

The Abstracts of the 3rd Australian Industrial and Organisational Psychology Conference

26th–27th June 1999

Brisbane, Queensland

Abstract Editors: N.L. Jimmieson, M.A. Griffin, B. Kabanoff
Queensland University of Technology

P. Bordia
University of Queensland

L. M. Bradley
Queensland University of Technology

and A. Neal
University of Queensland

The 3rd Australian Industrial and Organisational Psychology Conference was attended by 497 industrial and organisational psychologists from Australia, New Zealand, North America, Europe, and Asia. One hundred and twenty eight individual contributions were organised into nine invited symposia (comprising 33 abstracts), six symposia (comprising 20 abstracts), seven individual presentations (comprising 27 abstracts), 31 poster abstracts, six practice forums, three best papers, and eight keynote address abstracts (including the opening and closing addresses). In addition, a total of 398 individuals attended the seven pre-conference workshops. Phillip Ackerman (Georgia Institute of Technology), Walter Borman (University of South Florida), Joyce and Robert Hogan (Hogan Assessment Systems), Ruth Kanfer (Georgia Institute of Technology), Deniz Ones (University of Minnesota), Benjamin Schneider (University of Maryland), and Michael West (The University of Aston) are leaders in their respective areas, and provided workshops in areas central to industrial and organisational psychology.

The eight keynote addresses were presented by international and national identities of the highest standing in industrial and organisational psychology. Benjamin Schneider from the University of Maryland integrated the services marketing literature with traditional topics in industrial and organisational psychology in his opening address, entitled Services Management and Industrial and Organisational Psychology: Lessons Learned. Walter Borman from the University of South Florida discussed citizenship performance in his paper, entitled Citizenship Performance: Its Nature, Antecedents, and Measurement. Deniz Ones from the University of Minnesota considered the predictive utility of conscientiousness in her paper, entitled A Theory of Conscientiousness at Work: Theoretical Foundations and Empirical Evidence. Robert Hogan from Hogan Assessment Systems discussed the importance of leadership for organisational effectiveness in his paper, entitled Personality, Leadership, and Organisational Effectiveness. Phillip Ackerman from the Georgia Institute of Technology considered described a theory of adult intellectual development in his paper, entitled Adult Intellectual Development: Trait Complexes and the World of Work. Ruth Kanfer from the Georgia Institute of Technology presented a framework for understanding motivational traits and skills in her paper, entitled Motivational Traits and Skills. Michael West from The University of Aston considered teamwork effectiveness in his paper, entitled The Human Team: How It Works and Why It Fails. Phyllis Tharenou from Monash University examined the discipline of industrial and organisational psychology in her closing address, entitled The Relevance of Industrial and Organisational Psychology to Contemporary Organisations: Are We Y2K Compliant?

CONFERENCE COMMITTEE

Boris Kabanoff (Co-Chair)
Mark Griffin (Co-Chair)
Lisa Bradley
Prashant Bordia
Nerina Jimmieson
Andrew Neal

Adult intellectual development: Trait complexes and the world of work

ACKERMAN, P. (Georgia Institute of Technology).

Based on extensions of prior ability theory and recent analyses of personality-ability and interest-ability relations, a developmental theory of adult intelligence is described, called PPIK. The PPIK theory of adult intellectual development integrates intelligence-as-Process, Personality, Interests, and intelligence-as-Knowledge. Sources of overlap between personality and other trait families are also discussed and four trait complexes are reviewed: social, clerical/conventional, science/math, and intellectual/cultural. This paper will discuss how individual differences in knowledge reflect the 'investment' of cognitive, conative, and affective (personality) resources across adult development. The implications of this work are considered with respect to the acquisition and maintenance of intelligence-as-Knowledge during adulthood. The role of knowledge structures for predicting vocational task performance and for designing interventions for career development will be discussed.

Management in the early 21st century: Work force demographics and implications for high and low technology work

ACKERMAN, P. (Georgia Institute of Technology).

Organisations in the early 21st Century can be loosely divided into high-knowledge and low-knowledge. High-knowledge organisations will require the best and brightest workers and will be subjected to continuous demands for cutting-edge knowledge in an increasingly competitive global market. Low-knowledge organisations will require workers who, while not highly educated or trained, will need to have sufficient motivational strength to show up for work and provide a positive value for the organisation. Drawing on a wide range of demographic data and literature on literacy, aptitude, development, and motivation, this paper will discuss several challenges for the workforce and for management during the next two decades. Specific issues to be discussed include the effects of an aging workforce on both high- and low-knowledge organisations; changes in the entering workforce characteristics, trends and projections for aptitudes and educational preparation for work. Approaches to planning for the future workforce will be considered, including managing knowledge capital, differentiating between interventions for high- and low-knowledge workers, and interactions with larger public policy issues (such as age discrimination, retraining, and retirement).

Chief executive selection (enters the territory of assessment psychology)

AITKEN, P., & WINSBOROUGH, D. (Windsborough Allen Psychologists).
psycho@xtra.co.nz

A framework for Chief Executive (CE) selection has been developed for the New Zealand (NZ) Public Service, following the production of competencies for a CE commissioned by the NZ State Services Commission (SSC), and in the absence of substantive international protocols and research. Selection practice and processes, normally applied to other roles, were adapted to bring rigour to the assessment process following a review of

international and local CE selection methods and techniques. The forum will engage practitioners and academics concerned with selection in critically reviewing our framework and main findings, and to address issues connected with the 'mysterious' world of CE selection. In particular we expect people to share their ideas and insights with reference to the following questions: Can there be an 'ideal' CE profile that fits every organisation? What factors will influence it? How can the assessment of the leadership 'art form' be subjected to the same scrutiny as other management roles? How can we identify some next steps for CE selection practice and research?

A model of career decision making in adolescents

ALBION, M.J., & FOGARTY, G.J. (University of Southern Queensland).

A model of career decision making (CDM) in young people was tested using survey data from 121 Yr 11 and 12 students (78 girls and 43 boys) from a regional high school in Queensland, Australia. Participants completed the Career Decision Difficulties Questionnaire (CDDQ); the International Personality Item Pool (IPIP) Five-Factor Domain Scale (100-item Version); the Shipley Institute of Living scale; the Interest Determination, Exploration and Assessment System (IDEAS) Interest Inventory; and the Personal Attributes Questionnaire (PAQ). The structural equation model consists of two components — a measurement model defining latent constructs of decision difficulties and decision status, and a structural model incorporating personality variables and interests as significant predictors of CDM. The model developed and tested with this sample is able to predict satisfactorily 51% of students' decisional status.

New measures of trust in senior management

ALBRECHT, S.L., & SEVASTOS, P.P. (Curtin University of Technology).
albrecht@psychology.curtin.edu.au

Trust between individuals and groups has been identified as an important factor in determining organisational success, organisational stability and the well-being of employees. Existing measures of trust, in the main, have been derived using exploratory factor analysis and suggest the construct is comprised of between one and ten dimensions. The present research contributes to the growing literature on trust by developing valid measures of trust which have a particular focus on senior management. Drawing from the literature and the results of pilot studies, a six dimensional model of trust in senior management — consisting of dispositional, cognitive, affective, social and behavioural intent dimensions — was tested using confirmatory factor analysis. The results clearly support the convergent and discriminant validity of the model. For example, all model fit indices were above minimum recommended values and all items loaded at significant levels on their specified factor. The measures were successfully cross-validated in a sample from a different organisation. Theoretical implications and the practical implications for the diagnosis and management of trust in senior management are discussed.

Perceiving and managing emotion in the workplace: A research agenda based on neurophysiology

ASHKANASY, NM., & HOOPER, G. (University of Queensland).
n.ashkanasy@gsm.uq.edu.au

This paper presents a neurophysiological perspective on emotions and discusses methods for applying this perspective to the study of the perception and management of emotion in the workplace. Emotional stimuli give rise to neural, autonomic, respiratory, cardiovascular, facial, and neuroendocrinal responses. Perception of the physical indicators of emotion in others is surprisingly accurate, with perception of facial expression a sensitive discriminator between true and feigned emotion. We propose that the congruence, or otherwise, between expressed and felt emotions influences individual motivation, leader-member relations, group dynamics, and organisational climate and culture. A multi-method approach based on laboratory experimentation, field observation, and survey procedures is recommended for investigating the processes of perceiving and managing felt emotion in organisational settings.

Crucibles or cryospheres? The relationships between team climate, innovation, and performance in research and development teams

BAIN, PG., PIROLA-MERLO, A., MANN, L., ATKINS, L., HIRST, G., PADULA, M., & GILLESPIE, N. (University of Melbourne).
p.bain@mbs.unimelb.edu.au

Previous research has demonstrated that a supportive team climate for innovation is associated with innovative team performance. However, because the relationship between innovation and performance depends on the degree to which team work requires innovation, the relationship between team climate for innovation and team performance is expected to be moderated by project type (basic/applied research v. technical services/product development). Analyses on data from 295 R&D workers reveals that basic and applied research projects exhibited higher correlations between innovation and performance than product development and technical services projects. Team climate factors showed different patterns of association with performance for these different project types. Leadership roles showed consistent positive correlations with team climate factors, but perceptions of the organisation's value of innovation were highly correlated with team climate for technical and development projects only.

Measuring organisational stressors and individual reactions

BILGIÇ, R. (Middle East Technical University).
Rey@rorqual.cc.metu.edu.tr

This study is undertaken to create a generic work stress scale (WSS) and a stress reaction scale (SRS) in Turkey. Additionally, the buffering hypothesis of job satisfaction between work related stressors and stress reactions is tested. Factor analysis of the WSS based on 222 participants coming from the different work places in Ankara show that five-factor solution is the most adequate one. The factors are 'expected and unexpected work overload', 'negative organisational climate', 'perceived lack of autonomy', 'lack

of resources', and 'role ambiguity'. The results of four-factor solution of SRS are 'psychosomatic reactions' 'burnout', 'withdrawal', and 'irritability'. The short form of the Minnesota Satisfaction Questionnaire is utilised to measure job satisfaction. Furthermore, to test the buffering hypothesis of job satisfaction, four hierarchical regression analyses are used for each of the factors of stress reaction scale after controlling for the demographic variables. No buffering effect of job satisfaction is found. However, job satisfaction appears to be one of the major predictors of stress reactions at work. The implications of the results for employees are considered.

A new approach for the measurement and management of workload

BOAG, CC., HÄRTEL, CEJ., HALFORD, GS., & NEAL, A. (The University of Queensland).
Christin@psy.uq.edu.au

New forms of technology are making many aspects of work more mentally challenging. This paper presents a new approach to defining, modelling, and measuring mental workload, and shows how this approach can be used for managing performance and safety in the workplace. A key element of this approach is the development of a workload complexity metric. In order to develop this metric, one needs to understand how the individual mentally represents their work task. Following this a model of information processing can be derived. From this model the elements that impact upon mental workload, and ultimately employee performance, can be identified. This model can then be used to assess the impact that peaks and troughs in workload have upon performance across time. The ultimate aim of this research is to develop a model that can be used as a management tool, by identifying and controlling the critical workload parameters related to individual performance and error. This procedure will be illustrated through current research within the domain of air traffic control.

Denying rumours of organisational closure: Honest sources are the most effective

BORDIA, P. (University of Queensland), DIFONZO, N. (Rochester Institute of Technology), & SCHULZ, CA. (University of Queensland).
prashant@psy.uq.edu.au

Effect of source honesty and appropriateness on effectiveness of rumour rebuttal was tested. When the source was perceived as high on honesty, the denial was more successful in reducing belief and anxiety associated with the rumour. Source appropriateness (operationalised as a combination of source knowledgeability and status) did not have a main effect on belief or anxiety reduction. Honesty and appropriateness had an additive effect, such that the denial was most successful in reducing belief when the source was perceived as high on both, honesty and appropriateness.

Citizenship performance: Its nature, antecedents, and measurement

BORMAN, W. (University of South Florida).

Contextual or citizenship performance can be distinguished from task performance. Citizenship performance (CP) supports the social and psychological fabric of the organisation rather than contributing directly to the

goods and services produced by the organisation. This paper will discuss the nature of this construct and describe research intended to better understand it. Streams of research include work to link CP to organisational effectiveness, studies showing that experienced supervisors weight CP about as highly as task performance when making overall effectiveness judgments of subordinates, and research demonstrating that personality predicts CP. In addition, this paper will present a recently developed conceptual model of CP and describe an effort to measure this construct using an analogue to adaptive testing in the ability domain, computerised adaptive rating scales

Developing and using situational judgement tests

BORMAN, W. (University of South Florida).

Situational Judgement Tests (SJTs) present realistic situations in some relevant context and ask test-takers to indicate what they would do in reaction to each situation. SJTs are typically multiple-choice assessments with testees' scores derived against expert ratings of effectiveness for each response option. They can be paper-and-pencil or video-based. This paper will describe these tests and will also discuss research to evaluate their validity as predictors of job performance and issues regarding their use as criterion measures. Several examples will be provided, including a video-based SJT to measure aircrew resource management skills, a computerised SJT to evaluate air traffic controller performance, and paper-and-pencil SJTs to predict performance in several jobs. Workshop participants will have an opportunity to practice some of the development steps, as well. Finally, additional applications of SJTs will be discussed, including their use in training and development, as realistic job previews, and as a strategy for promoting an organisation's management practices.

Organisation, management and performance in hospitals in the British National Health Service

BORRILL, C., (University of Sheffield), WEST, M., (The University of Aston), & PATTERSON, M. (University of Sheffield).
c.s.borrill@sheffield.ac.uk

The impact of human resource management and human capital policies and practices upon organisational performance (whether in the private or public sector) is an important topic (Boudreau, 1991; Jones & Wright, 1992; Kleiner, 1990). Research literature suggests that the management of people can help to create a source of high performance especially where it is aligned with the organisation's strategy (Begin, 1991; Butler, Ferris, & Napier, 1991). This paper presents an overview of research being carried out in 100 hospitals in the British National Health Service (NHS), which is examining, longitudinally, the link between the management of people working in hospitals and outcomes such as quality of health care and financial performance. Details are given of the objectives and scope of the research, and the quantitative and qualitative methods being used. Current methodological and theoretical issues being debated by researchers in the HRM/organisational performance field are outlined, and the contribution that the research and findings from pilot work make to this debate discussed.

Factors influencing the quality of emotional process work: The influence of organisational legitimacy

BOYLE, MV. (University of Queensland).
Louis.Pierre@bigpond.com

This paper discusses the link between the quality of emotional process work and the degree to which an organisation accepts or legitimates emotional labour. A study of 110 service responses by an emergency service organisation showed that individual engagement in high quality emotional process work was viewed by organisational employees as both facilitating task accomplishment through enhancing future performance. Interviews with emergency service workers also indicated that recognition by the organisation of the need to engage in emotional process work as a continual part of performing emotional labour was necessary if employees were to maintain stress fitness and immunity to burnout. It is argued that a number of organisational factors can influence how individual employees experience and practice emotional process work as part of emotional labour — legitimacy of emotional process work, level of supportiveness within the immediate emotional climate of the work group, and the quality of organisational responses to individual cases of emotional exhaustion and burnout. It is proposed that the level of the quality of organisational response is determined by how much legitimacy emotional labour is given as integral part of the provision of service, and the degree to which leadership plays in establishing and maintaining emotional competence and climate norms.

Causes of conflict and styles of conflict management in a multicultural workplace: A case study of an Australian multinational corporation in Asia

BREW, FP. (Macquarie University).
franbrew@bunyip.bhs.mq.edu.au

This study investigates intercultural conflict between Australian expatriates and East Asian host-nationals. In particular, manifest and latent causes of intercultural conflict, how the conflict is managed, and the relationship of styles of conflict management to outcomes, are examined. Results from 35 critical incident interviews of employees of a major Australian multinational corporation are presented. Most respondents perceive the major feature of intercultural conflict to be normative in content; that is, breaches of behavioural norms. The described outward, manifest causes of some of the conflict incidents are similar to those found in a Western workplace but some are unique to the multicultural workplace. Two underlying, latent conflict dimensions emerged from a multidimensional scaling analysis. The first dimension involves communication problems related to direct versus indirect styles of expression. The second dimension involves tensions over competing Western and Asian work procedures and practices. When managing conflict, expatriates are found to favour direct management styles involving direct communication styles compared to East Asian host-nationals who favour indirect styles. Positive outcomes are more likely to occur with problem-solving management strategies, while negative outcomes are often found to be related to expatriate use of a dominating conflict management style coupled with an avoiding style favoured by host-nationals.

Negative affectivity: Does it predict vulnerability to occupational stress?

