



AUSTRALIAN ASSOCIATION FOR  
COGNITIVE AND BEHAVIOUR THERAPY

23 - 26  
OCTOBER  
2014

37th NATIONAL CONFERENCE  
**Uniting Research and Practice  
in Mental Health Care**

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## **PRESIDENT'S ADDRESS**

Sirius Room, 23<sup>rd</sup> October 2014, 9:10 – 9:30

### **Are social media and mobile devices the future of youth mental health?**

*Associate Professor Leanne Hides*

Australian Research Council Future Fellow,  
School of Psychology and Counselling & Institute  
of Health & Biomedical Innovation, Queensland  
University of Technology, Brisbane, Australia

Social media and mobile devices offer exciting potential to address the mental health and wellbeing of young people. There are more than 100,000 smartphone health apps available and over 1 billion people are on Facebook, including 60% of Australians. While there is now substantial research support for internet-based programs targeting depression and anxiety, little information on the quality, safety or effectiveness of smartphone apps is currently available. Social media provides a powerful platform for building social connections among young people and disseminating information, yet little is known about its health impacts. This presentation will discuss the potential positive and negative impacts of social media and mobile devices on youth mental health. Recommendations for how researchers and clinicians can help build the evidence base for and avoid the common pitfalls associated with the use of these online platforms will also be made.

## **KEYNOTE PRESENTATIONS**

Keynote Address, Sirius Room, 23<sup>rd</sup> October 2014,  
9:30 – 10:30

### **Enhancing the acceptability of CBT for anxiety disorders and related problems: The judicious use of safety behaviour**

*Professor Adam S. Radomsky*

Concordia University, Canada

Our roots are in the history of learning and behaviour change. Iconic individuals such as Ivan Pavlov and Joseph Wolpe have provided us with an evidence-based approach, as well as sound theoretical and technical frameworks on which to base our use of CBT in the clinic. Many highly experienced (and even many inexperienced) therapists apply the techniques of CBT for anxiety disorders and related problems with both empathy and compassion; although, some existing techniques (e.g., exposure) can be challenging for clients nonetheless. Anecdotal and empirical evidence suggests that challenging exposure exercises can be a source of client concern and may well lead them to refuse and/or discontinue the treatment. Interestingly, there is also evidence that many therapists are uncomfortable using exposure in the clinic. Though these problems are not always evident, CBT for anxiety disorders is sadly often associated with markedly and unacceptably high rates of treatment discontinuation and refusal. This presentation will review past and current research work designed to re-consider the role of safety behaviour in the treatment of anxiety disorders. Specifically, studies which show that judicious safety behaviour use during treatment can enhance the acceptability of CBT, without necessarily interfering with outcome will be described in the context of developing a highly effective, but markedly more acceptable approach to CBT for anxiety disorders and related problems.

Keynote Address, Sirius Room, 24<sup>th</sup> October 2014,  
9:00 – 10:00

### **The empirical status of metacognitive theory and therapy of depression**

*Dr Costas Papageorgiou*

The Priory Hospital Altrincham, Cheshire, UK

CBT for depression is one of the most effective interventions for this common and disabling problem. However, a significant proportion of individuals treated with CBT do not fully recover or they relapse and experience recurrences of depression. Therefore, given the nature, prevalence, and consequences of depression, it is important to maximise therapeutic effectiveness. To achieve this, interventions should target core psychological processes implicated in the onset, maintenance, and recurrence of depression. One such process is persistent, recyclic, negative thinking, in the form of rumination (Papageorgiou & Wells, 2004). Knowledge of the mechanisms associated with the initiation and perpetuation of rumination in depression can assist us in enhancing further our understanding of depression, and importantly, maximising the effectiveness of current psychological interventions. Papageorgiou and Wells (2003, 2004) proposed and tested a clinical metacognitive model of rumination and depression. In this model, positive metacognitive beliefs about rumination motivate individuals to engage in sustained rumination. Once rumination is activated, individuals may appraise this process as both uncontrollable and harmful and likely to lead to negative interpersonal and social consequences. The activation of negative metacognitive beliefs about rumination contributes to the experience of depression. This model has contributed to the development of metacognitive therapy for rumination and depression (Wells, 2009; Wells & Papageorgiou, 2004). In this keynote presentation, cross-sectional and prospective studies supporting the role of metacognition in depressive rumination will be presented together with clinical data attesting to the effectiveness of metacognitive therapy for rumination and depression in both individual and group formats.

