aspect of a good relationship with parents. According to the participants adequate communication required the parent to be open to listening and allowing them to feel safe to talk openly. Mothers are considered to be like friends whilst generally fathers are considered to be more distant. The participants' reports indicate that they can confide in their mothers with certain restrictions. Future research exploring the difference between perceptions of mother and father relationships is recommended.

### Body image dissatisfaction in childhood: Structure, stability and continuity

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Previously believed to be associated with adolescent development, recent research has indicated that perceived body image dissatisfaction (PBID) is also prevalent within pre-adolescent populations. However to date little is known about the actual development or stability of this construct within childhood. The current study examines the psychosocial correlates of PBID amongst a group of 369 pre-adolescent children (aged 7 to 10 years), over an eighteen month period. Findings of the study indicate that PBID is prevalent amongst both boys and girls from as early as seven years of age. Those factors considered to be important predictors of PBID in adolescence (i.e., self-esteem, perceived evaluation, teasing) were also found to significantly predict PBID in childhood. However, these factors account for only a small percentage of the variance PBID,

(10%). The construct of PBID was found to be continuous across the eighteen month time frame. Affective dissatisfaction remained stable over time, whereas cognitive dissatisfaction was found to increase. Findings of this study raise important questions regarding the manifestation of PBID and its proposed association with the development of psychopathological eating behaviours.

### Minimising harm, maximising benefit: A checklist for the incorporation of spirituality into counselling

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This theoretical paper addresses the question of whether it is of benefit to clients to incorporate spirituality into the practice of counselling. The cultural and historical contexts for this debate are explored, including the late 20th Century renewal of interest in spirituality as a dimension of human experience meriting consideration by psychologists. Challenges in defining and differentiating the concepts of spirituality and religion are examined, and limitations within existing models are identified, including the narrowness of their applicability and their failure to consider the influence of the counsellor's own spiritual and religious values in therapy. A checklist of considerations is identified for use in guiding the critique of existing approaches and the development of new models. It is argued that spirituality should be included in the counselling process if the client wishes; however this needs to be addressed honestly and with critical reflection on the part of the counsellor, if the client is to benefit.

### A discursive psychological approach to the construction of gender identity in elite sport

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Discursive psychology focuses upon how representations are constructed within and constitutive of the social practices that are found in language. Gender is conceptualised as a multifaceted, multidimensional, multifactorial, dynamic, and variable concept that is negotiated within the local interactive context where culture, history, and social contexts are reflected within discursive practices. Accordingly we make sense of ourselves as women and men within social interactions through the cultural and personal resources that are made available to us in our discourse. Interview data from 2 male coaches is presented that explores how gender identity is enacted and negotiated in everyday talk using a discursive analysis. Interest centres on the interpretative repertoires (IRs) and reflexive positions (RPs) that each participant uses to prescribe themselves as men. Analysis suggests that participants used gender related IRs to position themselves as particular types of men (RPs) that was specific to the social, historical, cultural, and local interactional context. Discussion centres on the ideological function of such talk and how gender may need to be re-conceptualised in sport and exercise psychology with consideration of such discursive findings.



## Utility of a Crisis Triage Rating Scale in a rural 1800 mental health telephone service

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In 1999 NSW Health provided funds for the establishment of a free call 1800-Mental Health Information and Support Service (1800-MHISS) in the Mid Western Area Health Service. A major component of the 1800-MHISS is its triage function, which primarily determines whether a Mental Health Service response is appropriate, and if so, the level of that response. To aid in decision-making the Crisis Triage Rating Scale (CTRS) was embedded within the 1800-MHISS triage protocol. The study aimed to: improve the efficiency of the 1800-MHISS assessment process; assess whether the CTRS accurately identified the level of client risk and referrals that required the immediate activation of the extended after hours team (EHT); refine the CTRS scoring and decision making criteria in light of the above objectives. A total of 2113 full triage assessments were completed over a 15-month period. The study compared triage assessment ratings completed by the 1800-MHISS telephone workers with 300 ratings completed by EHT clinicians at the conclusion of their face-to-face callout. The findings are discussed in relation to the overall utility of the CTRS within the 1800-MHISS and the relative advantages of adjusting CTRS cut-off points for the identification of risk.

## Testing D'Andrade's model of folk psychology: Is optimism related to a theory of mind?

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Folk psychology is a commonness understanding of the mind. It incorporates a theory of mind through which people conceptualise mental states and processes. The present study examines a folk model of the mind as proposed by D'Andrade (1987, 1995). In particular, three of D'Andrade's propositions are tested: The categorisation of mental states; the controllability of mental states; and the causal relationship among the mental states. In addition, dispositional optimism is explored in relation to D'Andrade's model to detect individual differences in folk conceptualisations. Five measures relating to D'Andrade's propositions are constructed for the present study. Additionally, the Revised Life Orientation Test (LOT-R; Scheier, Carver & Bridges, 1994) is used as a measure of dispositional optimism. These six measures are applied to a sample of 65 university students. Overall, D'Andrade's model of folk psychology is partially supported and his three propositions partially confirmed. Optimism is positively correlated with two causal links within D'Andrade's model. Namely, the link from thinking to feeling and intending to acting. These results suggest that optimists may conceptualise the causal relationship between mental states differently from pessimists. Results are discussed in relation to clinical application.

## Teaching psychology in the 21st century

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Those of us engaged in the teaching of psychology are presently confronted with a number of challenges. These include rising student numbers, diminishing support from

non-academic staff, introduction of new techniques and technologies, devolution of tasks from central administration to course co-ordinators, and increasing reporting requirements. Moreover, we are witnessing a change in the role of universities from providers of education to providers of degrees and consequently, a change in students' attitudes and expectations. These changes pose challenges to university teaching that we cannot ignore. Because these changes/challenges exist on several levels, they require answers on several levels. On the level of teaching practice we can utilise new technologies as a replacement for lost support while avoiding the trap of seeing technology as the answer to all questions and making it the centre of our efforts. On the levels of administration, planning, and policy development we can become involved in the decision making so that new developments such as increased emphasis on measurable outcome do not impose additional burdens, but can be used in a constructive manner. I would like to provide some examples from my teaching practice that address these challenges and may be of interest and practical use to others.

## The measurement of unrealistic optimism: Do the different scales really measure the same thing?

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The present study directly compared the different 'measurement' techniques commonly used to detect the pervasive phenomenon of unrealistic optimism. Fictitious diseases were used to remove the confound of intercorrelations between severity, probability and prior experience. Participants had no prior experience with these disorders and the severity and probability of the diseases were directly manipulated in a fully crossed design. Participants were asked to compare themselves to their average peer to produce a directly comparative measure of unrealistic optimism. Participants were also asked to make absolute judgements about their own and their average peer's risk on both a verbally labelled and numerically labelled scale. Indirectly comparative measures of optimism bias were calculated from these absolute judgements. While the direct measure indicated significantly more bias for improbable diseases, the indirect measures both indicated significantly less bias for improbable diseases. The indirect measures of optimism bias were calculated from the difference between participants' ratings of their own and their average other's risk for each disease. Although this difference score is the standard method of obtaining indirect measures of optimism bias, a ratio score may actually be a more valid method of inferring comparative optimism from absolute risk scales.

## Melatonin as a hypnotic: Miracle or myth?

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Insomnia is a prevalent problem in the community and is known to increase with age. Indeed, an estimated 25–40% of the population over 65 years report chronic insomnia. It is proposed that the age-related increase in insomnia is mediated by an age-related decline in the pineal hormone, melatonin, which is reported to show sleep promoting properties. This hypothesis was tested in four studies. In the first study we examined total melatonin excretion in a large sample of sleep maintenance



insomniacs ( $n = 56$ ) and good sleeping controls ( $n = 52$ ) aged between 55–80 years. Subjects collected their urine in 12h aliquots (0800–2000 and 2000–0800h) for five days. Urine samples were then analysed for the melatonin metabolite 6-sulfatoxymelatonin. In the second study, 16 insomniacs and 16 controls participated in five day protocol, consisting of four nights of ad-lib sleep followed by a 26h constant routine where subjects were maintained under conditions of constant wakefulness. Polysomnographic (PSG) sleep measures were collected on the ad-lib sleep nights, rectal and hand temperature were measured continuously over the entire study, and 2h urine samples for melatonin analyses were collected over the constant routine. In study three, we investigated the effects of 5mg oral rapid-release melatonin administered at 1400h on body temperature and sleep latency in twelve aged sleep maintenance insomniacs and ten controls. Sleep latency was measured at one hour intervals from 1100–2000h. In the fourth study, we investigated the effects of 0.5mg sustained-release transbuccal melatonin patch administered at 1900h for four evenings on PSG sleep in ten aged sleep maintenance insomniacs. We found no evidence for the melatonin-deficiency model of insomnia nor for melatonin-replacement as a treatment for age-related sleep maintenance insomnia. As well, meta-analysis of the existing literature failed to support the contention that melatonin declines with age. However, additional investigations did reveal support for the physiological hyperarousal model of insomnia. Specifically, compared to controls and independent of activity and posture, insomniacs showed elevated nocturnal core body temperatures. In summary, sleep has nothing to do with melatonin but it does with nocturnal core body temperature — if you're hot, you're not! Further work is now in progress examining the effect of cognitive arousal on core body temperature and sleep.

### The relationship of work support and organisational climate to the individual morale, individual distress, and the levels of absenteeism of rural nurses

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An exploratory study looked at the relationships between work support, and organisational climate, with individual morale, individual distress, and absenteeism outcomes of 172 rural nurses working in Southern Queensland. A model was developed that predicted that individual morale and individual distress would mediate the relationship between the exogenous variables in the model (work support, and organisational climate) and the level of absenteeism. Data was collected from nurses employed at six hospitals located in the Southern Downs District Health Service. The absenteeism data was obtained from the employee information report and listed total monthly absenteeism rates for the nursing staff at each of the six hospitals. Organisational climate was a significant predictor of individual distress and both work support and organisational climate predicted individual morale, while work support and individual distress significantly predicted absenteeism. This study concluded that the establishment of better support networks for rural nursing staff could assist in reducing levels of absenteeism.

### Validation of an observer-rating measure of emotional intelligence

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Emotional intelligence can be defined as the ability to identify, harness, and regulate emotions in the self and others. Emotional intelligence theoretically helps a person succeed in multiple realms of life. Existing measures of emotional intelligence either rely on self-report or involve a test of maximum performance. The self-report measures are limited by the possibility of faking good. The test measure is limited by uncertainty about what a correct answer is and by the length of time needed to administer the test. This pair of studies explored the feasibility of developing a 33-item observer-rating measure of emotional intelligence that avoids these limitations. The first validation study showed that the items had a Cronbach's alpha of .98. The study also showed that higher observer ratings of students by their psychology instructor correlated significantly with higher mean final grades for all courses in the term and with self-reported adjustment to college. A second study showed that supervisor ratings of emotional intelligence in psychology practicum students correlated significantly with supervisor ratings of performance on site. Altogether, these findings provide initial construct validation for the observer-rating scale of emotional intelligence because they show the theoretically predicted association between emotional intelligence and life success.

### The effectiveness of psychological intervention for chronic headache

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This paper will begin by reviewing the literature on psychological interventions for migraine and tension-type headache. It will highlight the positives, such as the evidence that a range of psychological treatments are quite effective in reducing headaches and associated symptoms, and these effects endure for at least three to six years. It will also highlight the negatives, such as the treatments are not universally effective and we do not understand fully treatment mechanisms. The paper will go on to argue that the major breakthroughs in this area occurred in the late 1970s and ask the question as to why more progress has not been made in the last two decades? The position taken will be that psychologists have adopted an approach that can be described as too 'clinical' and too 'conservative'. For example, psychologists have accepted prevailing medical views with respect to how headaches should be conceptualised, and have developed treatment approaches that are mere derivations of existing interventions such as stress management training. It will be argued that more innovative approaches are needed that draw on a greater range of psychological and medical science.

### Deficits in attentional processes following cannabis and alcohol use

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MMN and P300 are invaluable measures allowing the investigation of processes underlying information processing, attention, and memory. The long-term abuse of cannabis and alcohol is thought to cause a marked

degradation in these subtle processes reflected in reduced P300 amplitudes and increased MMN and P300 latency. ERP data was recorded from 11 non drug user controls, 11 regular alcohol binge drinkers, 11 long term cannabis users, and 11 long term cannabis users/alcohol binge drinkers. P300 was elicited in response to rare stimuli ( $p = 0.15$ ) presented in a visual oddball paradigm with MMN gained from the auditory presentation of common and rare ( $p = 0.1$ ) tones. Binge alcohol drinking was not found to affect cognitive functioning as measured by MMN and P300 amplitude. P300 latencies were found to be significantly longer for cannabis users and binge drinkers were found to have shorter latencies than their non-binge drinking counterparts. Long-term cannabis use, in the absence of binge drinking behaviour, caused reduction in P300 amplitudes and a trend toward increased MMN. It is concluded that cannabis use over a prolonged period causes subtle cognitive deficits related to attention, complex information processing, and resource allocation.