BRIGHT, JEH., & COOPER, L. (University of New South Wales).
J.Bright@unsw.edu.au

The status of the individual difference trait Negative Affectivity (NA) as a vulnerability factor to occupational stress is currently much debated in the literature. In lieu of inconsistent findings in the literature, a model was proposed in which high NA individuals are predicted to be more reactive, or vulnerable, to impersonal stressors in the work environment and not interpersonal stressors (Parkes, 1990). A laboratory experiment is designed to test this model by manipulating systematically the level of interpersonal and impersonal stressors associated with a computerised tracking task. Partial support is observed for the model in that the role of NA is found to be differentially related to the two types of stressors. However, results are not in the predicted direction with high NA individuals being more reactive to interpersonal stressors overall. Implications of the findings for stress research and workplace stress interventions will be discussed.

Proximal and distal measures of motivation predicting performance under maximum test conditions

BROWN, DF., & KIRK, AK. (Griffith University).

Campbell, McCloy, Oppler, and Sager's (1992) theory of job performance proposes a set of latent performance determinants identified as declarative knowledge (DK), procedural knowledge and skills (PKS), and motivation (M). The theory postulates that under maximum test conditions motivational factors will be constant and maximal. Social-Cognitive Theory challenges this proposition by proposing that variable motivational forces significantly determine the successful execution of any ability level. Campbell et al., see the maximum performance paradigm as eliciting maximum effort (motivation), and fail to consider that internal, individual differences will determine the perseverance of that level of effort. The present study challenges Campbell et al.'s measurement model by testing the effects of proximal (self-efficacy) and distal (need for achievement) motivation on performance under maximum test conditions. A walk-through performance test is used to evaluate the PKS of ninety employees. The structural model demonstrates significant pathways between measures of motivation and PKS. The findings confirm the explanatory power of the motivation construct under maximum test conditions and support the proposition of a typical:maximum performance continuum.

Studying relationships between work climate and customer service perceptions: Individual- and organisational-level of analysis issues

BURKE, M. (Tulane University).

Although the practice and research literatures are supportive of hypothesised relationships between work climate variables and customer service perceptions at the business unit-level of theory and analysis, there are different perspectives concerning (a) the meaning and measurement of climate in service contexts (i.e., social constructionist

versus multiple stakeholder perspective), and (b) how climate variables are causally related to customer service perceptions. These alternative perspectives are producing mixed and ambiguous results concerning the nature of relationships between climate variables and customer service perceptions. Based on store financial data and survey data collected from approximately 70,000 employees and 66,000 customers who shopped at 594 stores of a large U.S. retail company, confirmatory factor analytic results concerning the substantive nature of climate and path analytic results pertaining to relationships between climate constructs, customer service perceptions and store financial performance will be presented. The discussion of the results will offer insights into resolving issues related to defining, measuring, and managing climate in service contexts and provide suggestions for studying and modelling relations between climate variables, customer service perceptions, and organisational financial performance at the business unit (store)-level of analysis.

A brief measure of transformational leadership

CARLESS, S. (Monash University), WEARING, AJ., & MANN, L. (University of Melbourne).
Sally.Carless@sci.monash.edu.au

This study reports the development of a short measure of transformational leadership: the Global Transformational Leadership scale. The study sample was 1,440 subordinates who assessed the leader behaviour of 695 branch managers in a large Australian financial organisation. Exploratory and confirmatory factor analysis showed that the GTL measured a single construct of leadership and had satisfactory reliability. Evidence for the convergent and discriminant validity is presented. We conclude that the GTL has a number of potential uses as an assessment and selection tool and in leadership research.

Making common mistakes uncommon in psychometric instrument usage — What can be done?

CHALLIS, H. (Saville & Holdsworth Australia Ltd), & MCCOULOUGH, MJ. (Australian Council for Educational Research).
hannah.challis@shl.com.au

There is no doubt that quality psychometric instruments, when used appropriately, provide individuals and organisations with important and beneficial information. As these benefits become more widely understood, and consequently the demand for their use increases, it is not surprising that there is ever-increasing misuse of such tools. In this forum, practitioners are provided with a checklist of best practice to reflect on sound psychometric test usage. One recent and problematic case study of a retrenchment programme is presented for participants to review in groups. Participants are asked to use the checklist provided to identify the aspects of poor practice within the case study. They are also encouraged to reflect on how such problems can be avoided and what further steps should be taken to ensure the proficient and professional use of these instruments.

Making the deadline: Group development and timeliness in project teams

CHANG, A., BORDIA, P., & DUCK, J. (The University of Queensland).
artemis@psy.uq.edu.au

This study investigated the relationship between project groups' developmental patterns and their timeliness. Developmental patterns of successful, behind schedule, and failed groups were compared according to two competing perspectives on group development: Linear progressive (Wheelan, 1994) and non-sequential (Gersick, 1988, 1989) models. Results suggested that developmental patterns described by both the models were important to a group's completion of the project on time.

The legal responsibility of trauma at work

CLARK, MR. (Solicitor), & DOYLE, P. (Psychologist).
Mitchell@mba-lawyers.com.au

There is debate about the efficacy of psychological debriefs in the aftermath of traumatic events. Many outcome studies have been criticised for methodological flaws. It is unclear from a psychological (theoretical) perspective, what type (how) and what level (when) of professional intervention is required across the range of traumatic incidents people experience throughout their lives. What are the legal requirements associated with psychological debriefing for people exposed to traumatic and critical incidents at work? In a recent case, the N.S.W. Court of Appeal, effectively, 'drew a line in the sand' on the nature and timing of post-trauma counselling. This Decision is persuasive legal precedent on all Australian State Courts. A psychologist (on behalf of an employer) will potentially be required to ensure face to face counselling occurs for every employee exposed to a traumatic event as a consequence of their work duties. Failure to do so was negligence, according to the recent Court case. The Court decided that, on the facts of the case, the psychologist, retained by the employer, had failed to debrief and counsel the employee appropriately. The Court decided that the employee's Post-Traumatic Stress Disorder was materially contributed to by the psychologist's omission. An explanation of the Decisions of the Courts and an analysis of the issues associated with handling trauma at work, including consideration of the extent of legal responsibility on psychologists and employers.

The search for professionalism in human resource management: Do actions speak louder than attributes?

CLELAND, J., PAJO, K., & TOULSON, P. (Massey University).
J.D.Cleland@massey.ac.nz

The issue of human resource management as a profession is a vexatious one. There is considerable debate about how professions should be defined and whether human resource management qualifies, or should even aspire to be recognised as a professional occupation. It is in the context of this debate that we report the results of a survey of the members of the New Zealand Institute of Personnel Management on the issue of professionalism. The results show that a clear majority of members of the IPM aspire to professional status and recognition but that there is less agreement about the significance to HR of key attributes

typically associated with professional occupations. Responses to the questionnaire also provide evidence that HR practitioners recognise the importance of acting in a professional manner and the necessity to adopt a strategic role in which they contribute to the attainment of organisational objectives. These findings point to an inherent conflict between the evolving role of human resource management in organisations and the notion of autonomy which is a defining characteristic of most professional occupations.

Emotional intelligence (EQ) in organisations: Optimising emotional potential

COCHRANE, A., AUSTIN, B., & BARUKSOPULO, W.
(Emotional Intelligence (EQ) Network).
anitaco@webexpress.net.au

Emotional intelligence (EQ) refers to the intelligent use of emotions, of making a deliberate effort to use emotions to help guide behaviour and thinking in ways that enhance personal outcomes. Self-discipline, enthusiasm and persistence, and the ability to motivate oneself are some of the abilities of which EQ is composed. In recent years, research evidence has confirmed that emotional intelligence is twice as important as cognitive abilities, such as IQ or technical expertise, in the workplace and has more impact at higher levels of the organisation. Employers are now seeking not so much technical skills, as communication skills, confidence, interpersonal skills, adaptability to change and setbacks, motivation, cooperation, self-discipline and personal management, empathy, willingness to make a contribution and develop others, and initiative. Organisations throughout the world are recognising the importance of EQ and are embracing the concept and the strategies required to develop an 'emotionally intelligent organisation'. This practice forum presents a brief overview of EQ, the benefits of implementing EQ in the workplace, a summary of models of EQ relevant to the workplace, and strategies for implementing EQ at work.

The impact of mental strategies training on well-being and confidence of senior managerial staff

CREED, P. (Griffith University), & DAVIES, M. (Learning at Work).
p.creed@mailbox.gu.edu.au

This study evaluates short-term and long-term well-being (Job Affect Scale: Brief, Burke, George, Robinson, & Webster, 1988) and workplace self-efficacy (Neck & Manz, 1996) outcomes for a group of 48 senior executive public servants who attended cognitively based leadership training programs. Improvements in well-being and self-efficacy are identified as a result of attending training. Stronger effects are identified for self-efficacy. Those participants who had lower levels of self-efficacy prior to training improve more than participants who had high levels pre-course, demonstrating behavioural plasticity effects (Brockner, 1988) for the training. No changes in well-being or self-efficacy are identified at follow-up, indicating that the benefits gained from the course may have persisted after training. The results here, however, are confounded by the cohort who responded at follow-up not being representative of the group as a whole. Practical and theoretical implications of the study are discussed, and directions for further research are indicated.

Committing to your work, spouse, and children: Does role commitment exacerbate or alleviate work-family conflict?

DAY, AL. (Saint Mary's University).
Arla.Day@StMarys.ca

Many workers face the challenge of balancing their work and family responsibilities. Sometimes they are successful. Other times, they are not successful and, consequently, experience conflict between their work and family roles. The present study examines the direct and indirect relationship of role commitment with work-spouse and work-parent conflict, as well as commitment's moderating impact between job factors and conflict. A questionnaire was sent to female nurses and police officers in Canada and the United States. A critical finding is that increased conflict is associated with increased parent commitment but with decreased spouse and job commitment, suggesting that commitment to certain roles may help alleviate conflict. Results also indicate that long and irregular work hours, high work-role ambiguity and overload, and low job control each uniquely predict increased work-spouse conflict. Increased work-parent conflict is associated with higher work overload and lower job control. Finally, commitment moderates the relationships between irregular work schedules and work-spouse conflict, work overload and work-spouse conflict, and work intra-role conflict and work-parent conflict. Implications for organisations and for future research are discussed.

An exploration of information search behaviour

DEBOWSKI, S. (Murdoch University).
debowski@commerce.murdoch.edu.au

Electronic databases are increasingly important sources of information for all levels of the community. However, the process by which people search those databases is poorly understood. This paper defines electronic search strategy and then examines its application in three studies. Some common strategies employed by novice searchers are discussed. The relationship between self-efficacy, training and feedback is also broadly explored in the paper. The studies indicate that self-efficacy can be a strong predictor of search strategy, but becomes more strongly associated with wasted effort when feedback is comparatively directed. Subjects provided with guided mastery training and feedback on their search strategy demonstrated the strongest strategy gains. However, all three studies demonstrate the difficulties subjects faced in completing the tasks effectively. These are also summarised.

A two-state model of fatigue: Implications for risk management in occupational settings

DESMOND, P. (Texas Tech University).
pdesmond@ttacs.ttu.edu

This paper discusses the impact of fatigue on human performance in a variety of occupational settings. Operational characteristics of nuclear, aviation and trucking industries are particularly conducive to fatigue, and there is convincing evidence to suggest that fatigue plays a critical role in the occurrence of operational errors. The paper outlines a new model of fatigue, which makes a critical distinction between two fatigue states — 'passive' and 'active' fatigue. When performing a task over a prolonged

period of time, an active fatigue state develops, which results from constant perceptual-motor adjustments. It is this form of active fatigue that reflects contemporary knowledge of long-distance trucking operations. However, little attention has been given to a second form of fatigue, passive fatigue. This form of fatigue is likely to emerge when a human operator serves as both supervisor and monitor of a largely automated system. It is particularly acute in pursuits such as process control and trans-oceanic flights. Passive fatigue results from chronic understimulation. Implications of the model for managing risks associated with active and passive fatigue states are discussed.

Stress management interventions: What do managers and organisations actually do?

DEWE, P. (Massey University), & O'DRISCOLL, M.
(University of Waikato).
p.dewe@massey.ac.nz

Stress management programmes have been conceptualised in a number of different ways. Such approaches frequently distinguish between the level at which the intervention takes place. It is possible therefore to identify interventions at the *primary*, *secondary* and *tertiary* levels. There is no doubt that each level of intervention has embedded in it a range of practices that offer opportunities for individual development and employee wellbeing. Equally though, there is a strongly held belief that many interventions fall short because they offer only a partial solution, or fail to recognise the wider contextual-structural issues within which organisational behaviour takes place. One reason for this may be because little attempt has been made to find out what managers understand by stress and the extent to which they think their organisation has a responsibility to address problems of stress. Little is also known about what actions organisations actually take and how effective they are believed to be and what managers would do if they were responsible for stress interventions in their organisation. These issues were explored using a sample of 541 managers drawn from throughout New Zealand. The results indicate the variety of approaches taken and the range of views concerning the role of stress related interventions. These results are discussed in terms of the different theoretical approaches to stress management.

Psychosocial job strain and challenge in human service workers: A test of the demand-control-support model

DOLLARD, MF. (University of South Australia),
WINEFIELD, HR. (University of Adelaide), & WINEFIELD,
AH. (University of South Australia).
maureen.dollard@unisa.edu.au

The first aim of this study is to assess the utility of the Demand-Control-Support (DCS) model in accounting for differences in level of strain and challenge between different work roles in the same organisation. Human service employees ($N = 813$) are surveyed and roles (e.g., social worker, youth worker, manager) are categorised according to levels on psychosocial aspects of the job (demands, controls, supports). The study finds that examining the structure of various human service job roles, specifically their DCS dimensions, can be a useful way of predicting levels of challenge on the one hand, and strain (specifically emotional exhaustion and depersonalisation) on the other. The second aim is to test the main and interactive

effects of the DCS dimensions in the complete (multi-occupational) sample. Little support is found for the iso-strain hypothesis: only main effects are shown with regard to emotional exhaustion. No interaction effects are found. Main effects are found for the active learning hypothesis, demand and control adding to predict challenge. We conclude that the predictive utility of the model is improved by adding other work dimensions (e.g., work role ambiguity), and contextual experiences (e.g., violent exposures, unfair supervision, sexual harassment).

Bullying in the workplace

DYER, HM., SMART, RM., & SHEEHAN, M. (Griffith University).
r.smart@mailbox.gu.edu.au

The present study aims first to investigate whether males and females differ with respect to their attitudes towards bullying in the workplace and second, to investigate whether bystanders and victims differ with respect to the coping strategies they use in dealing with bullying in the workplace. The sample consisted of 105 Australian males (32%) and females (68%) employed in paid work for at least six months prior to participating in the study. In order to assess respondents' attitudes towards bullying, a measure consisting of 43 items was developed. The construct validity and internal reliability of the newly developed measure was assessed. Factor analysis revealed three factors, attitudes towards bullying, attitudes towards victims, and attitudes towards bullies. Significant gender differences were found in relation to attitudes towards bullying, with males having a more negative attitude towards victims of bullying than females. In contrast, females disagreed with bullying in the workplace more strongly than males and had a more negative attitude towards bullies than males. In relation to coping, victims report a more proactive reaction in coping with being bullied, than bystanders who observe a colleague(s) being bullied. Limitations of the present study and suggestions for future research are discussed.

Work-family conflict in three employment contexts

FALLON, BJ., FOX, S., GAGLIANO, J., & HARFORD, S. (University of Melbourne).
B.Fallon@psych.unimelb.edu.au

The financial, health and travel sectors have undergone considerable change over the last few years as a result of changes in the political and economic climate. This research investigates whether the changes faced by the workforce in these sectors have resulted in differences between them in the extent of work/family conflict and examines the relationship between work/family conflict and variables which have traditionally been related to that conflict. There were 172 respondents from the financial sector, 180 from the health sector and 201 from the travel sector. The variables of interest were supervisor support, work to family conflict, family to work conflict, and identification with the job. There were no differences between the three sectors for work to family conflict. The participants from the finance sector reported greater family to work conflict than those from the other sectors and they also reported the most positive attitude toward family by their supervisors. Those from the travel sector reported the most negative attitudes from the supervisor regarding family matters, the least general empathy and the lowest identification with the job. Hierarchical regres-

sions indicated that the predictors of work to family conflict and family to work conflict varied between the sectors.

Managing emotion in diverse work teams

FINN, CP., & ASHKANASY, NM. (University of Queensland).
c.finn@gsm.uq.edu.au

Diverse teams project contrasting images within organisations. Diversity can cause problems and unhappiness in some teams, but in other teams diversity produces creativity, innovation, and satisfaction. In this paper, we isolate four problems associated with diverse teams: occupational unboundedness, minority gender isolation, generational diversity and cultural differences. Using the surgical team as an example, we present a model based on the Affective Event Theory (AET). In our model, daily hassles and problems encountered by group members result in affective events, which precipitate affective states. The affective states, in turn, have consequences for affect- and judgement-driven behaviour, and for attitude formation. We also argue that dispositional affectivity, emotional intelligence, family commitments, and effective management modify the links between diversity problems, affective events, and affective states. In particular, capable managers have the ability to convert the problems associated with diverse teams into assets, and thus to enable teams to be synergistic and innovative.