## **INVITED PRESENTATIONS**

Invited Address, Sirius Room, 23<sup>rd</sup> October 2014,  
11:00 – 11:45

### **CBT for clinical perfectionism**

*Dr Sarah J. Egan*

Curtin University

There is substantial evidence showing that perfectionism is higher in individuals with anxiety disorders, depression and eating disorders compared to controls. It has been argued that perfectionism is a transdiagnostic process (Egan, Shafran, & Wade, 2011) that can explain the onset and maintenance of a range of disorders. There is data to show that perfectionism can explain comorbidity of disorders, leading to the argument that treatment of perfectionism may be an appropriate transdiagnostic treatment for individuals with elevated perfectionism and several comorbid disorders. Furthermore, results from several studies indicate that if perfectionism is not directly targeted in treatment, then it is associated with poorer treatment outcomes in treatment of depression and anxiety disorders. There is now growing evidence for the efficacy of Cognitive Behaviour Therapy (CBT) for targeting clinical perfectionism across disorders. Evidence will be reviewed that shows treatment of perfectionism can reduce both perfectionism and symptomatology across a range of disorders. This invited address will review the rationale regarding perfectionism as a transdiagnostic process, briefly describe the treatment and report on recent randomised controlled trials attesting to the efficacy of the treatment. Current research in the area of clinical perfectionism will be described and future directions for treatment of perfectionism and transdiagnostic treatment will be discussed.

Invited Address, Sirius Room, 23<sup>rd</sup> October 2014,  
16:00 – 16:45

### **Dirty deeds, done dirt-cheap: How computers are transforming the way we treat Obsessive-Compulsive Disorder**

*Dr Clare Rees*

Curtin University

The last decade has seen a rapid escalation in the use of computers to provide evidence-based therapy for Obsessive-Compulsive Disorder. In this presentation I will provide a review of the major changes that have occurred in how we provide treatment for OCD and the current evidence base behind each approach. I will also describe studies conducted in our OCD clinic that have explored alternative approaches to treatment provision. I will then go on to discuss some of the still unanswered questions and concerns about the use of these approaches. For example, can virtual dirt really provide as meaningful an exposure task as the real thing? Are we ultimately compromising the quality of patient care by focusing too much on the cost-effectiveness of these alternative modes of delivery? Given the large effect sizes associated with computer-delivered interventions, do we even need therapists?

Invited Address, Sirius Room, 24<sup>th</sup> October 2014,  
10:30 – 11:15

**The Attentional Bias Modification Approach to Attenuation of Anxiety Vulnerability and Dysfunction**

*Winthrop Professor Colin MacLeod*

The University of Western Australia

It is well established that elevated levels of anxiety vulnerability, and clinical anxiety disorders, are characterized by a pattern of attentional selectivity that favours threatening information, and may play a functional role in the aetiology and maintenance of anxious disposition and dysfunction. However, it is only in recent years that clinical investigators have sought to evaluate whether resilience to anxiety can be increased, and the symptoms of anxiety disorders can be alleviated, by computer-based training procedures designed to directly reduce attentional bias to threatening information. This presentation will review recent findings from research programs motivated by the complementary objectives of increasing theoretical understanding concerning the specific mechanisms that underpin anxiety-linked attentional selectivity, and therapeutically attenuating anxiety vulnerability and dysfunction through the development and application of these new attentional bias modification (ABM) technologies. It will be shown that ABM procedures not only have served to illuminate the causal contributions made by attentional bias to emotional vulnerability and pathology, but also are demonstrating great therapeutic promise, particularly in the treatment of anxiety. Nevertheless, there are also inconsistencies in the literature, and these will be examined with the objective of identifying the key factors that bear upon the therapeutic efficacy of intended ABM interventions. In the light of this review, four recommended directions for future research in the ABM field will be identified, and illustrative studies of each type will be reported from our own ongoing program of investigation.