### Personality profiles of Malay students in Malaysia and Australia using the NEO PI-R

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The paper reports preliminary findings of the personality profiles of Malay students using the Big Five measurement inventory. Two studies are conducted, both using Malay students studying in Malaysia (Study 1,  $N = 451$ ) and Australia (Study 2,  $N = 114$ ). The original NEO PI-R Personality Inventory (Costa & McCrae, 1995) is translated into Malay and subjected to item, reliability and factor analyses. Five factors are extracted with eigenvalues between 1.00 and 7.58. Reliability coefficients measured in the first study for neuroticism, extraversion, openness, agreeableness and conscientiousness domains are 0.92, 0.87, 0.80, 0.81 and 0.88 respectively. The second study's reliability coefficients improved slightly in every domain except the openness. Mean level comparisons in both of the studies suggested that Malay students in Malaysia are higher on neuroticism, especially on anxiety and self-consciousness facets, than their colleagues studying in Australia. On the contrary, Malay students in Australia are found to be higher on extraversion and openness than local Malay students. Studies also indicate that these differences in the personality traits profiles and the level of confidence in academic major decision-making are significantly correlated.

### The path and the goal: A comparative study of Zen concepts in Japanese martial arts and the tenets of Western sport psychology

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This paper presents findings from an investigation of similarities and differences between Zen concepts as they apply to the traditional Japanese martial arts and the concepts of Sports Psychology as they apply to Western sport. Zen components contained within the traditional martial arts are compared with published research on the theoretical underpinnings of sport psychology. Participants ( $N = 7$ ) were experienced practitioners recruited from traditional Japanese martial arts. A structured open-ended interview format was chosen, and ten questions were asked of each participant to obtain rich description of a number of areas in which the underlying philosophies might be

expected to be present, observable, or directly related to active participation in a martial art. The interview data was coded into meaning units using coding methods to identify common patterns, trends, concepts, and ideas. These data were then compared with existing knowledge and theory on Sports Psychology. Results indicate a strong case for arguing that Zen and Sports Psychology are complementary approaches to sport, although some fundamental differences remain. The study highlights the need for further research in the areas of cross-cultural differences within Sports Psychology, and identifies the possibility of the confounding impact of the Westernisation of Japan.

### Gender differences in bulimic symptomatology: A longitudinal evaluation of contributing factors

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Most past research has focussed on an evaluation of factors related to bulimic symptomatology in females, and has used cross sectional research designs. The current study was designed to examine factors related to bulimic symptomatology among adolescent boys and girls at three points in time over a 12 month period. A biopsychosocial framework was used to examine factors related to bulimic behaviour. Participants in the study were 547 boys and 743 girls who completed a questionnaire at Time 1, 2 and 3. The variables assessed within the biopsychosocial framework were BMI, puberty (biological variables) self-esteem, depression, anxiety, stress, ineffectiveness, perfectionism, perception of body size and shape (psychological variables), and perceived influences of mother, father, siblings and peers to lose weight (sociocultural variables). Structural equation modelling was used to investigate the hypothesised model to explain weight loss over time. The final model was similar for boys and girls. For girls, pressure to be thin was represented by maternal discussion about weight loss and sibling encouragement to lose weight, and for boys was represented by maternal encouragement to lose weight. As expected, perceived pressure to be thin was directly related to perception of body size and shape, body dissatisfaction and dieting. Also, as predicted, perception of body shape and size was directly related to body dissatisfaction, which, in turn, was related to both dieting and depression. Dieting was found to be directly related to depression, and both dieting and depression were directly related to bulimic symptomatology both cross sectionally and longitudinally. The results of this study demonstrate the importance of considering biological, psychological and sociocultural factors in the prediction of weight loss behaviours, and also examining how these factors influence weight loss and bulimic symptomatology over time.

### Maintenance and persistence of a taste hallucination

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This study explored the factors involved in the maintenance and persistence of a suggestion for taste hallucination. Twenty four high and 24 low hypnotisable participants were given a suggestion for a sour taste. Half were given the suggestion during hypnosis and half were given the suggestion in a waking, imagination condition. For half the participants, the taste suggestion was given and

tested three times (twice during hypnosis and once after hypnosis) and for the other half, the suggestion was given and tested twice (once during hypnosis and once after hypnosis). Notably, when the suggestion was given during hypnosis it was not cancelled. In general, highs rated their experience of the taste as stronger, less effortful and more real than lows. Also, there was no difference in hallucination strength between participants in the hypnosis and imagination conditions. However, highs who received the three suggestions maintained the taste to a greater extent than highs who received only two suggestions; that is, the additional suggestion and test helped the taste to persist. These findings are discussed in terms of an interactionist perspective of hypnosis and the combined influence of individual differences, situational factors and the hypnotist's message.

### In favour of tolerance: How young adolescents justify their stance about racial tolerance

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As part of a larger study, 72 students aged between 11 and 12 and 15 and 16 were asked to make judgements and justify their choice about dilemma-like stories based on real life events and relevant to the Australian context. The stories involved individuals of Indigenous, Asian and English descent. Content analysis of the data highlighted three ways young adolescents justified their support in favour of racial tolerance. The most common set of justifications appealed to justice, with responses based on issues such as equality and fairness. Another set of justifications appealed to both justice and empathy or perspective taking. The final set of responses concerned reflective thinking or reasonableness. In addition, two major constraints about racial tolerance also emerged. In the first instance, students supported racial intolerance by appealing to ideas related to freedom of speech, endorsing the rights of individuals to express their prejudicial beliefs openly and freely. In the second instance, students justified their intolerant stance on the basis of their own perceived negative personal experiences with disliked others. Analysis showed a significant association between gender and response type. More males appealed to the need for reflective thinking as a way for justifying racial tolerance whilst more females appealed to justice/empathy.

### The importance of pet ownership for children's well-being

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The present study explores the relationships between self-esteem, personality, and human and pet attachment. The sample includes 145 12 to 14 year old children. Data are based on pet owners' and non-pet owners' reports on the Coopersmith Self-Esteem Inventory, the social withdrawal scales of the Personality Inventory for Youth and the Inventory of Parent and Peer Attachment. In addition, pet owners' ( $n = 165$ ) reports on the Companion Animal Bonding Scale and Emotional Attachment to Pets Scale are examined. No differences in self-esteem are evident between pet owners and non-pet owners. Among pet owners, uninhibited adolescents demonstrate higher levels of human attachment and self-esteem, than inhibited adolescents; with only parent

attachment emerging as a significant predictor of self-esteem. However, all attachment relationships (human and pet) are significant predictors of self-esteem in the inhibited group of adolescents. Also, pet and peer attachment correlate significantly in the latter group. All pet-owners report high attachment to their pets. The findings have implications for interventions with socially withdrawn adolescents. Future exploration of the human-human and human-pet relationship is warranted.

### Regulation through registration: The impact of recent reforms to registration Acts on the practice of psychology

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Registration Boards in all States and Territories are vested with powers to investigate complaints against psychologists and, where deemed appropriate, exercise disciplinary powers and impose sanctions for inappropriate, unethical and/or unprofessional behaviour. Recently, registration boards in some jurisdictions have demonstrated an increasingly broad ambit in their activities and heightened levels of activity, including more proactive approaches to the investigation of alleged misconduct by psychologists. Recent legislative changes to some registration Acts facilitate and thereby increase the likelihood of this development. This paper examines the contemporary trend towards more active regulation of the practice of psychology in Australia by State and Territory registration boards and explores the implications for practising psychologists.

### Psychology of volunteering: Defining an emerging field

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Volunteering behaviour has not as yet attracted much attention from both research or practitioner psychologists. On the other hand, there is currently much interest from nonpsychology areas. Since 2001 is the International Year of the Volunteer, this seems an unfortunate omission. An attempt is made to outline psychology's interest in volunteering and set defining parameters. The few existing studies published are briefly reviewed and categorised within the parameters. Subareas for investigation suggested include: intrinsic/extrinsic motivation, personality factors, predictions of satisfaction and stress, role modelling and replacement function and volunteer/task match determination. It is argued that in the coming decade or so psychology can ill afford to continue to ignore this politically and socially important phenomenon.

### Psychological factors in illness

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Psychological factors are emerging as major contributors to illness and the maintenance of health. The new emerging speciality of Health Psychology spans population-based issues such as the influence of lifestyle on disease and health promotion, and the role of individual differences and methods of individual treatment (Clinical Health Psychology). This paper will review the breadth of research that

exists in the subspecialty Clinical Health Psychology. This will be discussed in the context of theoretical models highlighting the role of cognitive and behavioural factors in disease onset, progression and susceptibility. There is growing evidence for the role of cognitions such as health beliefs and individual differences in personality, self-efficacy and negative affect on health related outcomes. These influence diverse outcomes including pain tolerance, adherence to treatment, utilisation of medical services, physiological processes, and perhaps even survival. A particular focus of the paper will be on the role of depression and anxiety whether it is a consequence or an etiological factor in coronary heart disease. There are biologically plausible mechanisms which might explain how psychological factors give rise to cardiovascular disorders. Other topics will include evidence for psychosocial intervention trials improving adjustment, particularly in the area of cancer, and how to 'break the bad news'. Finally, the paper concludes with professional issues relevant to Psychology and health.

### Retrieval from short-term verbal and visuo-spatial memory

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Using a completely balanced 2 X 3 within-subjects design, 15 undergraduate students (10 female) were exposed to memory sets of 2, 4, and 6 items in a verbal and visuo-spatial condition. In the verbal condition, 5-letter words were presented sequentially at the centre of a computer monitor. For the visuo-spatial condition, flashes of light were presented in random locations on an imaginary clock face around a central fixation point. Each memory set in both conditions consisted of 60 trials. For each trial, the participant had to indicate by a key press whether a probe item was or was not a member of the set. Responses and reaction times (RTs) were recorded by the computer. Results for the verbal condition indicated an exhaustive search of the memory set with each item adding approximately 35 msec to search time. RTs for the visuo-spatial task were significantly ( $p < .05$ ) longer and although there was a significant linear trend with set size, estimates of search time per item varied from 5 (2 vs. 4 items) to 50 (4 vs. 6 items) msec. Results support the distinction between verbal and visuo-spatial components of working memory but suggest the functional characteristics of these two systems are different.

### Cognitive risk factors for sexual offending

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Cognitive factors are implicated in the aetiology or maintenance of many psychological disorders. Young (1994) has proposed that early maladaptive schemas (EMSs) are involved in psychological disorders that are pervasive, lifelong, resistant to treatment, and manifest in relationship difficulties. These criteria are generally applicable to paraphilias. Also, implicit in the content of many treatment programs for sex offenders is the notion that cognitive factors, particularly misinformation or maladaptive attitudes regarding sexuality, are involved in the aetiology or maintenance of sexual offences. In this study, 46 convicted sex offenders in two maximum security prisons were assessed for EMSs, using two of Young's questionnaires, and for strength of belief in eight popular myths regarding sexuality,

using the Ideas about Sex Questionnaire. Compared to a control group ( $N = 46$ ) of non-offenders, sex offenders overall showed significantly higher rates of EMSs on both measures. Analysis by ANOVA found that sex offenders showed significantly higher rates of EMSs in Young's domains of Disconnection and Rejection, Impaired Autonomy and Performance, Other Directedness, a finding consonant with the idea that the identified EMSs are risk factors for becoming a sex offender. In contrast, sex offenders did not show a higher rate of belief in popular sexual myths, suggesting that sexual misinformation is not necessarily a risk factor for sex offending. The implications of these findings for the psychopathology and treatment of sexual offending are discussed.

### The effects of mentation condition on the performance of worriers and nonworriers on verbal and spatial tasks

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In this study we tested the assumption that the verbal character of worry would interfere with the performance of worriers relative to non-worriers who were first exposed to noncontingent failure and then assigned to a one of three mentation conditions: worry, present-oriented mentation (POM), and relaxation. We expected that relative to nonworriers, the POM and worry conditions would exacerbate negative affect, diminished state self-esteem and anxiety among worriers, and that this would be manifest in poor performance on verbally mediated tasks (anagrams and remote associate problems) but not a visually mediated task (unicursal tasks). While in general terms, worriers were more adversely affected by the failure manipulation, reporting greater anxiety, lower performance self-esteem and greater negative affect, there were no performance differences between worriers and nonworriers on any task. While as expected, verbal thought was predominant during the POM condition and visual thought during the relaxation condition, no differences between verbal and visual thought were apparent during the worry condition. Again contrary to expectation, worriers reported more visual thought during the worry condition than nonworriers. These findings challenge assumptions about the distributions of verbal versus visual thought for worriers relative to nonworriers.