The dimensionality of perceived organisational support

FIRNS, IGJ. (Curtin University of Technology), & TRAVAGLIONE, A. (University of Western Australia).
firnsi@cbs.curtin.edu.au

Perceived Organisational Support is defined as the extent to which an organisation values employee contributions and cares about employee well-being. The construct has always been presumed to be unidimensional, despite the two distinct concepts embodied in this definition. Confirmatory factor analyses, however, provide strong support for a two-dimensional measurement model when selected items from the Survey of Perceived Organisational Support are allocated to the postulated factors. The two dimensions are associated differently with job satisfaction, affective commitment, normative commitment and work-related effort. This has important implications for management, as an over-emphasis on either dimension is likely to lead to quite different organisational problems. The environment in an organisation in which employees' contributions are valued but there is little concern for their well-being would probably be quite stressful, with high absenteeism and labour turnover rates. In an organisation which is concerned about employee well-being without valuing employee contributions, the environment is likely to be very relaxed, with little of value being achieved. The paper suggests that further research is needed to explore whether there are additional dimensions to this construct and to develop an operationalisation that more clearly separates the various facets of Perceived Organisational Support.

The trials and tribulations of experience sampling research on emotions

FISHER CD., & NOBLE C. (Bond University).
Cynthia.Fisher@Bond.edu.au

This paper describes some methodological issues associated with the use of Experience Sampling Methodology (ESM) in the study of emotions at work, using as an example an ESM data collection effort recently undertaken by the first author. The topics of study design, recruitment and retention of subjects across multiple reporting periods, technological issues involved in signalling subjects for responses, survey design, and statistical problems in the analysis of multi-level data are addressed.

Fear and loathing at work: An emotion script approach to anger between superiors, co-workers, and subordinates

FITNESS, J. (Macquarie University).
Jfitness@bunyip.bhs.mq.edu.au

The aim of this study was to investigate accounts of the causes, features, and consequences, of anger episodes at work. One hundred and seventy five respondents were interviewed about an anger-eliciting event with a superior, co-worker, or subordinate. Two distinct workplace anger scripts were identified, with superiors typically angered by rule violations and job incompetence, co-workers typically angered by rule violations, and subordinates typically angered by unjust treatment. Compared with superiors, subordinates appraised the offence as less fair, and reported more humiliation by, and hate for, the anger target; subordinates were also more likely than superiors to withdraw from the anger target and to consider the incident unresolved. Theoretical implications of the results are discussed in relation to anger in the workplace.

Predicting work-related fatigue: Validation of a quantitative model

FLETCHER, A., & DAWSON, D. (University of South Australia).
Drew.dawson@unisa.edu.au

Fatigue has been identified as a major risk factor for many shiftworkers. However, few organisations or policy-makers currently attempt to manage work-related fatigue in any systematic or quantitative manner. The current paper describes an applied modelling approach that enables organisations to quantify, compare and predict work-related fatigue. Using only shift start and finish times as an input, the model quantifies work-related fatigue on the basis of known determinants of fatigue, that is shift duration, shift timing, work history and the biological constraints on the length of individual sleep periods. The current study examined the relationship between calculated work-related fatigue scores, and performance measures from a 64-hour continuous sleep deprivation study. Objective vigilance, subjective performance, sleepiness, and tiredness were all strongly correlated with model predictions. Current scheduling recommendations were generally consistent with the model outputs with the exception that forward rotation did not provide benefits over backward rotation. The validation results indicate that the work-related fatigue model correlates well across a range of performance and alertness measures. This relationship would appear to hold for both cumulative and continuous sleep deprivation protocols. The

use of this model may be particularly useful where employees are required to work irregular shifts or where ad-hoc changes to rostering practice occur frequently.

The impact of organisational practices on work-family conflict and work-specific attitudes and behaviour

FOX, S., & FALLON, B.J. (University of Melbourne).
s.fox1@pgrad.unimelb.edu.au

The purpose of the current study was to ascertain the effects of family supportive organisational practices on work and family conflict and several job-related outcomes. One hundred and eighty employees (165 females and 15 males, mean age 39.3 years) of a major metropolitan Health Care Network, each filled out a questionnaire specifically designed for this study, incorporating a variety of demographic questions and scale measures to assess several areas of work and family. There was most support for the prediction that high levels of work schedule flexibility would decrease work and family conflict, and subsequently increase job performance. The findings suggest that by facilitating their employees to better manage their work and family lives, organisations might expect tangible gains in productivity.

A field test of the diversity-openness moderator model in newly formed and well-established groups: Diversity has affective, behavioural, and cognitive consequences and openness to dissimilarity moderates these consequences

FUJIMOTO, Y., HÄRTEL, CEJ., & HÄRTEL, GF. (The University of Queensland).
C.hartel@qsm.uq.edu.au

Detrimental effects of diversity in workgroups has frequently been observed but research identifying the factors that lead to negative or positive effects in heterogeneous groups is lacking. The Perceived Dissimilarity Openness Moderator Model provides one explanation of the process by which diversity influences group affective, behavioural, and cognitive outcomes. Specifically the model identifies individual, group, and organisational openness as moderating the effects of diversity in workgroups. In this paper we provide evidence from a field study that increased openness to perceived dissimilarity leads to better outcomes in newly formed and well-established groups. The research contributes to the development of theory concerning the moderating variables of the relationship between diversity and group processes and outcomes of organisations.

Towards an understanding of interpersonal trust between leaders and team members

GILLESPIE, N., & MANN, L. (University of Melbourne).
n.gillespie@pgrad.unimelb.edu.au

In the face of on-going large-scale organisational change, scholars are increasingly recognising the importance of interpersonal trust for sustaining both organisational and individual effectiveness and competitiveness (Jones & George, 1998; McAllister, 1995). However, empirical research on trust in the workplace is still in its infancy. This study investigates trust in project teams, with a focus on the trust relationship of the leader with two of their team

members. The study addresses three key questions: 1) What is the underlying nature of trust between leaders and their team members?; 2) What are the similarities and differences in the meaning and magnitude of trust for upwards (team members' trust in leaders), downwards (leaders' trust in team members) and sideward trust (peers' trust in each other)?; and 3) What is the relationship between Transformational, Transactional and Consultative leadership behaviours and team members' trust? In-depth semi-structured interviews were conducted with a sample of 128 dyads (64 leader-team member dyads and 64 peer-peer dyads) from a large Australian R&D organisation. Follow-up questionnaires assessing trust and leadership behaviours were further administered. Preliminary analyses revealed that leader-team member trust relies on a multidimensional set of conditions, and has a reciprocal component. Leaders consistently rated their team members as more trustworthy than team members rated their leaders. Team members differed in their perceptions of the trustworthiness of the same leader, and leaders differed in their perceptions of the trustworthiness of their team members, suggesting leaders have different types of trust relationships with their team members. A leadership style characterised by transformational leadership, consultative decision making and contingent reward was strongly associated with team members' trust in their leader and in their project team.

Managing risk in large organisations

GLENDON, I. (Griffith University).
i.glendon@mailbox.gu.edu.au

The paper reports on preliminary findings from a study involving focused interviews with 49 senior risk managers from as many large organisations, in both public and private sectors, based in four major Australian cities. Data were gathered broadly on the basis of a model of risk management and a quasi-grounded approach was adopted to data analysis and theory development. A prime objective of this exploratory study was to generate hypotheses and ideas for more systematic and extensive research. A broad framework for analysis of the data is first developed, before selected findings from the study are outlined. These consider some key issues that differentiate standard and advanced meta-sector organisations from which the respondent sample was drawn. Specifically addressed are the roles and functions of risk managers. Some broad key issues and dimensions that arose from the interviews are reviewed before a consideration of future potential issues. The research uses a meta-sector framework from Waring and Glendon (1998) to determine some of the key variables that are likely to be relevant to the ways in which organisations manage risks that confront them.

Links between emotional competence, emotional climate, and satisfaction: Empirical results and implications for construct development and measurement

GOUGH, H., & HÄRTEL, CEJ. (The University of Queensland).
helen.gough@hotmail.com

Whilst much popular and contemporary discourse is given to the need for consideration of emotions in organisation research, empirical investigations are only beginning to emerge in the area. Predictions regarding the role of service providers' emotional competence and

emotional climate in satisfaction with service encounters are derived from the existing literature on emotions, attributions, and climate. The model proposes that the emotional competence displayed by the provider during the service encounter influences both the participating provider's and customer's satisfaction. Further, the model develops the concept of emotional climate and depicts the provider's workgroup emotional climate as impacting the service provider's satisfaction with the service encounter. An event contingent experience method sampling approach is used to test the predictions in a field setting. Data were collected on provider emotional competence, workgroup emotional climate, provider momentary job satisfaction, and momentary customer satisfaction for 120 service encounters over a two-week period (27 employees, 302 customers). Analyses showed that, first, workgroup emotional climate positively predicted providers' satisfaction with their work. Second, the provider's emotional competence affected the outcome of the encounter in a complex way. Third, provider's emotional competence positively predicted workgroup emotional climate. Construct and measure development issues, methodological challenges, and practical implications will be discussed.

Influences of leaders on team self-regulation: An integrative framework of team motivation

GULLY, SM., & PHILLIPS, JM. (Rutgers University).
gully@rci.rutgers.edu

Team processes and team performance have become increasingly important as organisations have incorporated team-based systems into their organisational structures (Sundstrom, DeMeuse, & Futrell, 1990). Research has consistently identified leadership as a key factor in the emergence of team effectiveness. Leaders can have important effects on team processes, team member motivation, and ultimately team performance (Hollander, 1978; Kozlowski et al., 1996; Yukl & Van Fleet, 1990). A common theme of many leadership approaches is that the result of leader influence is to direct group or team members toward the achievement of certain individual and team goals (e.g., Bass, 1985; Carron, 1988; Conger & Kanungo, 1987; House, 1977; Roach & Behling, 1984; Tannenbaum, Weschler, & Massarik, 1961). We propose that a regulatory framework of team processes can explain how leader cognitions and behaviours can impact team member motivation and subsequent performance through goal-setting and team regulatory processes. We suggest that effective leaders first generate proximal and distal goals and strategies for achieving those goals. Leaders must then stimulate acceptance and commitment to individual and team goals and strategies, and develop member efficacy to meet those goals. Thus, leaders must model behaviour by showing personal efficacy and commitment to team goals, monitoring team processes, rewarding goal/congruent behaviour, and providing feedback. They must also adjust strategies and goals in reaction to team performance and environment constraints. The description of the leader behaviours outlined above parallels theoretical frameworks for understanding individual self-regulation. However, little theoretical and empirical work has been generated to understand how principles of individual self-regulation can help us understand effective leadership in teams. The purpose of this paper is to apply research on self-regulation to understand effective leadership in self-managing teams. In particular, we suggest that leaders must be sensitive to different attributes of goals,

feedback and efficacy as components of regulatory systems leading to effective team performance.

Cultures of injustice: Dimensions and organisational correlates of unjust employment relationships

HARLOS, KP. (University of Otago).

The article reports the results of an inductive study into the events and processes that underlie employees' experiences of organisational injustice. Findings point to organisational culture as a significant factor that appears to both produce and be produced by the phenomenon of injustice at work. Across diverse industries and work settings, six dimensions of injustice cultures and several organisational correlates emerge as recurrent features associated with employment relationships perceived as unjust. These dimensions draw on extant knowledge of cultures in organisations but extend their meaning beyond contexts of fairness to those within employment relationships that are not to consensually understood as right or just. In addition, data analysis reveals five images that cut across descriptions of work settings associated with organisational injustice perceptions. The functional (i.e., job-related) and affective impact on participants of both cultures of injustice and their correlates is also discussed.

Maximising person-job fit: Using measures of personality and motives for selection

HARRISON, K. (Davidson Trahaire).
davidson.trahaire@ibm.net

In 1997, a large Australian organisation enlisted our assistance to identify a profile of the key skills, aptitudes and personal characteristics which contribute to success in several different types of trade roles. In addition to structured interviews, we used a test battery including the Hogan Personality Inventory, the Motives, Values, Preferences Inventory and several measures of various aptitudes to determine which characteristics distinguished high performers in these roles from other job incumbents. Statistical analysis of the results indicated that amongst the discriminating factors were the HPI scales of Adjustment, Ambition, Intellectance, Sociability, Prudence, Reliability, and Managerial Potential. Two of the ability measures, assessing clerical speed and accuracy and the ability to follow instructions respectively, and the MVPI scales of Aesthetic, Security, and Recognition also proved to be factors that distinguished high performers from the rest. Further, there were key differences in the types of characteristics that were most effective within each particular division or work environment.

Contextual influences on contextual performance: A longitudinal study of the impact of organisational climate on work behaviour

HART, PM. (Social Research Consultants), GRIFFIN, MA. (Queensland University of Technology), & NORRIS, MJ. (The University of Melbourne).
srchart@ozemail.com.au

Contextual performance describes behaviours that go beyond typical task performance and support the overall working environment. This study investigated the impact of

change in organisational climate on two types of contextual performance: participating in organisational activities and promoting the organisation. The study was part of a larger investigation of organisational health and individual well-being among employees in a large state education system. Results of the study showed that improving the climate within work groups enhanced the performance of contextual behaviours. The results have implication for managing change in organisations and integrating assessment of climate and performance with organisational development.

Who needs to know? The role of self-categorisation in organisational communication

HASLAM, A. (The Australian National University).

This paper uses self-categorisation theory to develop a theoretical framework for understanding aspects of organisational communication and information management. In essence, it argues that people's desire to communicate with their colleagues is structured by their self-definition at a given level of abstraction as dictated by processes of category salience and social identification. In this way communication is seen to follow the contours of self-other interchangeability en route to social self-knowledge and self-oriented collective behaviour. This analysis was tested in a study in which employees of an Air Safety organisation were presented with one of several possible scenarios relating to their position in a hypothetical organisation. The study manipulated participants' place in the organisational hierarchy as well as the relations between work teams and the nature of information to be communicated. Participants were generally more willing to communicate with members of their own work team than with members of another team and more willing to communicate organisation-related information than personal information. However, as predicted, the first of these effects was particularly pronounced in the case of team-relevant information and willingness to communicate such information was especially sensitive to the quality of intergroup relations.

Political resistance in the implementation of organisational change: Development of a theoretical model

HAY, P., & HÄRTEL, CEJ. (The University of Queensland).
Phil.hay@qed.aid.gov.au

Two recent research papers (Buchanan, 1977; Hay & Härtel, 1997) highlighted the lack of research into the politics of resistance surrounding organisational change and confirmed the need for further research into how influencers decide to resist the implementation of an organisational change effort. A model addressing this theoretical gap is developed and presented. The model identifies the key factors that contribute to an influencer's decision to resist the implementation of an organisational change effort. The model depicts resistance as having an initiating event (discovery), an outcome (resistance), and two intermediary and interacting elements (an emotional reaction and a rational reaction), each of which is shaped by a number of key variables. The initiating event can trigger either an emotional reaction or a rational reaction, but based on Affective Events Theory it is assumed that the emotional reaction will occur first. The exit point from the decision making process to resistance activity can be from either an

emotional state or a rational state. The model contributes to research and practice by filling a gap in academic research and by providing a basis from which management practitioners can predict which influencers in an organisation will resist a change effort, and why.

Customer satisfaction and use of an electronic supermarket service

HENDERSON, R. (University of Canberra), DEANE, F. (University of Wollongong), & ROBERTS, P. (University of Canberra).
ron@science.canberra.edu.au

Retailers and service providers in a competitive environment need to know why customers choose to buy their produce or use their service. Customer satisfaction has been identified as one important outcome measure thought to be related to a number of relevant performance variables. To many organisations, however, customer satisfaction appears to be viewed as a soft performance measure. Part of the reason for this view may be the lack of research demonstrating the direct effects of customer satisfaction on organisational performance indicators. The present study had two aims; first, to examine the relationship between customer satisfaction and use of an electronic supermarket. Second, to explore the determinants of customer satisfaction and finally to explore the relations between previous consumer behaviour, satisfaction and future behaviour. Beliefs about the supermarket service were identified and embedded within a customer satisfaction questionnaire which was completed by 174 registered users of the electronic supermarket. Service use was measured electronically for up to five months for each participant. Results indicated a significant positive relationship between customer satisfaction and total purchase value, number of deliveries and number of times logged onto the electronic supermarket. These relationships were found for both the month the questionnaire was completed and one month after the completion of the questionnaire. Finally, the relationship between satisfaction and the three behavioural indicators remained statistically significant once prior behaviour was statistically controlled. These results lend support to the notion of customer satisfaction being an important organisationally relevant variable.