Invited Address, Sirius Room, 24<sup>th</sup> October 2014,  
13:15 – 14:00

**Schema therapy: What have we learnt in the last 20 years?**

*Dr Christopher Lee*

Murdoch University

It is now over 20 years since the publication of treatment manuals for schema therapy. This invited address will focus on what has been learnt in terms of the key processes and the current evidence base with a particular emphasis on the most recent data and including studies published by the presenter. Comparison with changes in standard CBT and Psychodynamic approaches will also be presented.

## **TRACEY GOODALL EARLY CAREER AWARD PRESENTATION**

Sirius Room, Friday 24<sup>th</sup> October, 15:45 – 16:15

### **Surviving ‘survivorship’: Adapting evidence-based therapy to the computer screen to promote adjustment in adolescent and young adults with cancer**

*Ursula Sansom-Daly*

Kids Cancer Centre, Sydney Children’s Hospital (SCH), NSW, Australia

School of Psychology, University of NSW, Sydney, Australia

School of Women’s and Children’s Health, UNSW Medicine, University of NSW, Sydney, NSW, Australia

**Research Aims/Questions:** ‘E-health’ technologies have significant potential to extend the reach of evidence-based psychological support to vulnerable, isolated populations. For adolescents and young adults (AYAs) with cancer, the time following cancer treatment completion can be a time of psychological vulnerability as they attempt to return to ‘normal’. Assisting AYAs to develop adaptive coping skills at this time of transition may prevent later distress. Our team has developed ‘ReCaPTure LiFe’ (Resilience and Coping skills for young People To Live well Following Cancer), an online intervention for AYAs aged 15-25 years in the first year post-treatment. This national phase II randomised controlled trial (RCT) aimed to establish the feasibility, acceptability, and efficacy of Recapture Life, relative to an online peer-support group control, and a 12-week waitlist.

**Methodology:** Recapture Life is a manualised program that promotes resilience using cognitive behavioural therapy (CBT) techniques tailored to the AYA cancer experience. It involves six, weekly, small-group sessions, delivered online by a psychologist using innovative video-conferencing technology. To date, 21 AYAs have completed the program from across five states in Australia. Groups have been conducted with participants >4000km apart, across different timezones. Early data indicate improved quality of life ( $p = 0.033$ ), and reduced distress ( $p = 0.021$ ), anxiety ( $p = 0.015$ ), and need for help ( $p = 0.024$ ) following the program.

**Conclusion:** Recapture Life is a promising model of support for AYAs across Australia. This talk will discuss new online models of evidence based support for young people living with cancer, examine how CBT can be tailored to the cancer context, and discuss the benefits and clinical challenges of using online delivery mechanisms for these populations.

**Keywords:** Anxiety, Child and youth issues, Depression, Dissemination, Early intervention, Health, Mental health, Rehabilitation, Treatment

## **DISTINGUISHED CAREER AWARD PRESENTATION**

Sirius Room, Friday 24<sup>th</sup> October, 16:15 – 16:45

### **Psychological interventions for co-existing mental health substance use problems: towards a healthy lifestyles approach**

*Professor Amanda Baker*

National Health and Medical Research Council Senior Research Fellow, School of Medicine and Public Health, University of Newcastle, NSW

Research into the treatment of co-existing mental health and substance use problems has grown over the last decade. Studies cover the spectrum of comorbidity, including psychoses, depression and anxiety and tobacco, alcohol and illicit drug use. Interventions include brief motivational interventions, intensive face-to-face therapy, computer-based delivery, and telephone delivered interventions. The 20 year gap in longevity between people with versus without co-existing mental health and substance misuse problems has drawn recent focus to quality of life and physical health more broadly. The progression from single focus (mental health) to dual focus (mental health and substance misuse) and then to a broader recovery focus is described and recommendations for conceptualising and improving future treatment are made.