### Communication: The sine qua non in all relationships

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Communication is the means by which we make ourselves understood. In order for communication to be successful, it needs to involve a sense of exchange, involvement and the belief that one's communication is being heard and considered. It is a natural process but one which is often compromised in our relationships. This paper will address the issue of communication across a range of workplace situations. Data from two studies will be presented to illustrate the various roles of communication. The impact of top-down communication as a major contributor to nurses' level of stress during hospital restructuring while communication with peers provided a sense of social support to buffer this stress. Lack of consultation by management during times of change increased the perceived impact of change and levels

of burnout in nurses. Lack of communication between management and staff will also be shown to be related to job dissatisfaction and intention to quit.

### Coping after temporal lobectomy for intractable epilepsy seizures

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Success rates of 60-80% have been shown for temporal lobectomy surgery in the alleviation of formerly intractable epileptic seizures. Although this success rate is good in terms of seizure removal, after-effects are reported to include depression and difficulties in coping with a new, non-epileptic identity in a significant minority of cases. The aim of this study was to evaluate psychosocial (non-neurological) factors associated with post-surgery adjustment in a sample of individuals who had experienced temporal lobectomy. All patients from the Melbourne Epilepsy Centre receiving temporal lobe surgery for epilepsy in the last 7 years, and who were at least 6 months post-surgery, were surveyed ( $N = 93$ ) regarding perceived preparation for surgery, pre- and post-surgery adjustment, perceived control over surgery, and surgery satisfaction. The response rate was 61% ( $N = 55$ ; 17 males, 35 females; ages 20-64 years; 6-79 months post-surgery). Results indicated an overwhelming improvement in psychosocial adjustment post-surgery. Pre- and post-surgery adjustment were correlated with perceived preparation for surgery (e.g., amount of understandable information received, number of people with whom surgery was discussed). A key variable in the prediction of both satisfaction with surgery and post-operative adjustment was perceived control over surgery, that is, the belief by the patient that he or she had made a truly informed and non-pressured decision about having the operation. Interestingly, pre-operative adjustment was negatively related to satisfaction, suggesting that those who were more accepting of their epilepsy had somewhat more difficulty in coping with their changed post-operative status.

### The challenge of discriminant validity in the assessment of psychopathology

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One of the most replicable findings in the realm of psychopathology is that an individual receiving one diagnosis has a dramatically increased chance of meeting criteria for at least one additional diagnosis. This finding, referred to variously as comorbidity, co-occurrence, or dual diagnosis, reflects a major challenge to the research community in the form of establishing the discriminant validity of these constructs and related measures. Discriminant validity issues are central but often neglected concerns within the domains of both taxonomy and assessment in psychopathology. This talk reviews a variety of models for understanding the widespread finding of comorbid diagnoses, examines natural and artifactual contributions to the phenomenon, and discusses some potential solutions. Two possible explanations carry particular implications for psychopathology; first, that there are important communalities between mental disorders that are rarely the focus of study and are poorly understood, and second, that many methods of constructing assessment measures are fraught with problems that lead to questionable discriminant validity.

### Self-esteem and gender conformity in homosexual and bisexual men

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This study investigates the relationship between gender conformity and self-esteem in homosexual and bisexual men. It specifically explores the role of femininity, which has been identified as playing a significant role in the well-being of men. Respondents consist of 204 homosexual men and 26 bisexual men, recruited through a number of community and social organisations, gay press and the internet. Respondents completed a paper or internet-based questionnaire measuring adult self-esteem, boyhood gender conformity, and adult gender conformity. Instruments used were the Rosenberg Self-Esteem Scale, Boyhood Gender Conformity Scale, and The Australian Sex-Role Scale. Amongst homosexual men, boyhood gender conformity, specifically boyhood femininity was found to be a significant predictor of adult self-esteem. The strongest predictors of adult self-esteem are 'negative feminine' and 'positive masculine' traits and behaviours. Bisexual men are not significantly different from the homosexual men on any of the measures of self-esteem or gender conformity. Therapeutic implications are discussed for working with homosexual men.

### The search for meaning: Incorporating meaningfulness in rehabilitation studies

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Patients who engage in meaningful daily activity have reported less severe pain symptomatology and improved wellbeing. The significance of meaningful activity in pain management and rehabilitation however does not appear to have been extensively researched. This study aims to explore the concept of meaningfulness and develop a meaningfulness measure. Two hundred and sixty four Australian adults, 119 males (45.1%) and 145 females (54.9%) aged between 25 and 65 years, participated in the study. Mean age of female participants was 44.1 years ( $SD = 10.6$ ) and male participants  $M = 44.6$ ,  $SD = 10.6$ . Items were generated for a Daily Activity Questionnaire (DAQ) and a Meaningful Daily Activities Questionnaire (MDAQ). Participants rated how often and how personally meaningful were 32 daily activities. Factor analysis identifies nine separate factors on the DAQ and the MDAQ, accounting for 68% and 63% of the variance respectively. The most frequent category of activity was domestic chores (11.6% of the variance) and the most meaningful activities were interpersonal contact and support (11.99% of the variance). The DAQ and MDAQ were reliable and valid and variations according to demographics were identified. This study clarifies that meaningfulness can be measured. The next step is to implement this measure in a study of pain.

### Developmental dyscalculia: An information processing perspective

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Developmental dyscalculia is one of several causes of children's inability to learn mathematical concepts and perform mathematical computations. It is characterised by varying classifications of dyscalculia, imprecise diagnosis

and remediation procedures. As well, a number of sub-types of developmental dyscalculia have been identified. The present study examined the relationship between mathematics procedural knowledge and a number of relevant information processing strategies for 190 third to fifth graders. An operational definition of developmental dyscalculia identified a group of dyscalculic students at each level. The influence of the ability to symbolise, to read number sentences, to encode numerals, to compute elementary number facts, and to sequence numbers, to increment/decrement by 1 on whole number computation ability and word problem solving ability were used to assess information processing ability. Each of the information processing tasks examined the capacity to process numerical information that increased both in quantity and complexity. As well, these tasks permitted the analysis of different types of dyscalculia on the display of numerical procedural knowledge. The investigation identifies the factors that characterise dyscalculic performance at each year level, both in terms of the types of information processing ability displayed and in the amount of information that can be processed efficiently. Developmental trends across the three grade levels are reported and the concept of a 'critical mass' of mathematical processing knowledge necessary for computational performance is explored.

### Sub-types of reading disability: Psycholinguistic factors and information load

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Young readers display reading disabilities for a number of reasons. The identification of sub-types of reading disability, each characterised by a unique set of learner-relevant features is necessary both for efficient diagnosis and instruction. The present study investigates the psycholinguistic and perceptual factors in a sample of 150 Grade 1 students identified as displaying reading disabilities. A battery of 24 tasks assessing ability in the areas of listening comprehension, receptive and expressive vocabulary, receptive and imitative syntactic awareness, verbal analogies, short term memory for sentences, words, objects and letters, phonological and phonemic processing, rapid naming ability, orthographic processing, learning an orthographic code, visual symbolic processing, nonverbal reasoning matching spoken and written forms of words were used to identify clusters of literacy difficulty. Literacy measures included reading prose and individual word, letter-sound decoding, spelling, creative writing and knowledge of text. Confirmatory factor analysis identified a complex factor structure of six main clusters, several with sub-clusters. A key variable that influences both initial reading and spelling scores and the literacy gain scores after a term of targeted instruction was the information load on several of the tasks that young readers could carry.

### Speed and accuracy of road sign perception in older adults with and without early Alzheimer's disease

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Accurate and timely perception and understanding of road signs is required for safe driving. Age-related changes in visual acuity, speed of processing, and cognitive functioning may adversely affect road sign apperception. An

experimental protocol to present a range of road signs filmed naturalistically at varying speeds was designed for computer presentation. The road signs used correspond to those in a New Zealand Land Transport Safety Authority assessment tool designed to assist GPs in assessing older driver safety. Early Alzheimer's disease (AD) patients were compared with age-matched and younger controls on their speed and accuracy of road sign recognition and knowledge. All participants were still active drivers. The three groups differed in their reaction time both in relation to the speed at which the clip was displayed ( $F(2,13) = 19.48, p = .00$ ) and the specific road sign that was displayed ( $F(2,13) = 19.48, p = .00$ ). Sign recognition declined with both increasing age and impaired cognitive state, dropping from accuracy rates of 100% in the younger controls, to 88% in older controls to 74% in AD patients. No significant differences between the groups emerged on an oral test of road sign knowledge. Findings are discussed with respect to road safety design issues and older adult drivers.

### The application of Erikson's psychosocial stages to Holocaust survivors

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Erik Erikson (1963) has postulated that there are eight stages of psychosocial development, with each stage having its own crisis requiring resolution. The purpose of this study was to assess whether or not Holocaust survivors have successfully dealt with the eight stages. 50 videotaped autobiographical interviews of Holocaust survivors (25 children at the end of the Holocaust), were viewed. Responses were coded as either representing a favourable outcome to the crisis or an unfavourable outcome. Results indicated that the survivors demonstrated favourable outcomes for all of Erikson's psychosocial stages except for trust versus mistrust, where the latter resolution predominated. Internal analyses compared male and female survivors, those who were children versus those who were older at the time of the Holocaust, and those who were identified as Jews during the persecution versus those who were physically concealed or 'passing' as Christian.

### Evaluations of dieting prevention messages by early adolescent girls

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A better understanding of the manner in which girls evaluate specific messages intended to dissuade against dieting may assist in improving the effectiveness of eating disorder prevention interventions. This study aims to examine: (1) whether a set of 7 messages would be rated by girls as more strongly than a control message on dimensions of credibility, interest, influence on feelings about body and self, and likelihood of going on a diet in the future; and (2) whether recipient grade and eating disorder risk status would predict how positively messages were received. Grade 7 ( $n = 149$ ) and Grade 8 ( $n = 89$ ) girls were assessed for eating disorder risk factors. A week later they rated each 2-3 minute message following its presentation on video. The messages were generally rated more positively than the control on the evaluative dimensions,



and two messages, skipping meals may lead to overeating, and fad diets in the media are misleading, were better received than the others. Approximately 30% of girls believed the messages would reduce the likelihood of them dieting in the future. Girls of different risk factor status did vary in their reaction to messages. Implications for prevention interventions are discussed.

### **Supervisory identity development and its relationship to supervisory experience, counselling experience and training in supervision**

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The relationship between supervisory identity development and supervisory experience, counselling experience, and training in supervision was investigated in this study. A developmental model of supervisory identity development was utilised, the Supervisor Complexity Model, in both the conceptualisation of supervisory identity development and the measurement of supervisory identity development. Consequently, supervisory identity and some factors thought to effect its development are reviewed. Counselling professionals likely to be engaged in providing supervision services were surveyed by mail. Participants completed a measure of supervisory identity development, the Psychotherapy Supervisor Development Scale, and also indicated their supervisory experience, counselling experience, and training in the area of supervision. Multiple regression analyses were then performed to examine the relationship between supervisory identity development and supervisory experience, counselling experience, and training in supervision. Results indicate that supervisory experience and training in supervision account for a significant proportion of the variance of supervisory identity development scores. The implications of these findings, regarding supervisor development theory and practical applications, are reviewed.

### **The Tiger Community: The application of the principles of online therapy to the treatment of obesity**

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Traditional treatments for obesity are effective in achieving short-term weight-loss results, however they are ineffective in achieving significant results long-term. When treatment is discontinued the weight is regained. Perri, McAllister, Gange, Jordan, McAdoo, and Nezu (1998) found that extending treatment for obesity resulted in significantly more weight loss and less regain. The availability of extended treatment is hampered by cost. There is a need for a low cost obesity treatment that can be made available to patients for many years. This presentation will explain how Internet technology is being used to provide a low-cost, high-quality, long-term treatment for obesity. A multi-disciplined collaboration of psychologists, physicians, dieticians, and exercise physiologists has developed an online community that helps obese people manage their weight. This ongoing project is called the Tiger Community. The project, staffed by volunteers, delivers facilitated group discussion, peer support, and nutritional and exercise counselling. It uses custom software to automate many aspect of client management, which results in lower operating costs while maintaining a high quality of care. The community currently

has 40 registered members and meets regularly once per week. Additional contact is maintained through email. Member characteristics, scores on readiness profiles, and initial outcome data will be presented.