The effect of task difficulty and anonymity within an electronic brainstorming context

HENDERSON, R., MORISON, R., & ZAMBELLI, N. (University of Canberra).
ron@science.canberra.edu.au

The group brainstorming process has been widely used as a creative problem solving technique. A review of 20 research studies (Mullen, Johnson, & Salas, 1991), however, has reported that brainstorming groups produced fewer ideas than nominal groups. Three mechanisms which may be used to explain the failure of brainstorming groups to outperform nominal groups: production blocking; social loafing; and evaluation apprehension. Electronic Brainstorming (EBS) approaches have been suggested as a means to overcome some of these mechanisms. Past research, however, has not considered the effect of task difficulty and anonymity within the EBS context. The current research examined the effect of task difficulty and anonymity within a sample of 63 first year university students, with the students being asked to brainstorm on two questions related to their studies. When

considering total comments made, a significant main effect for task difficulty was observed, as was an interaction between task difficulty and anonymity. Closer examination of the type of comments revealed that the manipulations had their effect with regard to supportive comments, where a social facilitation effect was observed. These results have implications for the way EBS is used.

The need for human factors in organisational psychology

HESKETH, B. (Macquarie University).
Bhesketh@bunyip.bhs.mq.edu.au

In recent decades Human Factors has become a major interdisciplinary field quite independent of Organisational Psychology. Contributing disciplines include psychology, engineering, and occupational health and safety, among others. Allied subfields cover aviation psychology, traffic psychology and environmental psychology. In part because of the existence and growing strength of these fields, organisational psychology has tended to de-emphasise the ergonomics/human factors content, except perhaps for the strong interest in occupational stress and job design. In this paper I wish to argue that in the current technologically rich climate, organisational psychology requires a much closer integration with human factors and applied cognitive psychology if psychologists are to maintain their effective contribution to the improvement of performance, satisfaction and health in the workplace. The paper will outline reasons why the integration is important for organisational psychology, and illustrate this with areas of organisational psychology that might benefit from a human factors and applied cognitive perspective. The purpose is not to devalue the current applied social and measurement emphasis in much of organisational psychology, but rather to attempt to get the balance right.

Job requirements biodata as a predictor of performance in customer service roles

HESKETH, B. (Macquarie University), & ALLWORTH, E. (Allworth Juniper, Psychologists).

This paper outlines a different slant on biodata, namely a job-requirements approach. The approach is simple. Making use of a biodata format, applicants rate the extent to which their current and previous jobs require attributes identified through job analysis as important for the future job. On a sample of 325 employees in an international hotel, the validity of the job requirements biodata approach compares favourably with more traditional construct-oriented biodata measures of customer service, and with cognitive ability measures of abstract reasoning, numerical reasoning and clerical speed and accuracy. The job-requirements biodata also predict performance in a customer service context better than Conscientiousness, Agreeableness and Extraversion. The job requirements approach has an advantage over traditional biodata as it does not require an evaluative self judgement, but rather a description of past and current jobs. Other advantages include the possibility of tailoring the approach to particular jobs or organisations, and its potential use in cross-cultural contexts.

Personality attributes as contributors to success in air traffic control training

HICKS, RE. (Bond University & Pacific Testing and Career Services).

Richard_Hicks@bond.edu.au OR rehicks@ozemail.com.au

This paper examines the relative contributions made by ability measures and by personality measures in the success of air traffic control (ATC) trainees. Particular abilities and skills have long been recognised as contributing to successful ATC performance. However, the role of personality attributes in ATC training success has been given less attention. This paper compares the relationships between success on ability and personality variables used as part of a selection procedure and the subsequent training and field results of over 90 air traffic control trainees in Australian government courses conducted over the period 1994–1997. For these trainees the results demonstrate that personality attributes are related to successful completion of the ATC training. Further, certain linear combinations of selected personality attributes yield highly significant relationships with successful outcome. These results from personality measures yield similar results to those involving the use of ability measures. However, the ability and personality attributes were not correlated with each other. Thus a weighted combination of these two areas was significantly more successful than either ability measures used alone or personality attributes used alone. Cross-validation research using recent cohorts and curvilinear analysis is proposed for confirmation of the results obtained.

A situation-behaviour relations model of work role transitions

HIGGS, MD., & WOOD, R. (Australian Graduate School of Management).

mikeh@agsm.edu.au

Using a situation-behaviour relations approach, we describe paths by which dispositional differences in implicit theories of ability are expected to lead to systematic biases in individual adaptation to new work roles. We argue that implicit theories of ability influence the ways in which the psychological features of work role transitions elicit cognitive-affective processes and behaviour. A model is proposed in which the interaction of an individual's implicit theory of ability and their perceived self-efficacy leads to one of three personal adaptation strategies: task-involvement, self-presentation, or defensive-avoidance. Individual differences in adaptation strategies are expected to lead to differences in work performance and other outcomes at the task, job, role, and career levels. Our approach emphasises commonalities between work role transitions and other role transitions that individuals experience as part of the life cycle. The main theoretical contributions of this paper are: 1. the extension of current theories of work role transitions; 2. the differentiation of work role adaptation strategies in terms of cognitive, affective, behavioural, and performance criteria; and 3. the linking of these adaptation strategies and other personal determinants, based on current social cognitive theory arguments, to the construct of implicit theory of ability.

Relational demography: The impact of diversity on organisational learning and innovation and creativity

HO, CD., & IVERSON, RD. (University of Melbourne).

r.iverson@ecomfac.unimelb.edu.au

This investigation examined the impact of diversity in a large financial services organisation in Australia through the application of the relational demography. The multivariate effects of demographic dissimilarity in vertical dyads and work groups are assessed in terms of their influence on organisational learning and innovation and creativity. The sample comprised 401 employees and 75 supervisors across 75 work groups. Partial support is found for the hypotheses proposed. Heterogeneity lowered organisational learning, suggesting that dissimilarity disrupts cooperation and communication flows in working relationships. However, greater heterogeneity increased innovation and creativity, as members brought differing perspectives, values, and backgrounds to the problem-solving process. Overall, the impact of vertical dyads is found to be relatively more important than work groups. The theoretical and practical implications for the management of diversity are discussed.

Further insights into the diversity-conflict link: The role of communication technology

HOBMAN, EV. (University of Queensland).

liz@psy.uq.edu.au

There is a lot of cost involved with handling organisational conflict. As such, investigation of situational factors influencing the conflict process need to be considered. This paper discusses the group demographic diversity and intragroup conflict relationship, the theoretical explanations of uninhibited behaviour in computer mediated communications, and weaves these two lines of research into an integrated model of the diversity-conflict relationship. The proposed social identity-based model highlights the moderating influence of group conflict norms and salient identity upon the diversity-conflict link, and introduces the artifact of group temporality as a contributor to the development of conflict norms. Research into this model will help organisations to best structure work teams to foster productive conflict, whilst ameliorating detrimental conflict. This model affords a new way of dealing with work teams. Rather than concentrating upon which individuals will be matched, it may be more a question of what situational factors to introduce to help the team work most productively. In today's business environment, where resources are scarce, this may be the more cost-effective way of helping groups to help themselves.

Managing the role of personality in organisations

HOGAN, J., & HOGAN, R. (Hogan Assessment Systems).

Although the I/O community has shown renewed interest in personality as a determinant of job performance, that interest has largely centred around the Five-Factor Model (FFM). The FFM is a useful starting place, but contemporary discussions ignore certain other topics that will enhance the utility of personality measurement. First, the contemporary literature never defines the term personality. Second, the FFM is only one facet — what we call 'the bright side' — of personality; other parts of personality are equally

important for understanding organisational behaviour. Third, with the exception of Schneider's work, contemporary discussions ignore the role of personality in the whole process of organisational development. The proposed workshop will deal with these shortcomings. The workshop goals are to: review the history of personality assessment for selection, define personality, show how to do personality-based job analysis, review the validity of personality-based selection systems, show how to develop a personality-based selection system, show how to develop a paper-and-pencil personality assessment center, show how to use personality for team composition, show how to use personality for organisational development

Personality and executive development

HOGAN, R. (Hogan Assessment Systems).
Rhogan@webzone.net

An organisation is only as good as its leadership team. Thus, it is a matter of some importance that the right people are in leadership positions. Unfortunately, this is where things often go wrong in organisations. To talk meaningfully about the relationship between personality and executive performance four issues must be considered. First, individual differences must be evaluated in executive performance, thus determining the good ones from the bad ones. Second, personality needs to be defined. Third, a taxonomy must be used that defines the major dimensions of personality. And fourth, the major dimensions of personality must be measured to allow the comparison of individual differences in personality with individual differences in performance. Building upon these four areas, a thorough evaluation can be made of personality and executive development.

Personality, leadership, and organisational effectiveness

HOGAN, R. (Hogan Assessment Systems).

Despite the enormous popularity of leadership as a topic in modern discussions of business, those discussions contain little more than opinions as to what leadership is and why it matters. Most research involves studying the persons at the top of large organisations; people at the top of large organisations are always good politicians but their talent for leadership is often not obvious. In addition, popular discussions of leadership often argue that personality is irrelevant, that good leaders display a wide variety of personal qualities. Finally, leadership is rarely linked to analyses of organisational effectiveness. This talk defines organisational effectiveness, describes the role of leadership in promoting it, and then traces the linkages between personality and leadership using real examples and data.

Shopfloor innovation: The differential impact of individual, group, and organisational characteristics

HOLMAN, D., AXTELL, C., WALL, T., WATERSON, P. (University of Sheffield), & HARRINGTON, E. (University of Sunderland).

While shopfloor employees are widely recognised as playing a critical part in organisational innovation, little research has been conducted in this area. Moreover, within organisational psychology, studies of innovation

have tended to focus on either the generation of ideas or the implementation of ideas. This study examines the differential relationships of individual, group and organisational characteristics with the suggestion and implementation of ideas. Based on a sample of 148 machine operators, it was found that the suggestion of ideas was more highly correlated to individual (personal and job) characteristics than social and group characteristics. In contrast, the implementation of ideas was more highly correlated with group and organisational characteristics than individual factors. Moderated regression analysis, with implementations as dependent variable, revealed interactions between the extent of suggestions made and group and organisational factors. It is concluded from this that group and organisational characteristics provide the opportunity for the implementation of suggestions made by employees. The paper concludes by drawing out the practical and methodological implications of the study, its limitations, and possible future research directions.

Team decision making under conditions of changing situational demands: A paradigm for team research

ILGEN, DR., HOLLENBECK, JR., LEPINE, JA., SHEPPARD, L., ELLIS, A., & MOON, H. (Michigan State University).
ILGEN@pilot.msu.edu

For a number of years, Hollenbeck and Ilgen have studied the team decision making in hierarchical teams with distributed expertise. Most recently, they investigated decision making in teams faced with shifting situational demands and have done so as part of a larger team of researchers addressing the development of adaptive team architectures for command and control teams in the U. S. Navy. The use of the multi-disciplinary research team will be described as a model for team research that attempts to deal with the tensions between desire to control critical variables, the need for ecological validity, and the diffusion of knowledge to both scientific and operational units. A team decision-making simulation will be described and data from a study of teams structured functionally or divisionally will be used to illustrate the use and value of the multi-disciplinary approach to team research.

The development of social cohesion in computer-mediated and face-to-face task groups

IRMER, BE., BORDIA, P., & CHANG, A. (University of Queensland).
bernd.irmmer@slq.qld.gov.au

Computer-mediated communication (CMC) has a significant impact upon organisations by altering organisational decision making procedures, communication, structure and culture. Early CMC research was guided by the cues filtered out theory, which proposed CMC is inherently constrained and impersonal in comparison to face-to-face interactions (FtF) due to the limited bandwidth of the medium. A more recent perspective, social information processing theory, proposes that CMC differs from FtF in the rate of information transmission but is capable of transmitting personal and relational information. A more positive relational tone is expected with message accumulation over time. In this study, cues filtered out and social information processing theories are tested using a longitudinal design. The current study examines temporal effects on a previously

unexplored group process variable in CMC, namely social cohesion. Results support social information processing theory and run counter to predictions of the cues filtered out theory. Differences between mediums were obtained at time 1 followed by convergence at time 2 and time 3. Social cohesion increased over time in both conditions. Implications for practice and future research are discussed.

Buffers of occupational stress: A longitudinal study of organisational change

JIMMIESON, N.L. (Queensland University of Technology),
& TERRY, D.J. (The University of Queensland).
n.jimmieson@qut.edu.au

The present study was designed to examine, in the context of organisational change, the stress-buffering role of both job characteristics (i.e., change-related information) and individual difference variables (i.e., self-efficacy) in the stress-strain relationship. The relationship among these variables was investigated in a longitudinal study of 588 employees working in a Queensland-based government department that was about to implement a range of structural changes that would afford greater operational responsibility to its regional centres. The extent to which the predictor variables had any long-term effects on employee adjustment also were examined for employees ($N = 209$) who provided data at Time 2 (approximately 2 years later). A series of hierarchical multiple regressions revealed that change-related information protected employees from the negative effects of role conflict on psychological well-being and organisational commitment. In addition, self-efficacy buffered the negative effects of role ambiguity on psychological well-being. There also was evidence to suggest that self-efficacy moderated the negative effects of change-specific work stress on job satisfaction and organisational commitment. These findings are discussed in relation to change management interventions designed to assist employees to cope with a changing work environment, thereby creating a sense of readiness for organisational change.

A longitudinal study to determine changes in employee attitudes during downsizing

JORDAN, C. (Curtin University), & TRAVAGLIONE, A.
(University of Western Australia).
c.jordan@gsb.curtin.edu.au

Many management fads have been shown, in the course of time, to be detrimental to the well-being of employees as well as to the long term competitiveness of organisations. Downsizing is now starting to be recognised as belonging to this category. It is important however to recognise that there are situations where downsizing may be necessary and if implemented effectively may cause minimal hardship for employees. Using data from a longitudinal survey this paper investigates the impact of downsizing on the employee attitudes of commitment, job satisfaction and perceived organisational support for both the survivors of downsizing and for those employees who within a 12 month period accepted voluntary severance packages. Links were made between these attitudes and the employee work outcomes of turnover and absenteeism. Analyses showed significant differences on both the attitudes and work outcomes between the survivors and those who left the organisation. The researchers found that measures of both employee attitudes and work outcomes did

not significantly change among the survivors over the one-year period of the longitudinal study. This suggests that the strategies implemented by management in this organisation were effective in maintaining employee commitment, job satisfaction, and perceived organisational support amongst survivors.

Job insecurity, commitment, decision-making and innovation: The role of emotional intelligence

JORDAN, P.J. (University of Queensland).
p.jordan@gsm.uq.edu.au

Job insecurity has increased markedly in the past decade. Increased competition from globalisation, greater participation in the workforce and organisational restructuring strategies have all contributed to increased job insecurity. Following a brief review of research into job insecurity, this presentation will explore this phenomenon and its ramifications for job performance. Specifically, this presentation will explore the implications of the emotional reaction of individual's perceptions of job insecurity for decision-making and innovation within organisations. A model of the consequences of job insecurity will be presented in which emotional intelligence plays an important role, moderating the negative effects of job insecurity for individuals and explaining the positive effects. Finally, the presentation will argue that emotional intelligence has the potential to enhance innovation and is a contributing factor that predicts how individuals will cope with the pressure of working in modern organisations.

Job satisfaction as a predictor of burnout: A structural equations analysis

KALLIATH, T. (The University of Waikato).
Kalliath@waikato.ac.nz

The relationship between job satisfaction and two dimensions of burnout are tested in two hospital samples, using structural equations analysis. Whereas burnout has typically been assumed to be a predictor of job satisfaction, our data provide support for the converse hypothesis, that job satisfaction contributes to the experience of burnout. Specifically, in a sample of 145 managers, job satisfaction shows direct effects on emotional exhaustion, an indirect effect on depersonalisation (via exhaustion) and a direct effect of exhaustion on depersonalisation. We did not obtain the predicted direct effect of job satisfaction on depersonalisation. The pattern of effects observed in the sample of managers is then successfully replicated in a sample of 203 nurses. Theoretical and practical implications for organisational efforts to reduce burnout are discussed.

Motivational traits and skills

KANFER, R. (Georgia Institute of Technology).