## **SYMPOSIUM PRESENTATIONS**

### **Symposium Presentation 1, Sirius Room 23<sup>rd</sup> October 2014, 11:45 – 12:45**

#### *Modifying cognitive processes in health psychology*

Louise Sharpe<sup>1</sup>, Patrick Clarke<sup>2</sup>, Emma Jones<sup>1</sup>,  
Barbara Mullan<sup>3</sup>

<sup>1</sup>University of Sydney, Australia

<sup>2</sup>University of Western Australia, Australia

<sup>3</sup>Curtin University, Australia

#### **Overarching Abstract:**

**Research Aims/Questions:** The content of cognitions has long been the target of cognitive-behaviour therapy. However, in recent decades, increasing evidence has demonstrated that cognitive processes, such as interpretation biases, attention biases and other aspects of cognitive processes (e.g. executive functioning) have an important role in psychopathology. This has led to the development of a range of modification programs that target cognitive processes rather than cognitive content. Cognitive modification protocols have met with considerable success in ameliorating anxiety and depression. However, their adoption to the field of health psychology is more recent. This symposium aims to demonstrate the impact of modifying cognitive processes in three health-related areas: sleep, pain and alcohol consumption.

**Methodology:** Four studies will be presented that demonstrate the efficacy of different approaches to modifying cognitive processes, namely attention bias modification for sleep; cognitive bias modification for interpretation in pain, attention bias modification in pain and training in executive function for binge drinking.

**Conclusion:** Results confirm that interventions that modify cognitive processes, such as attention, interpretation and executive function have a role in the management of health complaints. The fact that these interventions have the potential to be highly cost-effective and administered remotely makes this an exciting new avenue for the treatment of a range of health-related issues.

## **PAPER 1**

### *Take one before bed: Assessing the therapeutic potential of targeted Attention Bias Modification for Insomnia using smartphone delivery*

Patrick J. F. Clarke<sup>1</sup>, Kristiina Bedford<sup>1</sup>, Lies Notebaert<sup>1</sup>, Daniel Rudaizky<sup>1</sup>, Romola Bucks<sup>1</sup>, Bronwyn Milkins<sup>1</sup>, Colin MacLeod<sup>1,2</sup>

<sup>1</sup>University of Western Australia, Australia

<sup>2</sup>Babeş-Bolyai University, Romania

**Research Aims/Questions:** In this study we report on the results of an experiment designed to assess the potential benefits of a smartphone-delivered Attention Bias Modification (ABM) procedure for individuals experiencing symptoms of pre-sleep anxiety and insomnia.

**Methodology:** Forty-one individuals reporting moderate to excessive sleep disturbance and associated pre-sleep worry completed an 8-day home-based program. Participants were randomly allocated to complete either an ABM procedure, to encourage attentional avoidance of sleep-related threatening information, or a control procedure, immediately before sleep on five consecutive nights via a purpose-designed iPhone app. To assess outcomes participants completed measures of pre-sleep arousal, wore an electrophysiological sleep-monitoring device (Zeo sleep monitor), and completed daily sleep diaries.

**Conclusion:** Results revealed that compared to the control condition, those who received ABM demonstrated reduced symptoms of anxiety and arousal in the pre-sleep period, shorter times to fall asleep as indicated by electrophysiological measures and enhanced evaluations of overall sleep quality. These findings suggest that ABM may be of benefit in targeting sleep-related difficulties where pre-sleep anxiety and arousal are implicated. The broader implications of the findings are considered in relation to the potential for ABM to target anxiety and arousal at specific, critical time-points in a range of conditions.

**Keywords:** attention bias, modification, sleep

## PAPER 2

*The effect of Cognitive Bias Modification for Interpretation (CBM-I) on avoidance of pain during an acute experimental pain task*

Emma Jones<sup>1</sup>, Louise Sharpe<sup>1</sup>

<sup>1</sup>The University of Sydney, Australia

**Research Aims/Questions:** Research confirms that patients with chronic pain exhibit a tendency to interpret ambiguous stimuli as pain-related. However, whether modifying these interpretive biases impacts pain outcomes is unknown.

**Methodology:** This study aimed to demonstrate that interpretation biases towards pain can be modified, and that changing these biases influences pain outcomes in the cold pressor task. 106 undergraduate students were randomly allocated to receive either threatening or reassuring information regarding the cold pressor. They were also randomly allocated to one of two conditions in the Ambiguous Scenarios Task, where they were trained either to have a threatening (pain bias condition) or a non-threatening interpretation of pain (no pain bias condition). Therefore, the study had a 2 (threat/reassuring) x 2 (pain bias/no pain bias) design. Analyses revealed that a bias was induced contingent on condition, and that the threat manipulation was effective.