### **Coping as a hospital in-patient: Perceived control/powerlessness and satisfaction**

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Lack of control (both real and perceived) has been shown to have a significant negative impact on psychological and physical health, behaviour and motivation. Patients may perceive themselves at a disadvantage in medical relationships because of perceived loss of control in the 'sick role'. Perceived control over daily activities in hospital may be important, as research shows that withdrawal of freedoms instituted by the hospital setting can have adverse cognitive, psychological and physiological effects. These effects may be exacerbated if the patient also belongs to a low power group, for example young people, women, or minority cultures. The long-term objective of the current study was to examine the extent and nature of perceived loss of control in hospital settings, particularly among young female patients. As a first step, the study reported here is of the development and psychometric evaluation of a scale to measure perceptions of ability to exercise control over treatment, management, and daily routine during a hospital stay. Approximately 100 adult female participants who had experienced an overnight (or longer) hospital stay were surveyed, using the new scale and measures of theoretically overlapping variables including health locus of control, and perceived impact of and satisfaction with the hospital experience. In addition, focus groups were conducted to provide feedback on the measure and insights into participants' hospital experiences. The reliability and validity of the measure are presented, along with findings concerning patients' perceived powerlessness in hospital.

### **The relationship between everyday problem solving and parental generativity**

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This study represents a first attempt to examine the relationship between everyday problem solving and generativity. Sinnott's theory of postformal thought (1998a) and McAdams' and de St. Aubin's model of generativity (1992) guide the study. Postformal thought is likely to be observed when solving ill-structured problems that occur during the course of everyday life. Generativity involves a conscious concern and commitment to assisting the next generation. The relationship is examined within the domain of parenting. Sixty parents, 56 mothers and 4 fathers, aged between 33 and 50 years, solved two everyday problems by 'thinking aloud', and completed questionnaires measuring generative concern, generative behaviour, parental generativity and parenting style. Although the simple relationship between postformal thinking and parental generativity is not significant, multiple regression reveals that when generative concern, length of parenting and authoritative parenting style are taken into account, postformal thinking significantly predicts parental generativity. Everyday problem solving and parental generativity relate asymmetrically to length of parenting and age, such that everyday problem solving



ability increases, while parental generativity decreases. We conclude that proficiency in postformal thinking, and acting generatively towards one's children are connected to parenting experience and one's concern with generativity.

### Remorse and related emotions in criminal justice: Cognitions about the self

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Remorse by perpetrators of crimes is frequently commented upon during criminal justice proceedings, by judges, parole officers, and even reporters for the mass media. It is assumed that remorse is associated with lower recidivism, but there is little evidence for or against this assumption. Furthermore, there are disagreements and inconsistencies in psychological and philosophical literature regarding the nature of remorse. It is suggested that elucidation of the concept of remorse is necessary for further investigation of the influence of remorse on future criminal behaviour. Quantitative and qualitative data from two studies of the nature of remorse are reported. The first study shows that remorse should be described in relation to its close relatives: regret, guilt, and shame. The second study shows some phenomenological differences between remorse and related emotions. It is concluded that differing cognitions about the self best account for the distinctions between remorse and the other emotions. Future research directions, and implications of the distinction between remorse and other emotions for offender rehabilitation and recidivism, are discussed.

### A hierarchical manualised model for delivering services to parents of adolescents

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Prevalence rates for behavioural problems in adolescence are variously estimated at around 20% of the population. Projections for these figures indicate that it is not possible to service this need using conventional approaches. What is required is a hierarchical approach with allied health and education professionals and others who are at the first point of contact for parents and teenagers being trained in effective preventive interventions. Those who slip through this net may then be referred to clinically trained staff with various levels of expertise and experience. As evidence-based interventions become more widely available, the issue of dissemination then becomes a major challenge. The use of manual-based, fully resourced programs with associated training programs and competence checks is one approach to this problem. The Triple P — Positive Parenting Program is an example of such a program, and the newly developed adolescent version will be described to illustrate and exemplify the issues raised above. The advantages and disadvantages of packaged intervention programs are considered in the light of the model presented.

### The health and well-being of Aboriginal Elders

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With increasing longevity, much attention is becoming focused on ways to improve the quality of life of older adults, their health and well-being. However, Aboriginal Elders have not on the whole experienced the dramatic increases in health and functional ability of other older Australians. This paper reports on recent research, in the form of discussions and focus groups, with Aboriginal Elders in Adelaide, which were aimed at understanding the factors in health and well-being. Qualitative evidence is provided by way of stories and anecdotes that illustrate that the experiences of Aboriginal Elders are different in almost every way from those of non-Indigenous older adults. For instance, Western concepts like 'stress' and 'mental health' have little meaning for people whose total resources are devoted to surviving each day. Suggestions are made for developing ways of working with Aboriginal Elders to enhance their health and psychological well-being.

### Social constructions of health and cancer screening among women across four cultural groups

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What predicts participation in Pap screening among a group of ethnically diverse women? Do beliefs about the nature of the world, health in general, and cancer in particular differ between cultural groups, and to what extent do these beliefs influence screening behaviour? In this study we surveyed a sample of Australian women from four cultural groups — Anglo-Australians ( $N = 76$ ), South-Asians ( $N = 65$ ), Turkish ( $N = 72$ ) and Greek ( $N = 44$ ) — with respect to their Pap screening behaviours and health beliefs. The Anglo-Australians and to a lesser extent the Turkish women were the most conscientious Pap screen attenders, however South Asian and Greek women were relatively poor in their uptake of regular testing. With respect to health beliefs and attitudes, while there were differences between the groups, no clearly consistent pattern emerged. Greek women were to some extent differentiated from the other groups by being more likely to see cancer and health in general as caused by chance or fate, and less likely to believe they had personal control over health in general or cancer in particular. However, none of the health or cancer belief variables were significantly correlated with Pap screening behaviour, nor were other health behaviours, education level, or number of children. Variables which did predict Pap screening included low religiosity, ability at spoken English, and being married. Results were discussed in terms of their implications for improving screening uptake behaviours across cultural groups.

### Relationship between locus of control and Alexithymic characteristics in a male population

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It has been suggested that males who are violent towards partners deny responsibility for their behaviours and lack emotional awareness. This study explores the relationship

between such characteristics described as alexithymia and locus of control in male perpetrators of domestic violence and a non-violent control group. It also explores the effect locus of control and alexithymia had on mood state. It is hypothesised that the 'violent male' group will score higher on the Internal-External Locus of Control Scale and the Toronto Alexithymia Scale. Positive relationships are also predicted between 'locus of control' and 'alexithymia' for the 'violent male' group; and, identification of emotions and levels of anger-hostility for the violent male group. An exploratory hypothesis also examines the relationship between negative mood states and both locus of control and alexithymia. Results indicate the 'violent male' group scored significantly higher on alexithymia ( $t = -4.559, p < .05$ ), but not locus of control. A significant relationship existed between locus of control and alexithymia in the 'violent male' group ( $r = .43, p < .05$ ) and for identification of emotions and anger-hostility ( $r = .60, p < .01$ ). Negative mood state was not associated with any of the other scales for the 'violent male'. These findings suggest that domestically violent males may possess deficiencies in emotional awareness that inhibit their capacity to not only identify, communicate and distinguish between emotions, but to understand the effects of their violence and to take responsibility within a therapeutic setting.

### Reframing the nature and scope of social impact assessment: Managing psychosocial and biophysical impacts in the wet tropics

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The focus of the paper is on the nature of individual-level, psychological impacts in environmental transactions, and how this impact of the environment, and the encounter, on the person, is an integral part of the transaction between person and setting that also impacts on the biophysical environment. The research context which informs this transactional and individual experience-based perspective is an ongoing study of the impacts of visitation and use in the Wet Tropics World Heritage Area of Far North Queensland. The crux of the argument presented is that a more sustained focus on psychological considerations and the nature of the transactional interface between individual and setting constitutes an optimal strategy for ensuring that individual experience and outcomes are most effectively represented and utilised in the context of environmental evaluation research. A consideration of the importance of the psychological in environmental evaluation and monitoring also highlights the need and opportunity to more fully utilise human judgement in the development of environmental indicators. Management and legislative mandates for monitoring and program and policy evaluation, as well as good science, require that we have standardised, credible, effective indicators of both biophysical and psychosocial impacts. Indeed, the opportunity for cross-referencing and cross-validation across the biophysical and psychosocial provided by integrated, interdisciplinary environmental assessment would go a long way towards improving the credibility of social science measures in natural resource management contexts. The discussion, larger argument, and conclusions underscore the advantages of relabelling, re-presenting and reframing the nature of the 'social impact assessment' (SIA) enterprise as, 'psychosocial impact assessment', PSIA.

### Sociocultural and individual predictors of body change strategies to increase muscles among adolescent girls and boys

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Extensive research has examined the role of sociocultural and individual factors in the development of weight loss strategies among adolescent girls. Less research has focused on adolescent boys, even though it has been shown that many males display body dissatisfaction and also engage in body change strategies. Whilst the large majority of girls engage in strategies to lose weight, many boys desire a larger and more muscular body shape and engage in strategies to increase muscles. The present paper reports on cross-sectional findings and preliminary longitudinal data from a recent study which is examining the role of the media, parents, peers, body dissatisfaction, body image importance, self-esteem and negative affect on the development of body change strategies to increase muscles. The participants were 587 boys and 598 girls aged between 11 and 16 years. Cross-sectional findings indicated that body image importance and parental and peer encouragement were the main direct predictors of strategies to increase muscles for boys and girls, whilst negative affect was an additional predictor for boys. However, the same factors were found to only weakly predict strategies to increase muscles over an eight-month period, after controlling for temporal stability of the criterion variable. The findings will be discussed in relation to the results of other longitudinal studies that have been primarily conducted with girls.

### Serum lipids and their relationships with angry affect and behaviours in men

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Research into the relationship between the Type A behaviour Pattern and coronary heart disease suggests that the anger-hostility-aggression (AHA!) syndrome is directly related to total serum cholesterol and low-density lipoproteins. The present study involves an investigation of the specific components of the AHA! syndrome, which are related to blood lipid levels in 98 healthy men. The disposition to experience and express anger when frustrated, criticised, or treated unfairly (a component of trait anger, termed angry reaction) was related to total serum cholesterol and to low-density lipoprotein levels. Age and diet also predicted levels of these lipids, but each was unrelated to angry reaction. These results suggest that in healthy men, the experience of strong angry affect in reaction to perceived rejection, criticism, or unfair treatment may contribute to coronary heart disease through its relationship to elevated unfavourable serum lipids.

### Applying deterrence theory to malingering on subjective complaint tasks

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Warning would-be malingers about the possibility of detection has recently been suggested as useful deterrence strategy to reduce malingering on neuropsychological tasks. In this study, 60 first-year undergraduate subjects

were randomly allocated to one of three conditions: malingering without warning, malingering-with-warning, and control. A repeated measures analogue design was conducted to assess differences between groups on three self-reported complaints (SRC) checklists. We expected that subjects in both malingering groups would engage in malingering behaviour, but that our warning would deter those who received it, to some extent. This expectation was based on the premise that by clearly stating the cost of being detected to warned individuals (prosecution for insurance fraud) as well as the benefit of faking without detection (financial gain), our warning would act as a deterrent in accordance with the principles of deterrence theory. Results showed that, whilst SRC measures were vulnerable to malingering behaviour, our warning did not have a significant deterrent effect. This failure to observe a significant reduction in reported symptoms can be explained by either a failure of subjects to rationally consider costs and benefits specified in this study or a failure to include appropriate consequences. Future studies are needed to examine these possibilities.

### Social relationships and adolescent well-being

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It has long been established that social relationships have an impact on well-being, and that social support has both a direct and buffering effect on psychological health in times of stress. This paper reports on a large sample of adolescents aged 11–17 years and examines the effects of some aspects of their social relationships on their psychological well-being. Specifically, trust in family, friends and other adults, different types of social support — instrumental, belonging and appraisal support, and level of engagement in clubs and organisations are considered in a multivariate model predicting depressive symptoms. In this way the impact of more intimate, as well as more diffuse, social relationships is ascertained and discussed.

### A neurobehavioural and clinical comparison of children with high-functioning autism and Asperger's disorder

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Autism and Asperger's disorders are pervasive developmental disorders characterised by anomalies in motor, social, and communicative functioning. Asperger's disorder is distinguished from autism by the absence of clinically significant delays in language. The clinical profile of autism and Asperger's disorder contains an intriguing mixture of psychiatric and neurological symptoms: for example, movement abnormalities (i.e., stereotyped behaviours, hand flapping, toe walking, whole-body movements), atypical processing of parts and wholes, verbal and nonverbal deficits, ritualistic/compulsive behaviour, and disturbances in reciprocal social interaction. Although, clinically, these disorders are well defined, we are only beginning to understand their neurobiological underpinnings. While, on the surface, these disorders are clinically similar, the extent to which these disorders are similar neurobehaviourally remains unclear. Neurobehavioural models which have been used to study autism and Asperger's disorder have implicated executive dysfunction,

left hemisphere dysfunction, weak central coherence, and motor impairment. While it has been suggested that these theoretical models may form a basis for discriminating individuals with Asperger's disorder from those with autism, few authors have examined how this cognitive-motor dissociation may take place neurobiologically. The present research examined the neurobehavioural profiles of children with autism and Asperger's disorder using a series of novel neuropsychological techniques. The results from this research suggest that autism and Asperger's disorder may be associated with differential disruption within the fronto-striatal circuitry. The clinical and aetiological relevance of this finding is discussed.