New conceptualisations of motivation have emphasised the role of individual differences in non-cognitive, personality-like traits as an important source of variance in work behaviour and performance. Drawing from classic research in achievement motivation and recent advances in goal theory, this address presents an integrative model that: (1) organises motivationally relevant traits into a smaller set of superordinate trait complexes, (2) relates trait complexes to motivational skills, or self-regulatory mechanisms that

predict action, and (3) identifies gaps in our current theory and measurement of motivational traits and skills. Results of research supporting basic tenets of the framework are reviewed, and implications of the motivational trait-skill framework for revitalising theory and research in work motivation, as well as for optimising person-organisation fit in the motivational domain will also be addressed.

Self-regulation in the workplace: Training and performance issues

KANFER, R. (Georgia Institute of Technology).

Contemporary work environments vary dramatically in terms of the motivational and self-regulatory demands they place on employees. In addition, the changing nature of the workforce suggests that organisations will need to focus greater attention on training programs aimed at remediating and enhancing employee skills in the self-regulatory domain. An overview of advances in self-regulation theory, research, and training as applied to work-related behaviours is presented, and the efficacy of diverse laboratory and field-based self-regulatory skill training programs are reviewed. Discussion will then focus on the relationship between different programs and their components and their likely impact on specific job performance issues, such as work dependability, job skill updating, and organisational citizenship.

Developing a performance model for express coach drivers as a basis for selection

KELLETT, SM., & MACHIN, MA. (University of Southern Queensland).
machin@usq.edu.au

A comprehensive performance model for express coach drivers was used as the basis for identifying the abilities that could be used as potential predictors in the selection of express coach drivers. The first part of the presentation will describe the job analysis techniques that were used to collect information from job incumbents and supervisors. These techniques included a structured interview, observation, and questionnaire. The information collected was compared with the content model available in the O*NET Occupational Information Network. The job analysis revealed that express coach driving is an exceedingly complex task that requires the utilisation of multiple skills and abilities. The second part of the presentation will focus on the way in which the performance model could be used as the basis for establishing the construct validity of a selection test battery.

Defining and assessing customer service jobs in Asia

KIN CHONG, U. (SHL, Hong Kong, Ltd).

The paper will present the development of a Chinese Customer Service Contact Styles Questionnaire that aimed to measure behavioural styles related to customer service roles and competencies. Particular emphasis is given to the experiences of assessing customer service related behavioural characteristics in Chinese. These include the congruence between Western and Chinese characterisations of related behaviours; item and scale consistency of behaviourally based personality and styles measured in a Chinese language context; norming issues; and validation of the tool on Chinese populations. The implications for the

use of the tool in the current economic climate in Asia will also be discussed. Organisations are increasingly focusing on Customer Service as a way of differentiating themselves from the competition in tighter markets. Many Asian organisations are interested in the use of tools such as this styles questionnaire to assess staff development needs rather than for recruitment and selection in the area of customer service. The ideas will be presented within the context of a specific case study taken from a large multinational organisation in the finance sector with branches across Asia.

The relationship between work stressors, social support, and emotional exhaustion in female employees of the Queensland Police Service

KIRK-BROWN, A., THOMPSON, B., & BROWN, D. (Griffith University).
A.Kirk-Brown@mailbox.gu.edu.au

Previous research on police employees has suggested that social support may be a key variable involved in the relationship between the experience of occupational stress and emotional exhaustion. Much of this research has, however, been conducted on male officers. Little research has examined the experience of occupational stress in women police officers. By modelling the relationships between work stressors, social support and emotional exhaustion in operational and non-operational women in a police service, this study examined whether the salience of sources of support, and their impact on emotional exhaustion depends on the nature of the job and work culture. Path analyses identified direct effects of work stress and social support on emotional exhaustion. Different models were, however, identified for the two groups, suggesting different patterns of relationships between role stressors, support variables, and emotional exhaustion depending upon occupational role. The results indicate that the relationship between occupational stressors, social support, and emotional exhaustion is influenced by the nature of the job and its culture, and that policewomen may suffer from reduced ability to access sources of support utilised by other women.

The impact of team heterogeneity on team empowerment experiences and team effectiveness

KIRKMAN, BL. (University of North Carolina at Greensboro), TESLUK, PE. (Tulane University), & ROSEN, B. (University of North Carolina at Chapel Hill).
brad_kirkman@uncg.edu

Noting the absence of research on empowerment at the team level of analysis, Kirkman and Rosen (1997; 1999) recently developed a theoretical model of team empowerment and tested their model using over 100 work teams in four organisations. Their findings indicate that more empowered teams are also more effective on a variety of dimensions. What Kirkman and Rosen (1999) did not examine were the effects of team heterogeneity on team empowerment and team effectiveness. Previous research has shown effects for team heterogeneity on both team processes and outcomes. Thus, in order to provide a more comprehensive test, we reassess their team empowerment model and include team heterogeneity as an explanatory variable. We constructed team heterogeneity indexes based on the following demographic and team variables: age,

gender, race, education, team tenure, organisational tenure, team size, and team leader tenure. We defined team effectiveness as productivity, proactivity, customer service, job satisfaction, organisational commitment, and team commitment. Our findings include: (1) race heterogeneity is negatively related to team empowerment, organisational commitment, and team commitment; (2) organisational tenure heterogeneity is negatively related to job satisfaction, organisational commitment, and team empowerment; and (3) team tenure heterogeneity is negatively related to team productivity and quality. Age, gender, and education heterogeneity are not related to team empowerment or team effectiveness. In addition to these more direct findings, we also report results of testing team empowerment as a mediator between team heterogeneity and team effectiveness. We conclude with implications for both research and practice.

The effects of person-organisation fit on organisational citizenship and organisational retaliatory behaviour

KNIGHT-TURVEY, NE., & PATERSON, JM. (University of Queensland).
Nealkt@yahoo.com.au

The effects of person-organisation (P-O) fit on both organisational citizenship behaviour and organisation retaliatory behaviour is investigated. Polynomial regression analyses on data collected from 106 public education employees provide partial support for the hypothesis that fit between work-related preferences and perceived work characteristics may influence organisationally beneficial behaviours like OCB. Specifically, employees who expressed both a preference for professionalism from their organisation and who perceived professionalism to be characteristic of their organisation were more likely to engage in altruistic acts directed towards fellow employees. The proposed influence of person-organisation fit on conscientiousness, production deviance, and political deviance was not supported. Person and situation variables did, however, exert significant independent effects on both citizenship and retaliatory behaviours. Most notably, employees who displayed a preference for professionalism were more likely to engage in conscientious work behaviour, as were employees who perceived their organisation to be professional in its activities. Employees who displayed a preference for professionalism were also less likely to engage in political deviance. A preference for performance orientated organisations predicted both altruism and political deviance. Additionally, job involvement and interactional justice predicted altruism and political deviance, respectively. Implications of the P-O fit results for human resource management and future research are discussed.

The teamwork behaviour scale: Development and application in a service organisation

LANGAN-FOX, J., CODE, S. (University of Melbourne),
ROBINS, G. (Deakin University), & NIELSEN, I. (Deakin University).
j.langan-fox@psych.unimelb.edu.au.

This paper describes the development and application of a new teamwork measure, the Teamwork Behaviour Scale (TBS). The TBS was developed in collaboration with actual teams in a service organisation, giving it strong ecological validity. The data set included responses to the TBS from two sets of respondents within the same organisation. Both

samples involved teamwork issues, albeit in different contexts — Industrial Participation training groups (103 respondents) and work groups (68 respondents). Work group respondents completed a range of task characteristics and group process measures. Significant differences were found on the total TBS score as a function of planning, frequency of interaction with manager, and previous work group experiences. The TBS demonstrates good reliability (.89), and correlates significantly with other team related-constructs such as communication openness ($r = .67$) indicating reasonable convergent validity. An exploratory principal components analysis suggests that the TBS measures four factors of teamwork: performance, cohesion, communication, and agreement and involvement. Further validity work needs to be conducted in organisations where teams are involved with the new scale.

Coping strategies as predictors of strain

LITCHFIELD, K., & GOW, K. (Queensland University of Technology).

This study sought to determine how problem-focused and emotion-focused coping strategies moderated strain in 180 males and 68 females in administrative, supervisory and managerial roles. Respondents completed the revised Ways of Coping Scale, the Occupational Roles Questionnaire and the Personal Strain Questionnaire. Canonical correlation analysis indicated a positive relationship between organisational stressors and psychological strain. Those with more role overload, responsibility and role boundary stressors experienced more physical strain, psychological strain, vocational strain and interpersonal strain. The direct effects models was used to evaluate coping strategies as moderators of the stress-strain relationships. The increased use of problem-focused coping decreased psychological strain, while the increased use of emotion-focused coping increased psychological strain. However no indirect (interaction) effects were found.

Motivation, cognition and action

LOCKE, EA. (University of Maryland).
ELOCKE@rhsmith.umd.edu

This presentation begins by analysing the nature of cognition and of motivation, especially as they relate to the operation of the subconscious. The interdependence of cognition and motivation is demonstrated. This is then illustrated in an analysis of studies on goal setting and task strategies (task knowledge) in relation to task performance. Three types of relationships have been found: direct, separate effects of goals and strategies; interactions between goals and strategies (moderation); and the mediation of goal effects by strategies. It is argued that there is really one underlying model that accounts for all of these findings. There are two paths to performance, one motivated by goals and another motivated by other factors. Each is or can be associated with relevant task knowledge. 'Direct' goal effects occur when the subjects already possess relevant task knowledge, but that knowledge is not measured. (If it were measured, there would be mediation). Direct strategy effects occur when subjects are motivated to discover or use relevant strategies by (unmeasured) motives that are not a product of the performance goal. Moderation occurs when there is no task knowledge tied to the goals but knowledge derives from other sources which combines with goals to produce performance. Mediation occurs when

goals produce measured task knowledge, which, when controlled, vitiates the goal effect. This model suggests ideas for further research.

The effects of demographic and cognitive diversity on team performance and satisfaction: It's how they think, not what they look like

LOWE, K. (University of North Carolina at Greensboro).

The need for organisations to adapt to and leverage the value of an increasingly diverse workforce has received extensive attention in the practitioner and popular press (Copeland, 1988; Cox & Blake 1991; Esty 1988; Fernandez 1991; Kossek & Zonia 1993), moderate theoretical attention in the academic literature (Elsaas & Graves, 1997; Lau & Murnighan, 1998; Milliken & Martins, 1996) and more limited empirical attention (Jackson 1991; Pfeffer, 1985; Pelled, 1996; Tsui, Egan, & O'Reilly, 1989). Commensurate with the increased attention to workforce diversity, the use of teams to structure how work gets done has also increased (Lawler, Mohrman, & Ledford, 1995; Osterman, 1994). Though increased workforce diversity might be expected to impact team processes, little empirical attention has been given to how team diversity impacts team functioning and team leadership requirements (Russell, 1997). In an effort to bridge this gap, the purpose of this study is to examine the impact of leadership and team diversity on team outcomes. The study seeks to answer the central questions: How does team diversity impact team processes and outcomes? What behaviours characterise effective managers of diversity? In this study, the relationship between leadership, team diversity, and team processes to eight team performance measures was tested. Demographic and cognitive diversity were conceptualised as distinct and multi-faceted measures of team member differences. An index of each type of diversity was then developed. In these intact field teams, cognitive diversity had several impacts on team processes/outcomes while demographic diversity had few impacts. Demographic diversity did and cognitive diversity did not, moderate the leadership to team process relationships.

The Big-Five structured interview: Development and investigation of construct and interviewer validity

MCDANIEL, SM. (Hogan Assessment Systems).
Suzannr@webzone.net

Organisations rely heavily on the employment interview as a way to determine an applicant's suitability job. In the last decade, meta-analytic research demonstrates that well developed measures of personality are valid predictors of job performance. However, some organisations are still reluctant to use them for selection because they believe that some items appear to be unreliable or offensive. A structured interview assessing the Big-Five can be used as a surrogate for the less accepted paper-and-pencil measures to screen candidates. The purpose of this paper is to describe the development of a structured interview assessing the Five-Factor Model — the Big-Five Structured Interview (BFSI) — and investigate its construct validity by examining the relationship between the BFSI dimensions and (a) a measure of cognitive ability, (b) a paper-and-pencil measure of the Big-Five, (c) measures of non-cognitive training

performance, (d) academic training performance, and (e) a measure of contextual performance. In addition, this research explores the differences in the validity of individual interviewer ratings.

Effects of organisational responses to consumer mishaps on consumer behaviour may vary with crisis type: Deriving implications for company response choice from theory

MCDONALD, L., & HÄRTEL, CEJ. (The University of Queensland).
L.mcdonald@gsm.uq.edu.au

Despite the importance of consumer anger, there are few studies investigating consumer antecedents of anger within the organisational context. Studies at organisational level have assumed the existence of a response continuum or hierarchy from examination of interpersonal accounts. Yet it has been seen that the preferred hierarchy may depend upon the situational contexts with acceptable responses contingent upon situational factors. It is suggested that for some types of crisis, some company responses may be more appropriate than others. If the company responds appropriately, then negative purchase intentions can be reduced. Yet, this cannot be established without testing the full range of accounts in an organisational mishap scenario involving negative publicity. This conceptual review constitutes a significant building block toward the development of theory concerning the selection of organisational responses following a consumer mishap.

The influence of transfer climate and transfer enhancement activities on the implementation of aviation team training

MACHIN, MA., & FOGARTY, GJ. (University of Southern Queensland).
machin@usq.edu.au

This study was conducted with personnel in the Australian Defence Force (ADF) who had participated in an Aviation Team Training (ATT) program based on the principles of Crew Resource Management (CRM). The courses were conducted over a 12 month period and were subsequently evaluated using a questionnaire incorporating measures of post-training implementation activities, the transfer climate, and in-training transfer enhancing activities. Open-ended questions asked about the impact of using the teamwork skills on the performance of crew members. The measure of transfer enhancing activities was significantly related to transfer implementation, while positive reinforcement in the workplace was a significant predictor of transfer implementation. Several positive outcomes of the ATT program were reported. The need for a model of vertical transfer that links individual transfer outcomes and the primary organisational outcome of enhancing aviation safety is discussed.

The impact of self-efficacy enhancement on the psychological well-being of unemployed people

MACHIN, MA. (University of Southern Queensland),
SMITH, JK., & CREED, PA. (Griffith University).
machin@usq.edu.au

This study reported on the effects of a psychological intervention specifically designed to improve the levels of general self-efficacy and psychological well-being of unemployed trainees. The intervention was generally successful at improving both general self-efficacy and psychological well-being, although these levels were not always maintained over a five week period. General self-efficacy and psychological well-being were also found to be positively related at three separate times. It was also predicted that general self-efficacy would be a predictor of future levels of psychological well-being. This was not found to be the case. However, one measure of psychological well-being was found to be a predictor of a subsequent level of general self-efficacy. Further theoretical development of the intervention and more field evaluations are required in an Australian context.

Aligning goals throughout the organisation: Manager goal congruence and employee turnover intentions

MAIERHOFER, NI., & GRIFFIN, MA. (Queensland University of Technology).
n.maierhofer@qut.edu.au

This presentation focuses on the congruence between individual goals and organisational goals and asks how goal congruence of managers influences their employees. In particular, we investigate the impact of manager goal-congruence on employee intentions to quit the organisation. We propose two alternative processes through which manager's goal congruence will influence employee turnover intentions. First, a manager's goal congruence may influence the goal congruence of employees which, in turn, influences employees' turnover intentions. Second, manager's goal congruence may have an impact on employee turnover intentions that is independent of their employee's goal congruence. Subjects were employees of a state government organisation, 620 subordinates (540 male, 76 female) and their managers were matched on the basis of work group. Turnover intentions and goal congruence were measured using a three and five item measure respectively. The measures were part of a larger survey administered across the organisation. Results from hierarchical regression show that manager's goal congruence has an impact on employee turnover intentions which is independent of the influence of employee goal congruence. The results are considered in terms of their practical application in managing interventions in organisations to maximise their positive influence throughout the whole organisation.

In search of the ideal manager: Leadership prototypes, transformational leadership, and employees' perceptions of leader effectiveness

MARTIN, R., & EPITROPAKI, O. (Cardiff University).

The aim of the present study is to investigate the relationship between leadership prototypes with transforma-

tional leadership and their subsequent impact on employees' perceptions of leader effectiveness. Leadership prototypes, defined as personal assumptions about the characteristics and abilities needed for successful leadership, have been shown to be positively related to transformational leadership. Moreover, previous research has highlighted the importance of a transformational managerial style for improving organisational functioning and has reported positive associations between transformational leadership and leader effectiveness as well as other individual and organisational outcomes. This presentation reports the results of a cross-sectional study of 440 employees from seven UK companies. A causal path model linking leadership prototypes and the difference between ideal/actual manager profiles with transformational leadership and leader effectiveness, is tested and the results support the hypothesised model. The practical implications for management practices will be discussed.