**Conclusion:** Participants in the pain bias condition hesitated more before doing the cold pressor than those in the no pain bias condition, as did the threat compared with the reassurance condition. The major finding was that interpretive bias mediated the relationship between bias condition and hesitation time, supporting the causal role of interpretive biases for avoidance behaviours in current chronic pain models. No differences were found on other pain outcomes regarding bias or threat condition and the efficacy of the bias modification was not impacted by different levels of threat. These results suggest that cognitive bias modification should be further explored as a potential intervention in pain.

**Keywords:** pain, interpretation, bias modification

## PAPER 3

*An intervention to decrease alcohol consumption: The effect of improving executive functioning*

Nicola Black<sup>1</sup>, Barbara Mullan<sup>1</sup>

<sup>1</sup>The University of Sydney, Australia

<sup>1</sup>Curtin University, Australia

**Research Aims/Questions:** Excessive alcohol consumption can have both short and long term negative consequences. Despite this, many young Australians exceed the recommended guidelines for reducing harm. This study investigated the efficacy of improving executive functioning in order to decrease alcohol consumption among university students.

**Methodology:** Forty-nine undergraduate psychology students participated for course credit. At baseline, all participants completed demographic and alcohol-consumption related questionnaires, as well as a Tower of London task. Following this, participants were randomly assigned to the experimental or active control conditions. The control group then completed three more Tower of London tasks, of equivalent difficulty to the first task, each spaced at least 24 hours apart. During the same time period, the experimental group completed three more Tower of London tasks, of increasing difficulty. Finally, all participants recorded their alcohol consumption for two weeks.

**Conclusion:** When controlling for initial alcohol consumption and executive functioning scores on the Tower of London, there was a significant intervention effect, such that the experimental group ( $M = 4.8$ ) drank an average of 1.6 standard drinks less than the control group ( $M = 6.4$ ) per drinking occasion. Further, the discrepancy between intentions and behaviour differed significantly between groups. The experimental group drank 2.2 standard drinks less than intended, while the control group drank 0.5 standard drinks more than intended. The intervention demonstrated initial success in decreasing alcohol consumption. Further research into the mechanisms of change could allow the development of effective executive-functioning based interventions for alcohol consumption.

**Keywords:** alcohol, intentions, binge drinking, executive function, cognitive processes

## PAPER 4

### *Attention Bias Modification in pain: Understanding mechanisms and optimizing protocols*

Louise Sharpe<sup>1</sup>, Emma Jones<sup>1</sup>

<sup>1</sup>The University of Sydney, Australia

**Research Aims/Questions:** While attentional biases for some pain stimuli are present in pain patients (i.e. sensory pain words), recent prospective studies have revealed that it may be avoidance of affective pain words that is the putative process in the transition from acute to chronic pain. The aim of this study was to determine the optimal strategy for modifying pain in the laboratory under conditions of high threat by training participants either towards or away from sensory pain words; and either towards or away from affective pain words.

**Methodology:** One hundred and twenty-one university students, who were pre-screened as high in fear of pain were exposed to threatening information about a cold pressor task. They were then randomized to one of four conditions (Affective+/sensory-; Affective+/sensory+; Affective-/sensory-; Affective-/sensory+) while their gaze behavior was assessed. Participants subsequently completed an acute experimental pain task.

**Conclusion:** Those trained towards affective words and away from sensory pain words had a longer duration of first fixation on affective pain words and spent longer fixating on these words overall. Importantly, both duration of first fixation and total duration spent fixating on affective pain words were correlated with the level of pain reported. These data suggest that under conditions of threat training towards affective pain words is optimal, and suggest previous positive impacts of ABM may have resulted from the paradoxical effect that training away from sensory pain words also trains participants towards affective pain words.