### An examination of left-hemisphere anomalies in high-functioning autism and Asperger's disorder using executive function and visual-perceptual paradigms

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Neurobiological and behavioural studies of left-hemisphere dysfunction in autism have generated conflicting results. Conceivably, left-hemisphere dysfunction may manifest in autism only in tasks which invoke executive functions. Moreover, left-hemisphere dysfunction may underpin autism, but not Asperger's disorder. Therefore, the aim of the present study was to delineate reports of anomalous lateralisation in individuals with high-functioning autism ( $n = 12$ ) and Asperger's disorder ( $n = 12$ ). Two of the tasks were sensitive to executive dysfunction: (1) a choice-reaction time movement paradigm; and (2) a simple-reaction time paradigm. The remaining tasks, which entailed perceptual lateralisation, were resistant to executive dysfunction. Compared to age- and IQ-matched control participants, the group with autism displayed deficiencies in right-hemisphere, and thus, in left-hemisphere performance on both executive function tasks; however, these groups demonstrated comparable lateralisation effects on non-executive function, visual-perceptual tasks. In contrast, the group with Asperger's disorder showed similar laterality effects to their age- and IQ-matched controls on both executive and non-executive function tasks. The aetiological relevance of this neurobehavioural dissociation between high-functioning autism and Asperger's disorder is discussed.

### Processing speed, cognitive explanations, and the diminutive general, g

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In this paper, we review a number of studies conducted in our laboratory that question the proposition that processing speed is related to psychometric  $g$ . Our attack is on several fronts, each consistently supported by data emanating from these studies. First, the general factor of intelligence is weak inside a large battery of psychological tests. Second, processing speed shows near zero correlation with accuratized intelligence measures, which are often considered the avatar of  $g$ . Indeed, broad cognitive abilities share differential relationships with measures of processing speed. Third, many of the parameters extracted from measures of processing speed are circumspect. Fourth, the factorial structure of speed is as complex as that circumscribing accuracy. Finally, cognitive theory underlying

stimulus-response compatibility effects and attention-switching provide more enriched models than those currently based on processing speed. We conclude with a brief discussion of cognitive complexity and the possibility of integrating the disparate findings obtained under the cognitive correlates approach.

### Volunteers, job strain and job satisfaction

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This study investigated the prediction of job strain and job satisfaction for nursing home volunteers compared with paid staff. The Job Demand Control (JDC) model (Karasek, 1979) and the Demand Control Support (DCS) model (Johnson and Hall, 1988) were selected. Few comparisons have been made between paid employees and volunteers in relation to job strain and satisfaction and no evaluations have utilised either the JDC or DCS models. 139 paid employees and 186 volunteers participated. Anonymous questionnaires were utilised. The results demonstrated that the JDC model was appropriate in the nursing home environments because both job strain and job satisfaction could be predicted from the job demands and job control variables for paid staff. Social support became a significant predictor of job satisfaction for paid staff, once the job demands were specifically defined. Job strain for nursing home volunteers could be predicted from the JDC model. However, some aspects of the variables, job demands and job control, have different implications for volunteers compared with paid staff. Control and connectedness were the key predictors of job satisfaction for volunteers. Connectedness was an important predictor for both paid and volunteer staff. Elements of job demands became significant in predicting job satisfaction when they were more clearly defined. Social support did not prove to be relevant in any of the volunteer analyses. Thus, the DCS model was not supported for predicting either job strain or job satisfaction for volunteers working in a low demand environment. However, the JDC model previously applied only to paid employees can be successfully applied to volunteers when the job demands are clearly defined. The findings offer organisations insight and a practical tool to assist them in retaining volunteers and establishing a satisfied workforce.

### Australian children's preferences and attitudes towards peers from different ethnic and racial backgrounds

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Given the prominence of race and ethnicity in current Australian political debate and its role in the emergence of conflicts elsewhere in the world, it seems timely to review research on the development of ethnic/racial bias and acceptance in Australian children. A summary is provided of findings from a series of studies, conducted by the author and other local researchers, that investigate the extent to which young Australian children show ethnic/racial bias in their preferences for known and unknown peers, their play partners or their attitudes towards peers. These studies show that young children of European descent hold biased attitudes towards both Asian and Indigenous peers. The bias is greater among younger than older children. The presence

of such biases among young children and this age-related pattern have also been found in other nations. However, Australian children show a marked and unexpected mismatch between attitudes and behaviour. Measures of prejudice and measures of bias in peer preferences are not correlated. Indeed, there is little evidence of bias in preferences or play partners among pre-school or young school-age children among any of the groups studied (children of British, Southern European and Asian descent).

### Uses of psychology in social impact assessment

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Social impact assessment (SIA) is an interdisciplinary field of applied social science, which has historically been dominated by the contributions of sociologists in research practice, promotion of the field, and the little theory-building that has occurred. Yet psychologists have also been active, and have made significant contributions both to approaches and theory. Where sociologists have tended to emphasise social structures and processes, the special contributions of psychologists have been associated with the constructivist side of impact assessment, emphasising how the individual and social constructions of change events contribute to people's experiences of those events, their ways of responding, and hence the eventual form of the impacts. A key example is Michael Edelstein's work on the responses of communities and individuals to toxic contamination of their environments in North America. This presentation will outline a range of social impact assessments from the literature and the author's and associates' work, to show the potential of psychology in SIA. It will discuss the types of contributions made, and suggest further opportunities for psychologists to engage in this stimulating field.

### The effect of living in Australia on reported attitudes towards male homosexuality among male Chinese international students

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In general, people reflect the attitudes of the culture into which they are born, and in which they live. One of the many attitudes which may exist within a culture is the attitude towards homosexuality. Whilst it is reasonable to assume that constant exposure to the various agents of socialisation will help to maintain an attitudinal status quo towards homosexuality whilst resident in the culture of origin, it is problematic that one's attitudes will stay the same when one moves from one's own culture to a different host culture. The research question at the crux of this research report is whether living in Australia affects the attitudes towards male homosexuality which were held by male Chinese international students, who are currently studying for a degree in Australia. The students' attitudes towards male homosexuality were measured by the Index of Attitudes Toward Homosexuals (Hudson & Ricketts, 1980). A control group of male Australian students allowed a comparison of the attitudes of Chinese and Australian students to male homosexuality. The implications of the findings were that exposure to a host culture may have impinged upon Chinese attitudes, as initially shaped and formed by the culture of origin, but that the length of residence did not.

## Maternal self-efficacy and control-of-outcome expectancies: Predicting adjustment to first-time motherhood

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There is considerable evidence indicating that new mothers and pregnant women are at risk for a variety of psychological symptoms during this period in their life — most of which are mild, but some can be very severe. In the thesis, I examined the role of women's expectations in their emotional adjustment to new motherhood. The current romanticised images of motherhood may encourage women to set unrealistic expectations for themselves and because these cannot be met, breed in women a sense of guilt and failure that ultimately leads to depression. In my thesis I looked at two sorts of expectations in a sample of over 100 women pregnant with their first child, and followed-up these women until their infant was 6 months old. There was no evidence from my data that women with high expectations were at particular risk for adjustment problems, indeed these women seemed to be more likely to be adjusting well. On the other hand, women who lacked confidence did not necessarily adjust poorly — rather, to understand whether a woman who lacked confidence would experience difficulties, one also had to consider the sorts of control beliefs that accompanied her sense of inefficacy. In terms of practical implications, my findings suggest that the sorts of expectations a woman holds both before and after her baby is born, might be important indicators of a woman at risk for later adjustment problems. Although more work is needed to confirm this, it may mean that there is potential in working with women even before the infant is born in order to forestall some of the postnatal emotional problems experienced by new mothers.

## The relationship between sociocultural attitudes towards appearance, self-esteem, and anti-fat attitudes

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Despite pervasive societal prejudice against overweight individuals, few researchers have attempted to determine the factors which may be related to anti-fat attitudes. The present study investigated the relationship between sociocultural attitudes towards appearance, self-esteem, and anti-fat attitudes. A sample of 241 female undergraduate students completed the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ), the Rosenberg Self-Esteem Scale, and the Anti-Fat Attitude Scale (AFAS). High scorers on the internalisation sub-scale of the SATAQ reported significantly lower self-esteem than low scorers on this sub-scale. Furthermore, high scorers on the internalisation sub-scale of the SATAQ reported significantly greater anti-fat prejudice than low scorers on this sub-scale. These results suggest that both low self-esteem and anti-fat attitudes may be related to acceptance or internalisation of prevailing standards of the ideal physical appearance in females.

## States reflecting the Big-Five dimensions

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Five dimensions, surgency, agreeableness, conscientiousness, emotional stability, and intellect, seem to underlie many characteristic traits (e.g., Digman, 1990; John & Srivasta, 1999; McCrae & Costa, 1999). Characteristics that are situationally primed and not generally typical of an individual have been termed states. It may be fruitful to examine whether the Big-Five dimensions also have state components and whether these states can be assessed. Study 1: A confirmatory factor analysis examined 190 participants' responses to a newly created state version of a short-form Big-Five measure. This analysis showed a relatively good fit between states and the Big-Five dimensions. Study 2: To provide information about divergent and convergent validity, 68 participants completed the Big-Five state measure and a Big-Five trait inventory. States were most highly related to their corresponding traits, but were not so highly correlated as to be redundant. Study 3: To examine whether Big-Five states are changeable as one would expect, 143 participants completed the Big-Five state measure, read induction statements designed to increase a Big-Five state, and again completed the items comprising the sub-scale assessing that state. All states changed in the expected direction; however, only the changes in surgency, agreeableness, and emotional stability reached statistical significance.

## Facilitating alternative strategies to dieting in adolescent girls

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Dieting is a primary risk factor for the development of disordered eating, and its prevention may play a significant role in combating the prevalence of eating disorders in adolescent girls. An approach that is receiving increasing attention is the enhancement of protective factors using skills-based training. This study proposes that by training girls to consider alternative strategies to dieting, it is more likely that they will make careful and informed decisions regarding their eating behaviour. The aims of the study were to enhance and maintain the effects of a video presentation used in a school-based program for the prevention of eating disorders. In a randomised-control design, 150 Year 7 and 8 girls were assigned to one of three discussion groups following a video-tape presentation. It was expected that a discussion group in which girls were encouraged to generate alternative strategies to dieting would experience greater positive changes (compared to attention and supportive discussion control groups) in knowledge, attitudes and behaviours relating to nutrition and weight control, as well as improved body and self-image. Data collected using questionnaires and height and weight measurements at pre-intervention are compared to post-intervention and follow-up data. The results and implications of the study are discussed.

## Judgement and decision-making performance in personnel selection: Partial feedback and the role of confidence

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In most organisations, outcomes of personnel selection will not always be known, and therefore the selection officer has access to partial feedback only. In personnel selection, feedback — or knowledge of results (KR) — is more likely to follow a decision to hire than a decision to reject, particularly if the applicant was unsuitable. The present study investigated effects of asymmetric partial feedback on decision-making performance using an artificial personnel selection task. Further, it was postulated that decision-makers use their confidence as 'internal feedback' when KR is unavailable. Using Signal Detection Theory (Swets, Tanner, & Birdsall, 1961), performance was measured by *decision tendency*, the direction and degree of response favouritism; and *ability*, the extent to which a decision-maker can discriminate between objective differences. To complement this analysis, decision response latency and judgement consistency were also examined. Results indicated that introduction of partial feedback elicited a decision tendency towards rejecting applicants. This appeared to be an affective reaction against corrective feedback for wrong decisions to select. It was further demonstrated that feedback facilitated ability to a greater extent when confidence was low. This supports the proposed theory of internal feedback, results suggesting that confidence provides performance information to the decision-maker.