Should we differentiate group attitudes from individual attitudes? The case of group task satisfaction

MASON, C. (University of Queensland).
Claire@psy.uq.edu.au

This study examined groups in an organisational setting, investigating shared attitudes held by the members of a group towards their task and their work environment. The study tested whether the attitudes of the group could be differentiated from the attitudes of the individuals within the group by comparing the ability of group attitudes and individual attitudes to predict individual and group outcomes. The study also investigated the relationship between group attitudes and individual attitudes. Data were collected from 71 workgroups in nine organisations. The data showed that group attitudes could be differentiated from aggregated individual attitudes. These findings illustrate the importance of studying groups as an entity in their own right.

Frames-of-reference for sensemaking of transformational change: A proposed research agenda

MEIBUSCH, G. (University of Technology Sydney).
Gina.Meibusch@uts.edu.au

Transformational organisational change is becoming an inevitable part of organisational existence. Although there is agreement that social and cognitive factors are critical to the success of planned change efforts, traditional theories have failed to acknowledge organisational members' experiences and responses to change. The developing literature on organisational sensemaking has made inroads into describing individual and shared sensemaking of change, but have so far failed to explain why people make sense in the way they do. This paper proposes that an existing model of managerial frames of reference might be informative for understanding peoples' sensemaking of transformational organisational change, and describes a proposed research agenda for investigating this proposition.

Unfolding the process of theory development of culture and work motivation: Model and findings

MIRIAM, E. (Technion – Israel Institute of Technology).
merez@ie.technion.ac.il

Failures to support our research hypotheses outside the cultural border of western societies lead us to search for new explanations, and take the risk of entering new fields of inquiry. The purpose of my paper is to unfold the process of developing theories of culture and work motivation – past, present, and future. This trend consists of the following phases: I. Past research, was mainly using a descriptive approach, trying to identify cultural differences in approaches to work motivation. II. Current research is taking three major routes: a) Methodological and measurement issues — multi-level analyses; homogeneity effects; indigenous versus cross-cultural approaches; qualitative versus quantitative methods. b) an interactive approach, looking at the moderating role of culture in the relationships between motivational practices and work behaviour. c) identifying the mediating variables between the macro level of culture, and the micro level of individual behaviour: the self, self-identity, and self-regulatory processes. III. Future Research. The study of cultural change. Future research should look at culture not as a constant, but rather as a variable that changes overtime. Empirical findings will be used to support the theoretical arguments.

An Australian perspective on the use of computers in psychometric assessments for organisations

MONLEY, R.

With echoes of the revolution in military affairs and parallels in the business world of e-commerce, psychometric assessment processes also face a revolution in how testing is conducted. Like so much of what we do today, we are moving from paper based forms to computerised forms. The Internet and the World Wide Web (WWW) represent a significant further compounding of this accelerating process. What issues does this raise? What are the positives and what are the risks? Some key issues will be drawn from recent international research publications. What is happening at a practical level in Australia? This is presented in the form of some recent projects utilising the Web, computer based administration of personality questionnaires and ability tests, expert system scoring and interpretation systems currently in use in Australia, as well as those on the immediate horizon.

Are we selecting out strategic thinkers?

MORONY, S. (Macquarie University).
suzanne@bunyip.psy.mq.edu.au

The importance of strategic thinking in the workplace is being recognised and 'strategic thinkers' will become increasingly sought after. Selection specialists in organisational psychology may need tools that can reliably differentiate applicants who have the ability to work efficiently and effectively in dynamic and complex decision making environments. Current selection methods are inadequate for this task, because they do not assess the applicants' performance in managing systems. In addition, more research is needed to identify the cognitive and metacognitive

processes that are important for strategic thinking and to develop instruments that can reliably and validly measure them. The use of computer simulations is a potentially fruitful means for furthering our understanding of and providing capabilities for the measurement of strategic thinking. Already computer simulations are widely used by cognitive scientists and computer scientists interested in psychological phenomena. Organisational psychologists cannot afford to ignore these developments and should be working with specialists in these other fields to improve psychological science and to keep psychology at the forefront of technology. In this way psychologists can bring their specialist skills to a growing field and ensure that new developments meet high standards of scientific rigour.

What works best for working mothers? A pilot investigation into the effects of different work schedules on role strain

MULLER, J. (Queensland University of Technology), & SEIB, B. (Bond University).
Juanita.Muller@bigpond.com

Flexible work schedules, such as part-time, job-sharing, and flexitime, have been identified in the literature as beneficial in reducing levels of role strain in working mothers. Role strain is the perceived difficulty in achieving role obligations and has been related to negative psychological and physical effects. Forty four Australian working mothers from Commonwealth Government agencies completed scales to determine levels of role strain and family management in relation to their work schedules. Analyses indicated that mothers in the job-share option ($N = 6$) experienced significantly lower levels of role strain and greater ease in managing the family role followed by mothers in the part-time option ($N = 12$), flexitime option ($N = 14$) and full-time option ($N = 12$) respectively. A negative relationship between role strain and family management was also found. Implications, limitations and areas for further research are discussed.

The lognormal law and utility analysis

MYORS, B. (Macquarie University).

This paper discusses implications of the lognormal law of organisational tenure for utility analysis. The lognormal law states that organisational tenure is lognormally distributed and was first proposed by human resource planning specialists in the 1950s. Although this was about the same time that the utility model was being formulated, the lognormal law has been ignored in the literature on utility analysis. The importance of tenure is that mean tenure is one of the parameters that gives the utility equation its great leverage, often leading to estimates running into millions of dollars. For positively skewed distributions, such as the lognormal, the arithmetic mean may not be as good a measure of central tendency as the median or mode, both of which are lower than the mean in the case of the lognormal distribution. The current paper shows how to calculate median and modal tenure, assuming the lognormal law, and apply these estimates to utility analysis. This results in slightly lower, but possibly more realistic, estimates of utility.

Climate of fear: Measurement and validity in organisational settings

NICHOLSON, G.J., & ASHKANASY, N.M. (University of Queensland).
Nicholson@uq.net.au

In this paper, we explore empirically the construct of 'climate of fear'. We argue that climate of fear is an emotional phenomenon that can be palpably sensed, and is differentiated from organisation-wide constructs such as organisational culture and trust. In particular, we hypothesise that climate of fear varies across work sites within organisations, but not across organisations. This is in contrast to organisational culture, which was expected to vary both within and across organisations. In the study, we developed a new 13-item measure of perceived fear in organisations and tested it in twenty sites across two organisations ($N = 209$). Other variables measured were innovative leadership culture and communication culture. Results supported our hypotheses that climate of fear varies across sites in both organisations. Differences across organisations on the climate of fear measure were, as expected, not significant. Organisational culture, however, varied between the organisations, and within one of the organisations. In a follow-up qualitative study, a research assistant, blind to the results of the quantitative study, was able correctly to identify the high and low climate of fear work sites. The new scale demonstrated good psychometric properties and validity.

A theory of conscientiousness at work: Theoretical foundations and empirical evidence

ONES, D. (University of Minnesota).

Across all the meta-analyses of the criterion-related validities of personality variables, conscientiousness has emerged as a consistent predictor of a variety of criteria. Conscientiousness predicts job performance and its components across jobs and organisations. This paper will (1) present comprehensive empirical evidence for conscientiousness to enhance our understanding of the construct of conscientiousness in organisational settings, and (2) review relevant literature from various studies to explain the theoretical underpinnings of the construct of conscientiousness. From a practice perspective, the effects of faking and social desirability on criterion-related validity of conscientiousness measures will be discussed. This presentation will also explore the theoretical underpinnings of the construct, answering the question 'Why does conscientiousness predict job performance?' The theory and empirical evidence presented will be used to arrive at a 'general theory of conscientiousness at work'.

Using integrity tests in personnel selection

ONES, D. (University of Minnesota).

The purpose of this workshop is to present a thorough review of research findings regarding the use of pre-employment integrity tests in organisations. The last 10 years has seen an explosion in the use of integrity tests by organisations around the globe. Collectively, the paper and pencil tests that were specifically developed to assess the dependability, integrity, and honesty of job applicants and employees are referred to as 'integrity tests'. In the US, a variety of surveys of companies indicate that anywhere

between 7 to 20% of all companies test for integrity at least for some jobs. Even by most conservative estimates, millions of people in the US have been tested using integrity tests. Research will be presented reviewing the reliability, criterion-related and construct validity of integrity tests. Predictive and concurrent validities for the criteria of job performance, counterproductive behaviours on the job, violence at work, absenteeism, turnover, drug and alcohol abuse and theft will be summarised. The constructs that integrity tests measure will be linked to traditional personality constructs. The incremental validity of integrity tests above and beyond cognitive ability will also be assessed and compared to incremental validity with other noncognitive predictors. The links between integrity tests and personality constructs will be reviewed. Questions of adverse impact will be answered. Issues of cross-cultural applicability of integrity tests in international contexts will be addressed. This workshop will help potential users of integrity tests make informed decisions about incorporating integrity testing into personnel selection systems.

Reexamination of the influence of leadership: A multi-level perspective

OSTROGNAY, G.M., HART, P.M. (University of Melbourne), & GRIFFIN, M.A. (Queensland University of Technology).
g.ostrognay@psych.unimelb.edu.au

This paper examines the influence of the personalities of leaders and their subordinates on affective outcomes for individuals and their workgroups. In particular, we investigate the influence of leaders' and subordinates personalities on individual and workgroup morale and distress. We propose that there would be different degrees of between group variation in outcomes for individuals and workgroups. Specifically, it is proposed that there will be least between group variation in personality and most between group variation in workplace morale and distress. It is also proposed that subordinates' personalities will be related more to individual morale and distress than to workplace morale and distress and leaders' personalities will be related more to workplace morale and distress than individual morale and distress. Participants were employees of two large education systems, representing a total of 174 different workgroups and 3,986 employees. Individual morale and distress were measured using seven item scales and workplace morale and distress were measured using five item scales. Preliminary results support the hypotheses outlined in the study. The results are considered in terms of the theoretical and methodological implications of the influence of personality in organisations and the need to consider multi level relationships in organisational research.

Revisiting scale format: The influence of positively toned, asymmetrical forms on rating accuracy

PAJO, K., & PODD, J. (Massey University).
K.B.Pajo@massey.ac.nz

The goal of designing better instrumentation to eliminate as much subjectivity as possible from ratings is an alluring one. Unfortunately reviews of the rating literature have consistently failed to demonstrate clear superiority for any one type of rating instrument. The present study revisits the question of scale format, examining the influence of positively toned, asymmetrical forms on rating accuracy for reference reports and performance appraisals. A total of 288

distance education students provided ratings using one of three forms: narrative, graphic rating scales, or positively toned asymmetrical scales. The results show that raters are sensitive to variations in rating format. Asymmetrical, positively toned scales were found to reduce leniency in ratings compared to narrative and graphic rating forms. Asymmetrical, positively toned scales offer an inexpensive and easily implemented method for controlling leniency in ratings. The whole-hearted endorsement of this rating method must be tempered by the recognition that reductions in leniency may not produce similar improvements in other types of rating accuracy, and that the validity of such scales remains to be assessed.

Measuring and promoting active development in the work place

PARKER, SK., (University of Sheffield).
s.parker@sheffield.ac.uk

Given widespread agreement that proactive and flexible employees are required within modern work places, it is surprising how little organisational research is concerned with how to facilitate this type of employee development. In this paper, I argue that the motivational outcome variables traditionally used in research can be quite passive (such as job satisfaction), and do not assess the development of more active and flexible attitudes or orientations. I summarise a programme of research concerned with identifying, measuring, and investigating antecedents of, active developmental concepts (including role orientations, role breadth self-efficacy, and perspective-taking). Findings from longitudinal studies demonstrate the importance of organisational factors such as work design and communication in promoting active development amongst employees, and also show the effect of individual difference variables (such as proactive personality) on this process.

Redesigning work to promote a healthy and effective work place

PARKER, SK. (Australian Graduate School of Management), JACKSON, PR., SPRIGG, CA., & WHYBROW, A. (University of Sheffield).
s.parker@sheffield.ac.uk

We describe the underpinning theory and key findings from a recently completed research programme investigating how modern initiatives such as team working and just-in-time affect individuals and the organisation. Findings from several longitudinal studies show the importance of work redesign (e.g., job enrichment) as a way to minimise employee stress and maximise organisational effectiveness when introducing new initiatives, but also highlight the need to ensure that the chosen work design fits the context and that the change process is managed appropriately. Our studies show that work redesign can have a substantial impact on the health and effective functioning of the organisation, and we recommend greater input from human resource practitioners in facilitating this intervention.

Developing a computerised test of perceptual/clerical speed

PARKS, S., BARTLETT, A., WICKHAM, A., & MYORS, B. (Macquarie University).

With the increasing popularity of computerised testing, comes the need for computerised tests to establish convergent validity between traditional pencil and paper and their new computerised forms. The current study examines the conditions under which a computerised perceptual/clerical speed test (cancelling t's and e's), produces similar results to a pencil and paper version. Twenty different tests were developed, varying type of text, feedback and user friendliness. Results from 43 participants demonstrate the presence of a very strong common factor of speediness among all of these tests, but there is also a second factor capturing unique method variance, indicating that the two forms are not equivalent. Type of text and the presence of feedback also affect performance.

Reliability and validity assessment of new measures of organisational justice

PATERSON, JM., GREEN, A. (University of Queensland), & CARY, J. (Andersen Consulting).
jenp@psy.uq.edu.au

This study addresses the need for measures of organisational justice that can be modified for use in different organisational contexts by developing and evaluating the reliability and validity of new measures of procedural, interactional (treatment) and distributive (outcome) fairness. The measures were designed for use in organisational change contexts but are easily modified for other contexts by changes to the instructions. Two organisations participated in this study. A repeated measures design was used for the organisation that was undergoing enterprise bargaining ($N = 143$ at Time 1 and 80 at Time 2) and a correlational design was used for the downsizing organisation ($N = 84$). Measures were refined on the basis of item test-retest reliability and principal factor analysis. The new measures of procedural and interactional justice demonstrate good internal consistency, test-retest reliability, and criterion and construct validity. The global distributive justice question also demonstrates adequate test-retest reliability and criterion validity, but the items that operationalised this construct performed poorly on all criteria. Possible reasons for the problems with the distributive justice items are discussed and directions for further research are noted.

Human resource management, employee attitudes and company performance in UK manufacturing companies

PATTERSON, M., & WEST, M. (The University of Aston).
m.patterson@sheffield.ac.uk

There is a considerable body of work proposing that high quality people management can provide firms with a source of competitive advantage. Many writers have argued that one route by which HRM practices can improve company performance is by promoting more positive employee attitudes. Although there is some evidence supporting an association between HRM practices and company performance, there is little empirical support for the presumed relationship between employee attitudes and company performance and no work examining whether HRM practices do actually influence performance through

their effect on attitudes. This study addresses these issues in a sample of 70 UK manufacturing companies. First, we examined whether a range of HRM practices are associated with two measures of company performance — productivity and profitability. Second, we examined the relationship between employee attitudes and company performance. Third, we investigated whether HRM practices impact on company performance through employee attitudes. Data on HRM practices were collected by on-site interviews with senior management. Attitudinal data on job satisfaction and organisational commitment were collected from 4,021 individuals in 42 companies from the main sample. Regression analyses revealed positive associations between a number of HRM practices and company performance. Similar associations with performance were also found for job satisfaction and organisational commitment. There was support for the proposition that the impact of HRM on organisational performance is partly attributable to job satisfaction.

The role of rules and examples in transfer of training

POULTON, FH., & HESKETH, B. (Macquarie University).
fpoulton@bunyip.psy.mq.edu.au

Transfer of training is investigated with two experiments using a paradigm which is analogous to changing problem solving situations in the workplace. The experiments examine the relative effectiveness of rule-based and exemplar-based training for the solving of anagram problems, and question the assumption that knowledge of rules rather than instances or examples best facilitates transfer. Rule and exemplar training are compared on a near transfer test, requiring the same principles as used in training, and on a remote transfer test where new and unknown solution rules are needed. Experiment 1 demonstrates that exemplar training is more successful than training with rules plus exemplars or with rules alone. Experiment 2 explores a transfer appropriate principle explanation for differences between groups. Findings provide evidence for the exemplar group's success. Exemplar training fosters a more flexible learning process needed for adapting to new problem situations. However, the apparent inflexibility of rule training cannot be explained by the transfer appropriate principle alone, with persistence of rule set being proposed as a possible explanation requiring further research.

Balancing work and family roles across the work-family life cycle: How do dual career couples manage?