**Keywords:** pain, attention, bias modification, threat, avoidance

### **Symposium Presentation 2, Pleiades Room** **23<sup>rd</sup> October 2014, 11:45 – 12:45**

*CAMHS PEP (Program for Evidence-Based Psychotherapies), an evaluation of three years of program delivery in WA*

M. Jones<sup>1</sup>, R. Skinner<sup>2</sup>, R. Perera<sup>3</sup>, E. Seah<sup>1</sup>

<sup>1</sup>Child and Adolescent Health Services CAMHS

<sup>2</sup>Child and Adolescent Health Services CAMHS Pathways

<sup>3</sup>Edith Cowan University

#### **Overarching Abstract:**

**Research Aims/Questions:** The WA Child and Adolescent Mental Health Services, Program for Evidence-Based Psychotherapies (CAMHS PEP) comprises three brief evidence-based clinical interventions targeting mental health conditions in three areas: adolescents with depression and mood disorders; children with complex anxieties; and parent management training for parents of children with disruptive behaviour disorders. CAMHS PEP aims to increase the accessibility of evidence-based interventions in Community CAMHS to support treatment as usual. A collaboration with the UWA Psychology Post-graduate Clinical Program, post-graduate trainees assisted in development and delivered the PEP interventions. With the assistance of a Telethon grant, in 2014 an evaluation aimed to examine the effectiveness and cost-efficiency of these interventions in CAMHS.

**Methodology:** Three studies were conducted. Study one assessed intervention effectiveness evaluating change on treatment outcome measures. Study two examined wider intervention effectiveness comparing National Outcomes Casemix Collection measures trajectories over time between PEP participants and non-participant referrals. Study three examined intervention effectiveness and cost efficiency comparing: PEP participants and referrals with a matched CAMHS comparison cohort.

**Conclusion:** Differential treatment outcome effects were observed for the three interventions. This symposium presents the treatment outcomes findings for each of the interventions separately and an outline of the effectiveness and cost efficiency evaluation findings.

**Keywords** Child and youth issues, depression, anxiety, behavioural problems

## PAPER 1

### *CAMHS PEP Interventions: Evaluation of efficiency and effectiveness*

M. Jones<sup>1</sup>, R. Perera<sup>2</sup>

<sup>1</sup>Child and Adolescent Health Services CAMHS

<sup>2</sup>Edith Cowan University

**Research Aims:** The effectiveness and efficiency evaluation attempted to answer the question: “what, if anything, does participation in a PEP intervention add to treatment as usual?”

**Methodology:** Study two of the PEP evaluation compared global health outcomes of PEP participants and PEP referrals who did not go on to participate in PEP analysing National Outcomes Case Collection data. Study three compared length of stay in CAMHS between PEP participants, PEP referrals who did not go on to participate in PEP and a CAMHS comparison cohort matched on length of time in CAMHS and severity of presentation, selected by the Mental Health Information System (MHIS), Data Integrity Directorate.

**Conclusion:** Findings from the evaluation provide strong support for Mood Boosters, with impressive longer term recovery rates for a low dosage proving a very economical intervention. Evaluation of Worry Busters has moderate to strong support for low dosage with recommendations for booster sessions. Results also indicated, patients in Worry busters and Parent Skills were in CAMHS for almost a year before PEP referral.

**Keywords:** Treatment evaluation, child and youth issues

## PAPER 2

### *CAMHS PEP Evaluation: Mood Boosters*

M. Jones<sup>1</sup>, E. Seah<sup>1</sup>, R. Perera<sup>2</sup>

<sup>1</sup>Child and Adolescent Health Services CAMHS

<sup>2</sup>Edith Cowan University

**Research Aims:** ‘Mood Boosters’ is a brief CBT intervention for adolescents with depression/mood

disorders designed as an adjunct to treatment as usual and is one of the three Child and Adolescent Mental Health Services, Program for Evidence-Based Psychotherapies (CAMHS PEP). This study aimed to examine the effectiveness of “Mood Boosters” in improving treatment outcomes on symptoms of depression.

**Methodology:** “Mood Boosters” is a seven stage intervention, 6-10 weekly 60 minute sessions for 14-17 year olds with mood difficulties/depression, available in a group or individual therapy format. Adolescents were referred to mood boosters by CAMHS case managers within Metropolitan Community CAMHS. Sessions cover The Experience of Depression, Think, Feel, Do Tuning into Feelings, Coping Strategies, Getting Unstuck, Sussing out Self Talk, Thinking Tangles. Treatment outcomes were assessed using the BDI-II.

**Conclusion:** Findings from the evaluation provide strong support for Mood Boosters, with a large effect size, impressive symptom reduction and longer term recovery rates for a low dosage proving a very economical intervention.