## The effect of distress on the development of a primary immune response

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This poster presents a method of immune assessment for use in psychoneuroimmunology research involving the immunisation of volunteers with the novel antigen, keyhole limpet haemocyanin (KLH). This method of assessing immune competence allows the comprehensive assessment of an orchestrated immune response that develops in vivo over time. Healthy medical students ( $n = 22$ ) were immunised with KLH immediately after an annual viva voce exam. Control participants ( $n = 23$ ) were immunised at a time of low stress. Blood was drawn at baseline and three weeks for assessment of anti-KLH IgG antibody responses and proliferation of T-cells against KLH. Delayed-type hypersensitivity (DTH) skin responses to KLH were assessed in vivo. The Profile of Mood States (POMS) questionnaire was administered to assess mood states and behavioural health variables were recorded. In the group as a whole, the likelihood of developing DTH skin test responses was reduced in the more distressed participants ( $r = -.43$ ;  $p = .004$ ), largely independently of behavioural and health variables. In vitro proliferation of T cells against KLH and the development of anti-KLH IgG antibodies were not related to levels of distress. Changes in DTH responses to KLH are likely to be of clinical significance and should be investigated further in clinical populations and those experiencing prolonged distress.

## Influence of parents and peers on satisfaction with different parts of the body in men and women

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Past research has obtained mixed findings in relation to gender differences in body dissatisfaction. The current study was designed to investigate these differences further. Participants were 60 females (mean age = 20.31) and 50 males (mean age = 20.76). A digital body image program was used to assess body image. The program involved using an image of the individual's own body so that each participant adjusted their upper, middle and lower body to indicate their ideal image and their perception of the ideal held by peers and parents. As expected, females indicated greater dissatisfaction, and desired a body that was smaller than their current size, whereas males were split between wanting a smaller and larger body. Females were more concerned with the lower body and males with the upper body. The perceived messages from peers and parents indicated the same trends as for the individual. Gender differences were also found with ratings of attractiveness and effectiveness. Attractiveness importance was greater among males for the upper body, whereas the middle and lower body were most important for females. Finally, individuals rated the importance of the messages from their peers and parents. Females rated these messages as more important than did males. For both males and females, opposite sex peers were the most important influence, and parents the least important. A significant amount of the variance in body image was predicted from the sociocultural factors of peers, parents and society. In order to obtain a better understanding of body dissatisfaction future research should evaluate satisfaction with different parts of the body, using the person's own body, rather than evaluating overall body satisfaction.

## Examining the neurotransmitter basis of intelligence and speed of information processing

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There is now an extensive body of literature in differential psychology describing the role of speed measures in cognitive ability. A prominent speed measure has been the Inspection Time (IT) measure of early information processing. We have recently reported that IT is mediated by the neurotransmitter Acetylcholine and by cholinergic system activity. This conclusion is based on experimental studies in which the level of the neurotransmitter Acetylcholine is manipulated and on studies in which we systematically block nicotinic and muscarinic receptors and assess performance on the IT task. However acknowledging that IT is an important but inadequate model of human intelligence we are now extending this model by administering other measures of intelligence such as Digit Span and Digit Symbol from the Wechsler Intelligence Scales and manipulating other neurotransmitter systems. We present our preliminary work examining the role of Serotonergic, Noradrenergic and Dopaminergic systems in human intelligence. A biological model of intelligence, based at a neurochemical level is hypothesised in which the neural bases of information processing speed, working memory and attention are separated.



## Going to Mars: Psychology in space

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Sophisticated life support capsules make it possible for human beings to survive and function in environments that would otherwise be lethal, such as space, the ocean depths, and the polar regions. Although some of the features that affect human reactions are common among these habitats, space capsules also have unique psychological as well as physical characteristics. In the current phase of space exploration, long-duration missions are becoming the norm, and the near future will see people travelling in space for periods of years rather than merely months. The effects of such prolonged isolation, confinement, crowding, danger, monotony, and microgravity — to name just a few relevant variables — on individual performance and adaptation, as well as on group dynamics, are likely to be profound and complex. The presentation will review what is known about the environmental, social, cultural, emotional, cognitive, and personality aspects of adaptation to capsules. These aspects include sources of stress, selection criteria, obstacles to and facilitators of adequate coping, changes in group interaction, the role of temporal factors, and post-mission consequences.

## Ethical beliefs and behaviours among Australian psychologists: Dilemmas we face and solutions we chose

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A random sample of 2,100 members of the Australian Psychological Society (APS), identified as practising psychologists, was asked to complete a mail-out survey on ethical beliefs and behaviours. Participants received an expanded version of a survey originally developed by Pope and colleagues (Pope, Tabachnick, & Keith-Spiegel, 1987). This survey was expanded to include an open-ended question asking participants to briefly describe an ethical dilemma they or a colleague had faced in the past year and how this was resolved. Four hundred and sixty-eight participants answered this question, and several participants identified more than one dilemma. To identify issues raised by participants, two independent raters categorised responses according to the general and specific principles specified in the APS Code of Ethics. Courses of action reported were coded into one of nine categories. Results showed participants most frequently reported ethical issues related to the general principle concerning relationships with clients (71% of the sample). These results may be used to identify areas in need of specific attention in relation to ethical training of psychologists, and may inform future revisions of the APS Code of Ethics.

## Paediatric pain: Acute vs chronic issues

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The question of interest in this paper is whether or not the assessment and management of chronic pain in children should simply be viewed as an extension of approaches used to assess and manage children's acute pain. Although there are obvious practical advantages to answering this question in the affirmative, there are persuasive theoretical and empirical arguments against doing so. Firstly, learned

adaptations to pain that recurs over a long period may give rise to qualitative differences between this sort of pain and pain which is of short duration. Secondly, the assessment of chronic pain is more complex than of acute pain: fluctuations in the level and type of pain experienced over time, plus a lowered threshold for pain-related stimuli in general, raise special issues regarding the appropriate metric for monitoring pain sensations in chronic sufferers. Thirdly, while the effectiveness of cognitive-behavioural coping strategies is 'well-established' for procedure-related pain and 'promising' for disease-related pain, the specific strategies which are functionally useful may not be the same in each case. Fourthly, other variables (e.g., anxiety and depression) known to be related to the experience of pain have been frequently found to differ between individuals with acute and chronic pain conditions.

## Memory development and knowledge acquisition in children

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Adults and older children generally remember more of the things that they observe than younger children. However, this is not invariably so: for example, younger children have been demonstrated to have superior memory for objects like dinosaurs and cartoon figures that have particular significance in their everyday lives. The domain-specific nature of this memory superiority effect in young children illustrates the great importance of everyday knowledge and experience for retention: that is, everyday objects and events which have special meaning are likely to be remembered well, irrespective of the age of the person. This principle also has a converse: the updating of old knowledge and the acquisition of new knowledge is necessarily a function of whatever information is retained over time. All theories of knowledge acquisition are agreed on this point, even though they vary in the extent to which memory system parameters constrain the learning process. Thus, it is clear that there is a close interdependence between the development of memory processes and the growth of knowledge. The fundamental importance of this relationship during the cognitive development of children will be examined in this paper.

## Men's use of coercive and non-coercive sexual influence strategies

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This paper is concerned with the types of strategies men will often employ to engage in sexual activity with an unwilling date or partner. Research data to be presented were part of a PhD thesis examining the use of sexual coercion within a broader context of sexual influence strategies ranging from pro-social, through to seductive, to verbally coercive and physically forceful. The author discovered that most men do not routinely take no for an answer and engage in a process of persuasion that can often shade into coercion and even assault. Findings are presented within a theoretical model of traditional sexual scripts and gender based norms for resolving sexual dispute. The practical implications for preventing sexual assault in the context of close relationships are considered.

## Pica in a gifted boy: A successful cognitive-behavioural intervention

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**P**ica is rare disorder, occurring predominantly in people with intellectual disabilities, characterised by repeated eating of non-nutritive substances. Pica may result in medical complications or death following ingestion of hazardous materials. Its causes are largely unknown. Divergent hypotheses as to aetiological mechanisms underlying pica have implicated psychological, cultural, sensory, physiological, nutritional and developmental bases. Pica is reported as a treatment-resistant behaviour, and there is yet to be a treatment of preference. Treatments have included overcorrection, physical restraint, operant conditioning and punitive therapies. In this remarkable case of an eight-year-old boy assessed as being within the Very Superior range of intellectual ability according to the Weschler Intelligence Scale for Children (Third Edition), pica had occurred regularly since infancy. Ingested matters included crayons, soil, sticks, and stones. Pica was maintained in the absence of apparent psychological, social, cultural or physiological factors. A treatment program was devised containing psychoeducation, stimulus substitution, cognitive self-instruction, monitoring and reward components. Stimulus substitution involved supplying edible substances of firm textures that appeared to match preferred pica materials. Parents, teachers and the child monitored the pica prior to, during and after the intervention. Results suggested that prior to treatment several incidents of pica were occurring daily. Within thirteen weeks there were no further incidents of pica. This unique cognitive behaviour-al intervention for pica appears to have been completely successful in this case.

## Relaxation and cognitive shifts

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**T**his experiment investigated hypothesised shifts to right hemisphere processing after relaxation, in the form of enhanced data-driven processing in recognition memory. Following shallow, perceptual processing of word lists, subjects who had taken part in a progressive relaxation exercise or played an active computer game performed a recognition test with auditory and visual modes. The visual and auditory test modes differentially affected recollective experience and feelings of familiarity as measured by 'remember' and 'know' responses, with the relaxed group showing higher levels of familiarity with visual testing, where there was a perceptual match between study and test. This supported the hypothesis that relaxation facilitates data-driven processing. In order to further examine shifts to right hemisphere processing with relaxation, subjects were examined before and after with a haptic sorting task carried out with each hand separately and eyes closed. There was little change in the sorting speed of the relaxation group between trials. Unlike the active group, however, they became more accurate in the second trial, and accuracy increased more with the left hand than the right. A speed/accuracy trade off and a possible facilitation of left-hand-right-hemisphere processing were suggested. A scale designed for the present study showed that subjective levels of relaxation increased considerably after the relaxation exercise.

## Links between self-worth protection, claimed and behavioural self-handicapping

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**T**he self-worth theory of achievement motivation holds that in situations in which poor performance is likely to reveal low ability, certain students will voluntarily withhold effort, thereby blurring the link between poor performance and low ability. In this study, links between self-worth protection, claimed handicaps, practice effort, attributions and performance were examined in intellectually evaluative and non-intellectually evaluative situations. Self-worth protective (SWP,  $N = 36$ ) and nonself-worth protective (NSWP,  $N = 36$ ) undergraduate university students were assigned to one of three performance feedback conditions: success, humiliating failure, or face-saving failure. They completed cognitive tasks that provided assessments of performance, claimed and behavioural self-handicapping, intrinsic motivation, and attributions. Relative to NSWP students, SWP students claim a greater number of handicaps, perform poorly on 20 single-solution anagrams and 12 remote associate tasks, reduce practice effort on a set of unicursal tasks, and attribute their failure more to internal factors. Collectively, the findings reinforce links between self-worth protection, claimed handicaps, poor performance and reduced practice effort in situations that involve evaluative threat.

## A structural equation model of self-worth protection in achievement situations

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**T**his study tested key assumptions of the self-worth theory of achievement motivation. This theory holds that certain students — known as self-worth protective students — will voluntarily withhold effort in achievement situations in which poor performance is likely to reveal low ability. The avoidant strategies of these students is understood to be an outcome of their low academic self-esteem, tendency towards self-criticism, perfectionistic standards, uncertain global self-esteem, and uncertain attributions for achievement outcomes. Using scales that operationalised these variables, we obtained complete data from 352 participants, assigning 176 participants to a calibration sample and 176 participants to a validation sample. GPA and SAT scores (verbal and mathematics) were also obtained. Three structural equation models of self-worth protection were tested. After adjusting the models for nonsignificant paths, the best fitting model endorsed the roles of low academic self-esteem and self-criticism in predicting self-worth protection and achievement outcome. Contrary to expectation, neither certainty of self-esteem nor attributional uncertainty had appreciable links with self-worth protection. While self-worth protection was not strongly predicted by procrastination, the data reinforce an understanding of self-worth protection, perfectionism and procrastination as members of a family of failure-avoidant patterns of behaviour.

## Legislative incursions into the practice of psychology: Implications of legislation for confidentiality, informed consent, and record keeping

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Privacy Acts, Records or Archives Acts, and mandatory reporting acts have significant implications for the practice of psychology. Privacy and Record Acts prescribe what information about a person is collected, how the records of this information are stored, who has access to these records and, under what circumstances, for how long the records should be kept, and when the records must be destroyed. In some jurisdictions Acts require psychologists to report suspected child abuse, but some of these Acts lack clarity in relation to persons between the age of 14 and 16. The impact of these Acts on the practice of psychology is considered. Cases which throw into sharp focus some of the issues confronting practising psychologists.