RAJADHYAKSHA, U. (Indian Institute of Management).
ujvale@hotmail.com

This study borrowed the concept of Work-Family Life Cycle (WFLC) given by Voydanoff (1987) to refer to the simultaneous intersection of the work and family careers of an individual, and it examined: (i) How work-family conflict (WFC) varied across the stages of the WFLC, and (ii) Whether there were any gender differences in the variations. For the purpose of the study, the WFLC was operationalised using a simple grid framework which captured career stages on the horizontal axis and stages of the family life cycle on the vertical axis. Data were obtained from 199 professionals from dual-career families in Bombay. Results revealed that WFC was not highest in the middle stage of the WFLC as had been hypothesised, but it was higher in

the early stage. Gender differences emerged when the different kinds of WFC were considered. Men experienced greater job-spouse conflict, while women experienced greater job-homemaker and energy-based WFC. The results of the study are discussed within the context of changing roles for men and women professionals from dual career families, and their implications for organisational interventions aimed at enabling employees to better balance home and work commitments.

Perceived usefulness and ease of use and electronic supermarket use

ROBERTS, P. & HENDERSON, R. (University of Canberra).
ron@science.canberra.edu.au

Information technology (IT) has permeated many facets of work life in industrialised nations. With the expansion of internet access we are now witnessing an expansion of the use of information technology in the form of electronic commerce. This current study tests the applicability of one prominent IT uptake model within an electronic commerce setting. Specifically, the relationship between the perceived ease of use and usefulness and three electronically recorded indicators of use were assessed within an electronic supermarket setting. A total of 247 participants completed the attitudinal measure. Electronically recorded indicators of use in the form of deliveries, purchase value and number of log-ons to the system were recorded for the month the participants completed the questionnaire and six further months. Results indicated that both attitudinal measures were related to each behavioural indicator at the bivariate level. At the multivariate level, however, the perceived ease of use of the system became non-significant. Regression analysis also revealed that up to 15% of the variance in the behavioural indicators could be explained by the perceived ease of use and usefulness of the system. Further research should now focus on product and service attributes to more fully explain the use of electronic commerce services.

Appraisal of risk information campaigns: Conceptual and empirical challenges

ROHRMANN, B. (University of Melbourne).
rohrmann@rubens.its.unimelb.edu.au

This presentation focuses on measuring and evaluating risk education, information and communication outcomes. Such programs aim to inform people at risk about the nature of the hazards and measures to mitigate the risk, increase their awareness and preparation, and establish safe behaviours. Discussion is based on results from conceptual and empirical research, including several studies on the impacts of safety enhancement and disaster preparedness programs, which are aimed either at employees exposed to workplace hazards or residents facing environmental risks. Crucial conceptual issues are to define outcome criteria and to reflect the complexity of influences. Central empirical tasks are to achieve a sample of relevant respondents and to confirm significant outcomes of campaigns. Methodological and organisational lessons for designing future investigations are outlined.

Does mentoring provide benefits — and more to women than men?

SCANDURA, TA. (University of Miami), & THARENOU, P. (Monash University).
SCANDURA@miami.edu

Mentoring is advocated as useful for women to overcome their lesser advancement in management than men. By contrast, other views suggest that men gain more from mentoring than women, especially in terms of career outcomes such as pay and promotion. Irrespective of the views put forward, there are very few studies of gender and the impact of mentoring on career outcomes. The few studies in the main show that mentoring has the same effects for women as men, a conclusion now adopted in the literature. However, there have been too few studies from which to draw conclusions. The papers in this symposium examine if mentoring affects career outcomes (pay, promotion, advancement, plateauing) and career attitudes (job satisfaction, organisational commitment, career expectations) differently for women and men. The symposium also examines if men and women gain mentor support and characteristics in similar ways.

Gender differences in mentoring in Australia: Mentor functions and outcomes

SCANDURA, TA., & WILLIAMS, EA. (University of Miami).
SCANDURA@miami.edu

The issue of gender differences in mentoring remains controversial since some studies find gender differences and many do not. Perhaps the context of the mentoring relationship provides an explanation of why gender affects mentoring in some studies. Since most studies of mentoring to date have employed U.S. samples, the question of whether gender differences may emerge in studies of mentoring in non-U.S. samples needs investigation. The present study will examine the role of gender, mentoring functions and the interactive effects of gender and mentoring in relation to career expectations, job satisfaction and organisational commitment in a sample of $N = 155$ Australian managers. Results indicated that Australian women may benefit more from career mentoring in terms of career expectations, job satisfaction and organisational commitment than Australian men.

Creating a service organisation

SCHNEIDER, B. (University of Maryland).

The workshop will explore: The three tiers of service organisations — ways to think about how service organisations should be conceptualised and structured. The three faces of service — ways to think about the fundamental attributes of service: intangibility, simultaneous production and consumption, and customer participation in production. Implications of these attributes for service delivery. The three faces of customer expectations and needs — service quality from the vantage point of the end-user consumer. Three studies of the organisation-customer linkage — description of three projects in which the linkage between employee experiences of service climate and customer satisfaction will be described. The three faces of organisational culture — how organisations can create a climate and culture for service: marketing, operations management, and human resources management considerations. The three faces of service measurement — a sample of measures that

organisations can implement to ensure attention to a service quality initiative. Throughout the workshop, the benefits of service quality for internal employee issues (turnover, satisfaction), organisational effectiveness issues (customer retention and repeat business) and customers (satisfaction) will be noted and emphasised.

Services management and I/O psychology: Lessons learned

SCHNEIDER, B. (University of Maryland).

This address summarises the services marketing literature and then integrates that literature with more traditional topics in I/O psychology including personnel selection, reward systems, and organisational climate/culture. In the latter part of the talk, research will be discussed that has accomplished relating internal organisational functioning to customer satisfaction and customer intentions. A sub theme in the talk will be the usefulness of employee reports on organisational functioning as diagnostic data for making changes to enhance service quality and customer satisfaction.

Occupational stress: Management and coping. Using occupational stress models to look at job design and change in the Australian workplace

SEARLE, BJ., & BRIGHT, JEH. (University of New South Wales).
Ben.Searle@unsw.edu.au

This longitudinal study of Australian local government organisations tests two models of occupational stress. The three-factor model of occupational stress predicts that job demands, job control and social support influence levels of strain. The person-environment fit model predicts that strain results from misfit between one's capabilities or preferences and the actual job design or working environment that one experiences. These models make direct predictions about occupational stress, but they may also be used to predict such workplace outcomes as job satisfaction, absenteeism, turnover and performance. Employees at several local government organisations in New South Wales completed a detailed questionnaire which covers demographic factors and health behaviours as well as measuring job characteristics, mental well-being, physical health and job satisfaction. Employees also report on changes that have occurred to their job. Preliminary results suggest that both models are useful for predicting health and satisfaction, and in particular the variable of job control seems to be of great importance. The implications of these results are discussed with respect to interventions for improving job designs and working environments as well as managing workplace change.

Testing the three-factor model of occupational stress: The impact of demands, control and social support on a mail sorting task

SEARLE, BJ., BRIGHT, JEH., & BOCHNER, S. (University of New South Wales).
Ben.Searle@unsw.edu.au

This study tests a three-factor model of occupational stress which predicts that job demands, job control and social support influence levels of strain. In a laboratory

simulation of mail sorting, task demands, control and social supports were manipulated systematically. Pre- and post-task measures of self-reported stress and arousal were compared across groups. Performance on the mailing sorting task was measured continuously during the task and subjects reported their perceived performance afterwards. Self-reported stress was higher in conditions of high demand, and also higher in conditions of low social support. Actual and perceived performance were both poorer in conditions of high demand and perceived performance was poorer in conditions of low social support. Level of control had no effect on stress or arousal, although subjects in conditions of high control were more accurate. Contrary to our hypotheses, the factors do not interact to produce elevated levels of stress or arousal, although interactions were observed for performance measures. Measures of work preference indicated that arousal, performance and perceived performance were influenced by the level of fit between ideal and actual task conditions. The implications of these results for models of stress and job design are discussed.

Job features and well-being: A test of two models

SEVASTOS, PP., BEER, L., & GORMAN, T. (Curtin University of Technology).
P.Sevastos@psychology.curtin.edu.au

This research investigates the predictive power of two competing models of well-being and job strain. Male and female white collar employees ($N = 1,222$) of a semi-government instrumentality, with classification levels ranging from one to nine, were required to complete a questionnaire containing a range of validated instruments for this purpose. Hierarchical multiple regressions were used to determine whether Warr's (1990) Vitamin model that suggests non-linear association between job features and well-being, and the Demand-Control-Support model proposed by Karasek and Theorell (1990) could adequately account for incremental variance in this data set. Moderate support was found for Warr's model, when the dependent variables were affective well-being consisting of anxiety-comfort and depression enthusiasm. However, not all job features showed similar curvilinear relationships with the two indices of affective well-being. Limited support was found for the Karasek and Theorell's (1990) three-way interaction model when anxiety-comfort was the dependent variable. Substituting 'control' with 'skill utilisation' did not affect the results of the three-way interaction. Support for either model was not evident when the dependent variable was intrinsic job satisfaction.

Identifying personality-based job requirements: The performance improvement characteristics job analysis

SHELTON, DK. (Hogan Assessment Systems).
dshelton@webzone.net

Job analysis is used to identify the important tasks, knowledge, skills, and abilities of a job. As such, it is a crucial first step for most personnel-related applications. Although, it is relatively well accepted that personality characteristics are associated with successful job performance, until recently, no job analysis method assessed these characteristics. With the advent of the Big-Five personality taxonomy, industrial-organisational psychologists are becoming more

interested in personality research and its applications in organisations. The Performance Improvement Characteristics (PIC) Job Analysis was developed to evaluate the importance of personality-based job requirements as opposed to cognitive or skill-based requirements using the Big-Five dimensions. The PIC identifies the personal characteristics required to perform a specified job, and the degree to which having those characteristics improves job performance.

Some experiences with Stankov's tests of cognitive abilities (STOCA)

STANKOV, L. (University of Sydney), & DOLPH, B.
(Cognitive Sciences International).

STOCA is a battery of six computerised tests of cognitive abilities. These tests have been designed to measure fluid intelligence (Gf, Swaps and Triplets tests), crystallised intelligence (Gc, Vocabulary and Proverbs Matching tests) and quantitative ability (Gq, Numerical Operations and Financial Reasoning tests) inside one hour. In addition to accuracy scores for the three broad abilities of Gf, Gc, and Gq, the battery provides information on individual's speed of test-taking, self-confidence, and self-monitoring. This test battery was designed to select personnel for entry-level jobs in a broad range of occupations. The data that provided initial norms for Version 1.0 of the battery are presented.

The predictive validity of practical intelligence

STANKOV, L., & ROBERTSON, R. (University of Sydney).

A test of practical intelligence (Tacit Knowledge Inventory for Managers, TKIM) was given to a sample of employees in a large financial firm and to a sample of university students ($N = 92$). The results indicate that this test is a measure of ability and it can be used to distinguish between the business sample and university students. Its incremental validity over traditional measures of intelligence, personality, and motivation within the business group was not significant. However, its face validity for selecting managers is supported by a satisfactory overall predictive validity. Thus, even though the test by itself may not represent an advance over the existing selection instruments for managers, its satisfactory predictive validity justifies further use.

A cluster analysis of women's career concerns using Super's theory

STURGES, N., & SMART, RM. (Griffith University).
N.Sturges@mailbox.gu.edu.au

The rising employment participation rate of women has been a continuing phenomenon since the mid 1900s. Despite this, there has been a lack of research on women's career development. The current study addresses this research gap through examining the career concerns of a cross section of 584 women, from professional, blue collar and clerical fields. This study utilises Super's (1957) career development theory to determine whether women in three occupational groups demonstrate different or similar career concern profiles. With career concerns assessed according to the Adult Career Concerns Inventory (ACCI), this study uses cluster analysis to determine whether women in one occupation demonstrate a different profile of scores from women in other occupations. Results of this study demon-

strate that women in different occupational groups demonstrate different career concern profiles. Blue collar women possess early career concerns, professional women possess mid to late career concerns, and clerical women possess mid career concerns. Inconsistencies are noted between the results of the present study and the postulates of Super's (1957) theory. Subsequently, analysing women's career development using Super's theory may be inappropriate for women experiencing non-traditional career patterns. The tentative question is raised of whether Super's career stage theory, developed on a male sample, provides a useful framework for viewing women's career development beyond 2000.

Employee responses to an organisational merger: A social identity perspective

TERRY, D.J., & O'BRIEN, A. (The University of Queensland).

Adopting a social identity perspective, the research was designed to examine predictors of employee responses to an organisational merger. Data were collected from 120 employees of a newly-merged scientific company. As predicted from social identity theory, there was clear evidence of ingroup bias among the employees of the lower status premerger organisation on the dimensions irrelevant to the status differentiation between the organisations. On the status-relevant dimensions, ingroup bias was significantly more marked among the employees of the high status premerger organisation. Also, as predicted, perceived threat associated with the merger was related to ingroup bias on the status-irrelevant dimensions for the low status employees, whereas threat predicted ingroup bias on the status-relevant dimensions for the high status employees. In accord with social identity theory, the perception that the basis for the status differentiation between the two organisations was legitimate was associated with more positive responses to the merger among employees of the low status premerger organisation, but negatively for employees of the high status premerger organisation.

Allocating layoffs: An investigation of distributive criterion and framing effects in a hypothetical downsizing organisation

TERRY, M. (Andersen Consulting), & PATERSON, J. (University of Queensland).
Michelle.R.Terry@ac.com

Research into the allocation of rewards in organisations has indicated that equity is a more widely accepted distributive norm than equality or need. However, the criteria that are preferred to allocate losses have not been adequately investigated. This study examines whether equity, represented by task and contextual performance, is favoured over need as a distributive criterion for determining layoffs in a hypothetical downsizing organisation. First year psychology students ($N = 160$) are randomly assigned to a retain or layoff frame condition, where they judge whether candidates who vary in their level of task performance, contextual performance, and need should be retained or made redundant. MANOVA and pairwise comparisons reveal a preference for contextual over task performance, and task performance over need considerations, as the basis for determining layoffs. A main effect for frame is noted, with subjects in the retain condition consistently awarding higher retainability scores than those in the layoff condition. A post hoc analysis indicates that within the layoff frame

condition, female subjects show greater preference for retaining high contextual performance candidates. This study highlights the importance of considering contextual performance in retention or layoff decisions.

Antecedents of mentor support, gender and duration of the relationship: Does gender make a difference?

THARENOU, P. (Monash University).
phyllis.tharenou@BusEco.monash.edu.au

This study predicted the extent of career and psychosocial support protégés receive from their mentors, as well as the gender of their mentor and the length of the relationship, from earlier measures of individual, job, interpersonal and organisational variables. It also assessed if these relationships were affected by the gender of the protégé. Overall, employees who reported more career and psychosocial support have higher advancement drives, are in environments encouraging of their careers, and are women. Mentoring support was similarly predicted for men and women. Where promotion ladders were shorter and career encouragement greater, beyond the prediction by the control variables (higher managerial levels, older, longer tenure), longer than shorter relationships with the mentor were predicted. Career encouragement and managerial aspirations more strongly predicted the duration of the relationship for men than women. The gender of the mentor was predicted. Female mentors were gained more by women than men, and more in organisations where managerial hierarchies were less proportionately male, the latter more for women protégés than men.

Consequences of mentoring to career outcomes: Does gender make a difference?

THARENOU, P. (Monash University).
phyllis.tharenou@BusEco.monash.edu.au

This study assessed (a) if mentoring predicts future career outcomes of salary, promotions, plateauing, and overall career advancement; (b) if some aspects of mentoring are more important than others (career support, psychosocial support, gender of the mentor, length of the relationship) to career outcomes; and (c) if mentoring translates into more positive outcomes for men than women. Using a longitudinal design with a Time 1 sample of 5208 respondents and Time 2 sample of 3181 respondents, the study found that mentoring predicted salary, promotion, less plateauing, and overall managerial advancement a year later, although little beyond individual, job, and organisational control variables. Career support, male mentors, and longer than shorter relationships with mentors predicted positive career outcomes, whereas psychosocial support was less predictive than the other measures of mentoring, and negatively predicted salary. Men overall gained more positive career outcomes than women from mentor psychosocial support, male mentors, and lengthy relationships. By contrast, mentor career support translated into more positive career outcomes for women than men. Overall, contrary to past studies, at least for this Australian sample, gender differences do emerge in the prediction of career outcomes from mentoring.

The relevance of industrial and organisational psychology to contemporary organisations: Are we Y2K compliant?

THARENOU, P. (Monash University).