## The psychologist's contribution to treatment in a private multidisciplinary pain unit

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The Complex Injury Group assesses and treats non-malignant chronic pain according to a bio-psychosocial model of pain. Referrals to the group come from either specialists or general practitioners. Sixty percent of referrals are Workcover, 30% are Third Party and 10% are private, predominantly patients over 60 with degenerative problems. Patients are seen initially by an occupational physician. When the presenting problem is recognised as a complex problem, referral is made to a range of consultants who jointly determine a treatment plan. The plan is provided to the referring doctor prior to implementation. Psychological issues are dealt with by a family and individual psychologist and a psychiatric opinion is sought when relevant. Treatment is either carried out on an office basis with the relevant professionals who liaise, or patients are referred into a multidisciplinary group program aimed at restoring activity, developing pain management strategies and modifying emotional distress arising from pain and lifestyle changes due to injury. This paper will discuss this 4-week treatment program and in particular the role of the psychologists in this team. Approaches to difficulties in treatment, including recognition and management of psychological issues within the medical and the insurance systems, will be discussed.

## Body dissatisfaction and media use in Estonian and Australian young adults

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The study investigates body concern in young adults from two countries with very different histories of media exposure. Questionnaires assessing body dissatisfaction, dieting, disordered eating, self-esteem, leisure pursuits and media exposure were completed by 394 Australian university students and 415 Estonian university students between the ages of 17 and 35. Although there are large gender differences between men and women, in contrast to prediction, there are relatively few differences on body concern

between Australian and Estonian respondents. Further, the same pattern of correlations between body image and media exposure emerges for both countries. It is concluded that the Western ideal of slimness for women has been quickly and eagerly adopted in Estonia.

## A preliminary, controlled trial of circadian interventions, delivered within a cognitive behavioural framework, in patients with Chronic Fatigue Syndrome

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Chronic Fatigue Syndrome (CFS) is a debilitating condition in which severe, ongoing fatigue is the most prominent of a complex of somatic, psychological and neuropsychological symptoms. The aetiology of CFS remains uncertain, and efforts to distinguish a clear pathophysiological profile for the disorder have been unsuccessful. Current evidence suggests that, rather than being a discrete disease entity with a single cause, CFS is a clinical condition resulting from the interaction of a number of pathophysiological factors, including acute infections, stress and psychiatric disorder. We present data from a series of studies that set out to examine whether the circadian system acts as a central biological pathway through which these diverse factors converge to contribute to the development and maintenance of CFS. Results indicate that CFS patients have altered diurnal patterns of sleep-activity, melatonin secretion and core temperature variation. Results also indicate that some of these disturbances are related to symptomatology. A pilot treatment program, aimed at restoring circadian integrity, was implemented to assess the causal nature of the relationship between circadian disturbance and CFS symptomatology. This program, delivered within a cognitive behavioural framework, resulted in limited short-term improvements that were no greater, in general, than those achieved by the placebo comparison group. Longer-term outcomes were more positive, although appeared to have more to do with the CBT, rather than circadian treatment components.

## Advancing effective psychological practice in adolescent health promotion

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Through adolescence a range of health compromising behaviours increase in prevalence. Tobacco use, harmful alcohol use, illicit drug use, depression, youth suicide, self-harm and sexually transmissible diseases (particularly Chlamydia) are at high rates within the Australian youth population. These behaviours and their developmental consequences exact considerable health and social costs, emphasising the priority for their prevention. There is evidence for substantial commonality in the risk factors (prospective predictors) and protective factors (mediators and moderators of risk) for youth tobacco use, alcohol and drug use, anti-social behaviour, sexual risk taking, depression and suicidal behaviours. Critical and modifiable risk and protective factors can be meaningfully organised to accord with the 'key settings' for youth development within communities, families, schools, peer groups and individuals. This presentation will describe a range of intervention strategies that have been developed and trialed to prevent the emergence of youth health compromising behaviour

across a range of developmental settings. Psychological knowledge has played an important role in the design and evaluation of these interventions. Evaluation evidence for these interventions is reviewed relevant to their practical implementation, impacts on risk and protective factors, behavioural outcomes and prospects for wide-scale dissemination. A strategy for advancing effective psychological practice in adolescent health promotion is proposed.

### Time course of attentional bias for emotional faces in repressors, low-anxious, high-anxious, and defensive high-anxious groups

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The time course of attentional bias for threatening and happy faces in repressors, low-anxious, high-anxious, and defensive high-anxious are examined using the modified version of the dot probe task with two stimulus exposure durations (500 and 1250 ms). In both conditions the participants are required to identify the shape of a probe replacing happy, threatening, or neutral faces. Results reveal that in the low defensive groups (low-anxious and high-anxious), the high-anxious show selective attention towards threatening faces at both exposure durations, whereas the low-anxious shows no bias. The high defensive groups (repressors and defensive high-anxious) show a different pattern as the defensive high-anxious show avoidance for both threatening and happy faces, particularly at the 500ms exposure duration. Repressors do not show a significant bias for either happy or threatening faces, however a non-significant tendency to be vigilant for emotional faces in general is evident. The results indicate the importance of distinguishing between the effects of anxiety and defensiveness on processing of emotional information.

### Presenting problems and lessons learned in a remote area clinical psychologist practice

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The provision of psychological services in rural and remote Australia has had attention in the recent local literature: it has been largely qualitative in nature. This paper presents a quantitative analysis of the presenting problem profile of the last two years of a continuous private clinical psychological practice in a remote area which has been the sole such provider within a 1000km radius for nine years. This data indicates that the remote area clinical psychologist (RACP) practice offers strong showcase opportunities to build the profession's profile well beyond the remote setting — with its niche market, captive audiences and the mobile, educated, economically and racially diverse and youthful nature of the population it serves. The problem profile is reconciled with the community's demographics, the range of referral and payment sources. Myths are dispelled. Implications for matching the RACP's skillings to the needs of a remote community are drawn, including in the contributing to both the primary and more global areas of mental health care. The RACP as 'general practitioner' as compared with 'specialist' and the pros and cons of bonding with medical providers are visited. The RACP's status as the authority in psychological health arises: if not the RACP, who is? If so, so what? The opportunity to use the remote area courts to showcase clinical

psychology is emphasised; pointers for psychological practice building emerge.

### Genetics: Irrelevant, dangerous or informative to clinical practice?

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Attitudes toward the genetics of human behaviour can range from an unquestioning belief in genes as the answer to all human woes to hostility regarding a perceived deterministic philosophy. This keynote address seeks to place genetics in a context that can provide clinicians with a balanced and informed overview. Research will be reviewed that illustrates the impact of genetics across a wide variety of human behaviours, including psychopathology and personality. It will be argued from the research that heritability does not imply genetic determinism. Further, it is suggested from examples of my research that an understanding of how genes influence behaviour will (a) enhance our appreciation of the enormity of the contribution of the environment to complex behaviours, and (b) allow us to target clinical interventions that are likely to be most efficient at changing specific behaviours.

### Are there psychological and physical differences between those people who enter cardiac rehabilitation and those who do not?

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Only about 20% of people who experience an adverse cardiac event take up the option of entering a cardiac rehabilitation program, despite the evidence suggesting the effectiveness of cardiac rehabilitation in improving functioning. This study seeks to determine the differences between people who enter a 6-week cardiac rehabilitation program and those who elect not to do so. We will be examining psychological symptomatology, some indicators of physical functioning, and self-reported reasons for not attending cardiac rehabilitation. Severity of depression will be assessed using the Centre for Epidemiologic Depression Scale (CESDS) and Alexithymia will be assessed using the Toronto Alexithymia Scale (TAS). Posttraumatic stress will be assessed utilising the Post Traumatic Symptom Scale – Self-Report (PSS-SR), whilst other forms of psychological distress will be assessed using a shortened version of the Symptom Checklist-Revised (SCL-R). The implications for the outcome literature on cardiac rehabilitation will be examined in the light of these findings, and recommendations will be made for the role of psychologists in cardiac rehabilitation.

### Triage and psychotherapy: Prioritising access to psychotherapy using the Client Priority Rating Scale

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The majority of research published in the area of triage and mental health has occurred in emergency psychiatric services. There are presently no published protocols for determining who gets priority to psychotherapy services within budget-limited health services. This study set out to

investigate a new method of triage using the Client Priority Rating Scale (CPRS). Following a comprehensive psychological assessment, clinicians made weighted ratings in the domains of Suicidality, Severity of Presenting Problem, Strength of Internal Coping Resources, Availability of Interim Care Options and Possible Negative Impact of Waiting. The sum of these scores was then used to prioritise waiting times for psychotherapeutic services. Sixty-eight clients who had been assigned CPRS scores were studied to assess the utility of the scale. The CPRS was found to have good inter-rater reliability. Those with higher CPRS scores were significantly more likely to commence psychotherapy before those with lower scores. CPRS score was also found to be significantly correlated with Global Assessment of Functioning (GAF). This study introduces one method of triage that appears to usefully and quickly determine priority for clients referred to psychotherapeutic settings.

### **The impact of 'Work for the Dole' on psychological health and work involvement: A qualitative study**

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'Work for the Dole' is a national, government-funded, scheme that places unemployed people into employment for 2 days a week over a six-month period. Although participants do not earn a wage, their involvement in a Work for the Dole project may provide many of the benefits associated with employment such as social contact, a weekly routine, time structure, and skill mastery. Four focus groups of 5 people each (total  $n = 20$ ) were conducted to collect detailed feedback about each participants experience with Work for the Dole. The focus groups were recorded with the participants' permission and answers were transcribed verbatim. Transcriptions were then entered into the NUD\*IST 4 qualitative data program (Richards, 1998). Analyses of the qualitative data revealed a number of major themes: 1) networking and social support provided through Work for the Dole, 2) the appropriateness of the program in which participants' were placed, and 3) the stress of dealing with Government services. Implications for research in the area of unemployment and for changes to future Work for the Dole programs will be discussed.

### **Effects of eye movement and imaginal exposure on psychological and physiological responses in test anxious students**

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This study aims to investigate the effects of eye movement and expectancy during imaginal exposure. Forty-eight female and 7 male test anxious university students (aged 17-39) were randomly assigned to one of four groups in a 2 (eye movement vs. eye fixation) x 2 (high expectancy vs. low expectancy) factorial design. The trait component of the State-Trait Anxiety Inventory (STAI) and the Test Anxiety Inventory (TAI) were completed prior to exposure. Participants imagined a traumatic test-related incident for 10 trials of 30 seconds each whilst simultaneously engaging in lateral eye movements or eye fixation. Psychological (Subjective Units of Distress; SUDS), physiological (heart rate and respiration rate) and image vividness responses were recorded. The TAI was administered 2 to 4

weeks later. No significant differences were found between eye movement and eye fixation conditions for any of the measures used. For both groups, there was a significant reduction in SUDS, respiration rate and vividness over trials but not heart rate. There was no significant difference between pre exposure and follow-up scores on the TAI. Expectancy was found to play a partial role in decreasing physiological but not psychological arousal. Individuals with test anxiety appeared to have a vulnerability to anxiety in general as evidenced by high trait anxiety scores. The role of dual tasks in relation to imaginal exposure is discussed.

### **Mental health and well-being of older people from diverse cultural and linguistic backgrounds**

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Older people from culturally and linguistically diverse backgrounds are under-represented in gerontological research. It is important to consider both biological and psychosocial factors in attempting to improve their health and well-being. Data from the National Health Survey (1995) were used to compare older people (aged 60 and over) born in Southern Europe, Western Europe, Eastern Europe, and Asia with those born in Australia and older migrants from English-speaking countries. Older women from Southern Europe were more likely than other groups to feel nervous or down and were more likely to be taking medication for anxiety. Older Asian women were more likely than Australian-born individuals or those born in English-speaking countries to report feeling down in the dumps. Women from Eastern Europe were most likely to report that emotional problems restricted their capacity to work. High alcohol consumption was comparatively frequent among men born in Italy, as well as among men born in Australia and other English-speaking countries. The challenge is to convince researchers and funding bodies that the mental health and well-being of older migrants deserves immediate attention.

### **Prevention of eating disordered behaviours and body image concerns: How should we approach research in the field?**

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This paper gives an overview of the various approaches to prevention which have been taken to date and which are available for prevention researchers. The rationale for research into prevention of eating disorders is discussed followed by an overview of the controlled empirical studies conducted to date. Preventive research by the author and research associates are briefly described in this context. It is concluded that the prevention studies conducted to date have often not been successful in long term attitude and behaviour change, although some recent programs appear promising. In addition, due to the methods used in most prevention studies, there exists a general problem in the literature with ascertaining what the effective elements in prevention programs are so that they may be built upon. The paper addresses this issue and other issues in the field of the prevention of eating disorders. The paper then proposes a framework for approaching research into the field, proposing that evaluation studies make a separate evaluation of components of prevention programs, evaluating whom the

most appropriate recipients (or target populations) of preventive efforts are, what message contents are most effective, which program presenters are best, and the best contexts and media for preventive efforts.

### The clergy and odyssey

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**M**ost clergy would describe their odyssey as a unique and demanding one. An adventure that is more about survival than spirituality. Trends in clergy research confirm that the journey for many is buffeted by stress, burnout and relationship problems with both people and God. Further, the high incidence of clergy sexual abuse suggests that it can be an unpleasant odyssey for others as well as themselves. It seems that specialising in God, Bible and church is no guarantee for developing one's spirituality. Indeed, operating predominantly from within an artificial church environment can ironically hinder it. In an attempt to curb current clergy trends church bodies have emphasised professionalism, ethical codes and counselling. Although a welcomed addition, these measures nevertheless fall short of a systemic solution. In this seminar we will explore the nature of spiritual meaning making using personal construct psychology, and consider the implications for clergy and church environments.

### Aggressive expressions of jealousy: Testing the cognitive-behavioural formulations in the general population

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**E**mpirical applications of cognitive behaviour-al frameworks in the understanding and treatment of nonpsychotic morbid jealousy are recent and in need of further verification in general, rather than clinical, populations. Similarly, current models would benefit from more precise testing, such as attempting to predict the often-dangerous consequences of jealousy. The present study investigated a broad range of relationship-specific cognitions (schema) and their association with jealousy and aggressive affective and behavioural manifestations in a general sample of heterosexual couples. Results indicated that frequent negative cognitions about romantic relationships were associated with high trait anger and anger expression, and were significant predictors of jealousy, intrusive behaviour (such as stalking) and physical abuse. More specifically, schemas representing themes of trust, attractiveness, abandonment, fear and sexual behaviour were all significant predictors suggesting the possibility of a broader range of negative distortions underlying the jealousy complex than previously suggested. These findings support and extend previous findings, emphasising the need to streamline the treatment of jealousy sufferers, including violent domestic offenders, by identifying underlying cognitive and emotional patterns that prompt individuals to misinterpret neutral or ambiguous events/situations and act aggressively.

### Training health professionals in psychological skills: The development of an interactive education CD-ROM

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**O**ne of the roles of the RFDS psychologist is to provide staff training in mental health issues. Conducting such training poses logistical problems, due to shift arrangements and wide dispersal of staff across Queensland. An educational medium is sought which allows staff to engage in self-directed learning, at a time to suit them. The medium should also have the capacity to contain a variety of media, i.e., text, audio and video. A CD-ROM satisfies these criteria. A training needs analysis of RFDS and other remote health personnel reveals that the most commonly occurring mental health presentations are depression, alcohol abuse, suicide, anxiety, general stress and psychological crises and skills needs include counselling, recognition skills, management skills and referral skills. Learning objectives are set around the training needs and educational material is developed for the CD-ROM format. The CD-ROM contains text, video footage, Internet links, key references, skills practice sections and educational quizzes to inform, advise, question, challenge and reward the user. It provides a stimulating and informative learning experience. The CD-ROM will ultimately improve the mental health of people who live in rural and remote locations, as their health service providers will be better able to manage mental health problems.

### The role of sex-role traits in problem eating behaviours

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**S**ex-role traits are viewed as highly pertinent in the study of problem eating because they provide one of the ways for studying the sociocultural context underlying disordered eating and self-regulation failure. Specifically, sex-role traits reflect stereotypes about the beliefs and behaviours typically attributed to men and women, which are acquired as they learn about the world and their role in it. In a range of populations that include women with bulimia nervosa, adult men and women, and adolescent boys and girls, higher scores on negative femininity were found to predict problem eating. Higher scores on femininity have also been found to predict problem eating behaviours among pre-adolescent boys. These findings are consistent with the femininity hypothesis. This hypothesis suggests that the identification with characteristics typically labelled as 'feminine', such as passivity, dependence, and unassertiveness, reflect a need of approval from other and low self-esteem which increases women and men's susceptibility to the development of problem eating.

### Emotion workers — Trained and untrained

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**E**motion workers are members of the community who work at reducing and preventing the psychological distress of others. The amount of training they have had to prepare them for this work varies enormously. For example while mental health professionals have had extensive specific training, the more numerous members of other health professions (such as nurses and general practitioners)



have had only small to moderate amounts of preparation to reduce others' psychological distress. There is also an even larger emotional workforce which has usually had no specific training at all. These informal caregivers include parents, workplace supervisors and managers, members of self-help groups, and relatives of people suffering from chronic physical or mental illnesses. They express needs for support to perform this work, which tends to be relatively invisible and unrecognised. As access to psychological services by the public is currently limited, the informal caregivers seem like an important target group: helping them might have snowballing beneficial effects. The possibility of psychologists providing support for at least some informal caregivers through the health care system, is one which deserves exploration. Goals would be improvements in the psychological well-being of the emotion workers and of those for whom they work.

### The developmental and contextual nature of racial tolerance

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The ultimate, practical objective of understanding both prejudice and tolerance is to reduce discrimination. However, it is surprising how little we know about tolerance from a psychological perspective. This paper will firstly discuss definitional and conceptual issues surrounding tolerance in general and racial tolerance in particular, and secondly, report on a study about racial tolerance using a developmental model. One hundred and ninety three (193) Students aged 11–12, 15–16 and 18–22 were asked to make judgements about dilemma-like-stories relevant to the Australian context about people from Indigenous, Asian or English backgrounds. Analysis revealed age-related differences with older students becoming less tolerant. Whilst younger students tended to only see the immediate consequences of being intolerant and blankly rejected intolerant views both for themselves and others, older students were more accepting of others who hold intolerant views and/or speak about them, justifying their position by invoking democratic rights. Contrary to expectation, racial tolerance was not found to be a global construct. Analysis showed that level of tolerance on any one of the stories was independent of the level of tolerance of any of the other two stories. That is, racial tolerance is contextual in nature and depends on whom and what we are asked to tolerate.

### Predictors of pre-operative anxiety in children

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This study aimed to identify factors contributing to anxiety at induction of anaesthesia in children. One hundred and twenty children aged 5–12, scheduled for surgery requiring general anaesthesia were included. Children were interviewed and assessed prior to surgery. Parents completed anxiety measures prior to surgery and were interviewed after the induction of anaesthesia. The level of children's anxiety was determined at the time of induction of anaesthesia by the modified Yale Preoperative Anxiety Scale. Factors associated with increased levels of anxiety in the children included: the number of people in the room at induction of anaesthesia; longer waiting time between admission at the hospital and induction of anaesthesia; negative memories of their previous hospital experi-

ences; and having a mother who does not practice a religion. Suggestions for implementation of the findings and for future research are provided.

### Less stress and more success: PET for Australian parents

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Parent Effectiveness Training (PET) has been taught in Australia since 1979, and generally involves eight weekly sessions of three hours each. From 1998 the standard American workbook was largely replaced by a simplified Australian workbook. Both include a section for objectives so that parents can evaluate their subsequent progress and achievement. In the present study 151 parents (70 US workbook, 81 Australian workbook) completed this section at pretest, and assigned a subjective units of distress (SUDS) score for the stress they felt about each identified issues. At the end of the course each was given a copy of the issues without the SUDS scores and asked to assess the current level of stressing the same way. Eighty-one controls identified the issues they felt were problems with their children (including SUDS scores), and as nearly as possible at the same interval as in the course completed the same post-test. Both PET groups compared to the control group reported a substantial and statistically significant reduction in stress, and comparable improvement in the percentage of relationship and management issues achieved, partly achieved or no longer relevant, though no significant differences were found between courses using the different workbooks.

### What do GPs think about the early diagnosis of dementia?

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The critical role of the General Practitioner in identifying and treating psychological disorders amongst older people is widely accepted. Early recognition can assist the family carer/s and the wider family to develop adaptive and collaborative management strategies and reduce the likelihood of dysfunctional response patterns developing. It can also allow the person with dementia to attend to important matters (e.g. lifestyle decisions, grief issues) and allows the optimum use of new generation anti-dementia medication. The person with dementia can also benefit from counselling to better adjust to his/her situation. Current research suggests GPs and other medical specialities are far less likely to inform patients of a dementia diagnosis than a cancer diagnosis. However, little is known of the GP's attitudes and views regarding the benefits of early diagnosis, whether they actively look for early warning signs or their beliefs about the adequacy of existing dementia services. The data from a small pilot study in Queensland, using a similar methodology to that recently used in England, is presented. The apparent lack of enthusiasm of GPs to actively look for early warning signs of dementia is discussed. It is argued that the 'myths about dementia' operate at a very subtle level, inexorably linked with ageist beliefs, and may permeate the messages of even the well informed. Suggestions as to how to counter these myths and engage the GP into early intervention mode are discussed.

## Is visual attention the link between poor magnocellular processing and dyslexia?

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A model of visual attention has been proposed that explains the link between poor magnocellular (M) processing and dyslexia. Spatial attention, which is controlled by the posterior parietal cortex (PPC), is required in order to correctly combine the features that are present in a specific spatial location. Inefficient spatial attention mechanisms would lead to a diffused focus of attention and features from different spatial locations being combined. As the PPC is dominated by M inputs it may be this function that is compromised in dyslexia. In this study 'pop-out' and serial search tasks were used to assess visual attention in 12 dyslexic and 12 normal adult readers. Both tasks were presented under luminance and equiluminance conditions. Dyslexics were significantly impaired compared to normal readers on all tasks. Bearing in mind that 'pop-out' search does not require spatial attention and that the M pathway does not operate under equiluminance conditions these results suggest that dyslexics have an attention deficit; but that this deficit is general, not specific and is independent of M processing.

## The killers among us: Lay attributions concerning crimes of serious violence

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Crimes of serious violence, particularly when they appear to the bystander as seemingly random and motiveless events, have the inherent ability to incite fears within individuals from a wide spectrum of society. The prospect of the unknown 'killers among us' striking at random, provides an omnipotent threat to one's continued existence. To this extent, the contemplation of indiscriminate violence in society engenders great fear and the search for rational explanations often follows as a consequence. Underlying such fears are schemas and prototypes of offenders, offences, and categories of crime: crimes such as serial murder, mass murder, sexual predation, and other seemingly unpredictable threats. This study sought to examine fears and cognitions underlying crimes of serious violence such as serial homicide, mass homicide and homicide using an attributional framework, with causal explanations investigated utilising a between-subjects design. Focal attributions differed according to crime type, as did more specific attributional judgements related to the controllability and stability of the offences portrayed. Implications of the research findings are discussed, particularly with regard to social and criminal justice policy formation, and the development of intervention strategies for offenders. In particular it is suggested that the language society uses, and the causal attributions individuals develop, potentially shapes the manner in which society's problems are addressed and managed. This study aims to elucidate such cognitions.

## Testing the efficacy of 'inoculation' as an adjunct in primary prevention of dieting

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There is an urgent need for prevention interventions that 'inoculate' adolescent girls against the social influences that lead to unhealthy dieting practices. The process of inoculation is based on the work of McGuire (1964) who theorised that an individual's attitudes and beliefs could be inoculated against future persuasive argument in much the same way as a biological inoculation builds resistance to future disease. The inoculation intervention consists of two components: a warning of future threat to currently held attitudes on an issue, and a request to defend a current position. 'Inoculation' in eating disorder prevention programs is rare, and the individual contribution inoculation makes in a multifaceted program is unknown. The present study assesses the potential for an 'inoculation' intervention to increase the effectiveness of a prevention videotape. Three hundred Year 7 and Year 8 girls who had watched a videotape designed to reduce dieting behaviours and body image concerns were randomly assigned to one of several post-videotape discussion groups, including an inoculation group and an attention control group. These groups were statistically compared as to change from pre- to post-intervention and follow-up on knowledge, attitudes to dieting and dieting intentions. Findings and implications for prevention programs are discussed.

## The role of memory in the development and representation of savant-type skills

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A savant is a person with a disabled level of general functioning who nevertheless displays isolated and exceptional skills. The skills demonstrated by savants are typically limited to a discrete range of abilities: musical precocity, arithmetical and calendrical calculations, verbal representations, highly developed sensory discriminations, artistic ability, mechanical dexterity, mathematical skills, and memory for facts. Although the skills of savants may appear somewhat diverse, it is suggested here that consistent preserved cognitive architecture or neurological substrates, particularly those involving memory, may predispose an individual to develop any one of these skills, irrespective of type. Despite poor performances on standardised tests of memory, superior memory is typically demonstrated by savants through excellent recall of everyday, trivial facts (e.g., dates, post-codes, capital cities, addresses, types of cars, floor plans and legal codes). This well developed declarative memory is typically found in all savants irrespective of the skill for which they have been identified. The nature and form of this memory are discussed.