Rapid and critical changes in the environment of organisations are influencing the behaviours and practices needed for their survival and growth. Because of these environmental forces, certain issues become important. The discipline of I/O psychology appears well placed to address these issues. What have industrial and organisational psychologists been doing recently that address the issues stemming from the context in which organisations operate? What has I/O psychology been doing less of, or rarely? What are the areas of importance in the discipline? There are other people-oriented disciplines than I/O psychology that also respond to these issues. The most closely related to I/O psychology is human resource management (HRM). What are the trends in HRM, and how do they compare to I/O psychology? What lessons can be learned? Several issues and dilemmas arise for I/O psychologists in terms of the relevance of their work and its focus. Where could I/O be going to capitalise on its strengths and be relevant to problems in contemporary environments?

Testing a causal model of organisational commitment

TRAVAGLIONE, A. (University of Western Australia), & SEVASTOS, PP. (Curtin University of Technology).
ttravagli@ecel.uwa.edu.au

Using a longitudinal sample of 129 employees obtained from an organisation that had downsized, a causal model of commitment was developed. The causal model tested hypotheses linking the dimensions of affective and continuance commitment to variables representing a number of their determinants and outcomes. The determinants were perceived organisational support, job satisfaction, training opportunities and organisational tenure. The outcomes were work effort, absenteeism and turnover intention. The results of analyses using the causal model showed that job satisfaction had a causal impact on affective commitment, which in turn impacted on work effort. None of the results showed that continuance commitment was causally linked to work outcomes. No causal relationship was found between organisational tenure and the dimensions of affective and continuance commitment. The findings of this study provide further evidence for the suggestion that the most desired form of organisational commitment is affective commitment.

An exploration of the role of leisure as a coping strategy

TRENBERTH, L., DEWE, P. (Massey University), & NG, A. (Wellington Polytechnic).
l.trenberth@massey.ac.nz

The application of the transactional model of stress to work settings and the measurement of its different components has resulted in considerable debate and discussion. There is much to be gained from exploring the theoretical and empirical contributions of Lazarus and his colleagues. Work stress researchers have long recognised the importance of coping and there is now considerable data on the measurement and classification of coping strategies. While a range of coping activities has been explored, one area that has received a less than complete treatment is

leisure and its role as a coping strategy. This research sets out to investigate leisure as a coping strategy. Using a sample of 695 principals and deputy principals from secondary schools throughout New Zealand it explores whether leisure is used as strategy for coping with work stress and how such activities help. It also identifies whether leisure is viewed as an important part of life and why. In order to understand more about the role of leisure as a coping strategy individual profiles are developed to explore the context within which leisure is used. The transactional model is then used as the context for explaining the importance of leisure as a coping strategy.

Procrastination: Self-regulatory failure in implementing aversive goals

VAN EERDE, W. (Eindhoven University of Technology).
W.v.Eerde@tm.tue.nl

Work motivation theories have not devoted much attention to why people don't do things at work. Procrastination is a phenomenon that is easily recognised as one of the behaviours involved in not doing and avoiding things at work, but it has not been investigated as a motivational mechanism. As abnormal behaviour is used to understand normal behaviour, so can procrastination enhance the understanding of self-regulation. A previous study on procrastination and time management supported the notion that procrastination can decrease through the training of self-management skills. In this paper, dimensions of the content of work tasks and the social context are discussed as factors important in providing feedback to overcome or to prevent procrastination. A study is presented that investigates these dimensions on procrastination.

The domain-specificity of procrastination: Employees and students compared

VAN EERDE, W. (Eindhoven University of Technology).
w.v.eerde@tm.tue.nl

Procrastination is a familiar phenomenon, and surprisingly, it has hardly been studied in work-related settings. Students' procrastination has been approached from a personality perspective, in which 'trait procrastination' is seen as the major factor contributing to the behaviour. In this paper, it is argued that the omnipresence of procrastination at work may be indicative of a motivational mechanism. As such, it is seen as self-regulatory failure in implementing important but affectively aversive goals. More specifically, procrastination is operationalised as avoidance coping, a way to feel better temporarily with the help of distraction from unpleasant obligations. This perspective does not preclude the influence of traits, but emphasises the self-regulatory nature of procrastination, which implies that the training of self-regulatory strategies is sufficient to change the behaviour. In this paper, procrastination was assessed within three samples, using different types of measures. A peer rating of orderliness was included for the employees. Comparisons of the samples are indicative of differences in domains, with students procrastinating more than employees, and trainees of a time management training procrastinating more only before the training, a difference that disappeared after the training.

The relative effects of leaders' design choices and their hands-on coaching on team effectiveness

WAGEMAN, R. (Columbia University Business School).
rw46@columbia.edu

This multi-method field study examines the relative influence of two kinds of leadership activities — design choices and hands-on coaching — on the effectiveness of self-managing teams. Self-managing teams, those with the authority and responsibility to monitor their own performance and manage their own work processes, are increasingly the focus of empirical research. Generally, people who write about self-managing team effectiveness have focused on what leaders do in their day-to-day interactions with team members — that is, coaching the team — to empower them, to foster members' sense of responsibility for the work, and to help members work through interpersonal problems (e.g., Barry 1991; Bass, 1957; Berkowitz, 1953; Jackson, 1953; Likert, 1958; Manz & Sims, 1987). Yet hands-on coaching of leaders represents only one leadership function — though one that has received the lion's share of the attention in the teams literature. An alternative perspective on team leadership emphasises the actions leaders take to diagnose and alter the design of the team itself and the context within which it operates (Hackman & Walton, 1986). Design choices refer to leader actions taken to influence features that are structured into the team (including its task and composition) and its immediate context (including reward, information, and educational systems). In contrast to leaders' coaching — which varies in style and content over time — leaders' design choices create relatively enduring features of the performance situation. Researchers have confirmed that many of these design elements individually influence team outcomes (Ancona & Caldwell, 1992; Cohen & Ledford, 1994; Goodman & Shah, 1992; Shea & Guzzo, 1987; Wageman, 1995). From this perspective, a leader's influence comes mainly from his or her ability to affect the design of the group, and coaching behaviour makes a difference only at the margins through small adjustments in what is an already overdetermined trajectory. Moreover, there is reason to believe that leaders' design choices and their hands-on coaching may interact in shaping how well a self-managing team performs. That is, only when a team is well-designed do leaders have the opportunity to coach a team to high levels of self-management and superior performance. Finally, quality of design choices and hands-on coaching may differentially affect the three components of team effectiveness. For example, the way leaders choose to distribute rewards may have especially powerful effects on work performance and relatively little on team processes (Wageman, 1995); by contrast, coaching focused on process consultation may have little effect on performance, but be among the more powerful influences on team member satisfaction and on the quality of group relationships (Kaplan, 1979). The setting in which this research is conducted contains significant variance in both the design choices that team leaders make and in the coaching behaviour of these leaders. Thus, it offers a unique opportunity to address these propositions. The findings show that design and coaching both affect team self-management, the quality of member relationships, and member satisfaction, but only leaders' design choices affect task performance. Moreover, how well leaders design their teams determines how much positive — and negative — difference their coaching makes: well-designed teams are helped more by effective coaching (and undermined less by ineffective coaching) than are poorly-designed teams.

From work simplification to work integration: Some implications for organisational psychology

WARN, J., & BARBER, E. (University of New South Wales).
j-warn@adfa.edu.au

The argument proposed is that job design in the knowledge economy can be interpreted at the broad level as an attempt to reverse work simplification. Simplified jobs are being automated. Remaining for managers is the challenge to work integration. To do so, managers must overturn a century of management thinking that proceeded from the assumptions of work simplification. The thesis is explored in an examination of best practice endeavours in Australian industry. These practices are viewed from a perspective of work integration. The concept of intellectual capital is introduced in order to develop a framework by which work integration can be examined. Finally, some implications for organisational psychology are discussed.

Economic deprivation and psychological health: A comparison of unemployed and employed people

WATERS, LE. (Melbourne University), & MOORE, KA. (Deakin University).
l.waters@ecomfac.unimelb.edu.au

Although the negative impact of unemployment on psychological health is well known, less is known of the specific impact of economic deprivation on psychological health during unemployment. This study compares unemployed ($N = 201$; age $M = 32.41$, $SD = 10.18$) and employed ($N = 128$; age $M = 35.00$, $SD = 11.73$) participants on their levels of economic deprivation (deprivation of money to purchase material necessities and of money to engage in meaningful leisure activity), coping-efforts (affective-based and solution-oriented) and psychological health (self-esteem and depressive affect). Participants completed the Deakin Coping Scale, Profile of Mood States and the Adult Self-Perception Profile. When compared with employed participants, unemployed participants are higher on depressive affect, economic deprivation for meaningful leisure activity, and affective-based coping and are lower on self-esteem and solution-oriented coping. Path analysis using unemployed data reveals that the impact of economic deprivation on psychological health is dependent on whether the deprivation is of money to purchase material necessities or money to engage in meaningful leisure activities. The positive relationship between solution-oriented coping and self-esteem ($\beta = .15$) suggests that the promotion of solution-oriented coping to deal with economic deprivation during unemployment may improve psychological health.

Measuring the psychological contract: A revision of the psychological contract inventory

WATSON, JM., & SMART, RM. (Griffith University).
noosayouth@peg.apc.org

The aim of the present study was to clarify further the nature of the psychological contract and propose a revised and updated version of the psychological contract measure. The study was conducted in two phases. In phase one, 15 employees from a state government department were interviewed and asked to identify what they expect from their employer and what they expect to give their

employer in return. In phase two, a meta-inventory was formed by combining items from existing inventories, intended to measure the psychological contract, with items generated from employees in phase. The meta-inventory was completed by 307 (35% male, 65% female) Australian workers employed in a range of full time and part time occupations from both the private and public sectors. A principal components analysis revealed that the psychological contract is multi-dimensional in nature, comprising seven factors. The findings confirmed four factors evident in past research which include employer obligations of fair and best practice, employee obligations to get the job done, loyalty and citizenship behaviour. An additional three factors not previously identified by research were also found and include employer obligations of career and job support, a supportive work climate and employee obligations to contribute skills, ideas and expertise.

Participation in group goal setting: Some novel findings and a comprehensive theory as a new ending to an old story

WEGGE, J. (University of Dortmund, Germany).
Wegge@wep-mail.fb14.uni-dortmund.de

Working in collaborative teams is very common today. However, successful group work requires coordinating organisational goals and group goals continuously. Research on leadership suggests that the best way to achieve goal coordination is to use participative goal setting. However, there is some evidence that this technique is not superior to assigning goals in a friendly manner. Most of this evidence is concerned with individual performance and there are some reasons to suppose that these findings do not hold for the group level. In order to examine this idea further, a new comprehensive model of participation in group goal setting (PGS) was developed. This model consists of various mediator variables (e.g., group goal commitment, self-efficacy beliefs, communication intensity) that explain why PGS increases work motivation and group performance. In addition, it describes some moderator variables that foster or hinder the development of these effects (e.g., task-interdependence, group composition). The model was tested in four laboratory experiments ($N = 169$ three- and four-person groups). In none of the tests a detrimental effect of PGS was found. Moreover, as predicted by the model, in some conditions PGS enhanced work motivation and group productivity more than assigning group goals.

Teamwork: Reflexivity, effectiveness and innovation in teams

WEST, M. (The University of Aston).

In order to fulfil their potential, teams must foster team member creativity and promote organisational innovation. How can these aims be achieved in practice? Drawing on the latest research findings and experience in organisations, practical ways of promoting creativity and innovation over the long term will be described. This workshop is about how to enable innovation and effectiveness in complex decision-making teams. Using interactive and practical exercises, videos and participants' experience, the principal focus of the workshop will be on how to develop team reflexivity and thereby their potential for radical organisational innovation.

The human team: How it works and why it fails

WEST, M. (The University of Aston).

This presentation will make extensive reference to teams from top management, health care, TV production, research, sports and manufacturing to illustrate how teams work and why they fail. The starting point will be an exploration of whether working in teams is natural for humans. The presentation will describe key and necessary requirements for team working and also explore the dark side of teamwork and the often hidden realities which lead to failure. The presentation will also include an exploration of the role of teamworking in developing creativity and innovation in organisations.

A case study of a research programme in the transfer and utilisation of OB knowledge

WILLIAMS, APO. (City University Business School, London).
A.P.O.Williams@city.ac.uk

This paper attempts to identify the lessons emerging from the case study of a 30-year research programme studying the transfer and utilisation of OB knowledge. The dominant methodology used is that of action research. The paper is in four parts. First, background information is given of the theoretical context in which the programme is initiated, and the three main phases through which the programme progresses. Second, synopses of a range of projects are given. Third, in the process of making sense of the learning experiences emerging, explanations are put forward to account for (a) the choice of projects carried out, (b) the three types of relationships characterising the projects (i.e. educational, consultancy, research), (c) the moderating factors which appear to be important in determining the success of the projects, and (d) the consequences of each of these three relationships for organisational learning. Finally, this reflective exercise is encapsulated in a model designed to stimulate interest and further research in the topical area of organisational learning.

Negative feedback and responses from subordinates

WU, PG. (Zhongshan University), LEUNG, K. (Chinese University of Hong Kong), & ZHANG LF. (Hong Kong Baptist University).
Peigw@mit.edu

Research in performance feedback has suggested that supervisors are reluctant to deliver negative feedback to avoid difficult future interaction and other unfavourable reactions from subordinates. This study is conducted to examine the counter effects of mediating factors of negative feedback. A total of 248 employees from two joint ventures in China take part in a questionnaire survey in the present study. Results of the study indicate that subordinates who perceive that criticism is delivered for their benefit respond positively. Theoretical importance and managerial implications of the findings in the present study are discussed.

Personal characteristics associated with leadership: An investigation of senior executives

XIE, J.L., & WHYTE, G. (University of Toronto).
MJLXIE@cityu.edu.hk

This study examined the personal characteristics of executive leaders. Data regarding ability, managerial aptitude, social skills, values, needs, interests, temperament, and personality were collected from 270 senior executives (268 males and 2 females) and 2,898 individuals (2,600 males and 298 females) from the general population. In comparison with the male and female general populations of nonleaders, senior executives were characterised by higher intellectual and critical thinking abilities, higher managerial aptitude, and higher social skills. They demonstrated higher needs for achievement, autonomy, and dominance. They scored higher on such personality and temperament traits as dominance, ascendance, energy, capacity for status, stress tolerance, intellectual efficiency, personal relations, emotional maturity, and objectivity. Executive leaders, however, shared more similarities in value with male nonleaders than with female nonleaders. Furthermore, the personal differences associated with functional areas were smaller among executive leaders than among those in the general population.

Emotion work and psychological strain: Empirical results and practical implications

ZAPF, D. (Johann Wolfgang Goethe-University).
D.Zapf@psych.uni-Frankfurt.de

Emotion work (emotional labour) is a neglected area in Organisational stress research. It is defined as emotional regulation required to display organisationally desired emotions by the employees. Based on the existing literature on emotion work and action theory, emotional regulation requirements (sub-scales: requirement to express positive emotions; requirement to express and handle negative emotions; requirement to be sensitive to clients' emotions), emotional regulation possibilities (interaction control) and emotional regulation problems (emotional dissonance) were differentiated. Questionnaires were developed and applied in a sample of employees in a handicapped children's home

($N = 83$), in the hotel business ($N = 175$) employees working in call-centres ($N = 250$), in the banking sector ($N = 122$) and nursing schools ($N = 611$). Analyses showed that, first, the emotion work scales were both positively and negatively related with psychological health. Second, emotion work scales explained variance in psychological strain on top of task-related, organisational and social stressors at work. Third, similar to the demand-control model of Karasek, emotion work interacted with job control. Fourth, there was an interaction effect of emotion work and job stressors on strain. Practical implication of these findings will be discussed.

Employee support for alcohol reduction intervention strategies in an Australian railway

ZINKIEWICZ, L. (University of Southern Queensland),
DAVEY, J., OBST, P., & SHEEHAN, M. (Queensland
University of Technology).
zinkie@usq.edu.au

Employees of an Australian state railway ($N = 4979$) are surveyed, to assess perceptions of alcohol as a problem in the workplace and support for alcohol reduction interventions. Eighty-four percent feel that alcohol affects the workplace, with absenteeism and health the most frequently reported problems. Thirteen percent report having seen an alcohol-related accident. Employees reporting higher frequency drinking are least likely to see alcohol as a workplace problem. Respondents feel that employees coming to work drunk or hungover should discuss the issue with their supervisor or be sent to the employment assistance program (EAP) for counselling. Those who have sought help within the organisation for drinking problems report seeking help from workmates and EAP counsellors. Respondents feel that the organisation should deal with alcohol in the workplace by providing information on its alcohol and drug policy and on alcohol's effects in the workplace, and by encouraging use of the EAP. Those reporting higher frequency drinking show least knowledge of the organisation's policy, least support for intervention, and most support for doing nothing about workplace alcohol. Results show the importance of clear, well understood organisational policy, and the need for education and support services such as provided by an EAP.