**Keywords:** Youth depression, brief intervention, treatment evaluation

## PAPER 3

### *CAMHS PEP Evaluation: Worry Busters*

M. Jones<sup>1</sup>, E. Seah<sup>1</sup>, R. Perera<sup>2</sup>

<sup>1</sup>Child and Adolescent Health Services CAMHS

<sup>2</sup>Edith Cowan University

**Research Aims:** ‘Worry Busters’ is a brief CBT intervention for children with complex anxiety disorders designed as an adjunct to treatment as usual and is one of the three Child and Adolescent Mental Health Services, Program for Evidence-Based Psychotherapies (CAMHS PEP). This study aimed to examine the effectiveness of “Worry Busters” in improving treatment outcomes on symptoms of anxiety

**Methodology:** “Worry Busters” is a six stage intervention, designed for primary school children (6-12 years) with complex anxiety disorders delivered in 6-10 weekly 60 minute sessions. Initially designed for both group and individual delivery, most subsequent delivery has been

individual. Children were referred to worry busters by CAMHS case managers within Metropolitan Community CAMHS. Sessions covered Knowing Your Feelings (worry and alarm), Finding Thoughts, Stepping Stones, Using Your Thoughts, and Choosing Your Actions. Treatment outcomes were assessed using The Children's Anxiety Life Interference Scale – Parent Form (CALIS), the Spence Children's Anxiety Scale (SCAS) and the Paediatric Quality of Life Inventory -social competence subscale (PedsQL-SC).

**Conclusion:** Evaluation of Worry Busters indicates moderate to strong support. The intervention reduced anxiety interfering with child and family daily life, physical injury fears, panic attacks, agoraphobia and GAD. In child completed measures, improvements in separation anxiety quality of participants' social life were evident.

**Keywords:** Complex childhood anxiety, brief intervention, treatment evaluation

#### PAPER 4

##### *CAMHS PEP Evaluation: Parent Skills*

R. Skinner<sup>1</sup>, R. Perera<sup>2</sup>

<sup>1</sup>Child and Adolescent Health Services CAMHS Pathways

<sup>2</sup>Edith Cowan University

**Research Aims:** "Parent Skills" is a parent management training intervention for parents of children with disruptive behaviour disorders and is one of the three Child and Adolescent Mental Health Services, Program for Evidence-Based Psychotherapies (CAMHS PEP). This study aims to examine the effectiveness of Parent Skills in improving outcomes including reflective functioning, parent-child relationship, disruptive behaviours and parenting stress.

**Methodology:** Parent Skills is designed for parents of children aged 7-12 years with disruptive behaviour problems, completed over six to ten weekly, 90 minute sessions in group or individual therapy formats. Parents were referred to Parent Skills from CAMHS case managers within Community and Specialised CAMHS. Sessions explored the role of attention, 'emotion rich' and 'neutral' responses to manage behaviour, and coping skills. The aim was for parents to learn practical parenting skills, improve their own coping

and wellbeing and build secure, loving relationships with their children. Treatment outcomes were assessed using the Parental Reflective Functioning Questionnaire (PRFQ), the Parent-Child Relationship Inventory (PCRI), the Eyberg Child Behaviour Inventory (ECBI) and the Parent Stress Index - short form (PSI-SF).

**Conclusion:** Overall there was a reduction in parent distress, improved parent/child interactions, reduction in child perceived difficulties and improvement in reflective functioning. Medium to large effect sizes indicate that components of the program may be useful in improving parent/child relationships and reducing parental stress. The evaluation demonstrated that CAMHS has capacity and resources to develop, implement and deliver programs in the long-term.

**Keywords:** behaviour problems, treatment, mental health, child and youth issues

##### **Symposium Presentation 3, Orion Room 23<sup>rd</sup> October 2014, 11:45 – 12:45**

##### *Using music in therapy*

Genevieve Dingle<sup>1</sup>, Melanie Dalton<sup>2,3</sup>, Leanne Hides<sup>4,5</sup>

<sup>1</sup>The University of Queensland, Australia

<sup>2</sup>North West Metropolitan Child and Youth Mental Health Service, Queensland Health, QLD

<sup>3</sup>School of Psychology, University of Queensland, Australia

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<sup>5</sup>Young and Well Cooperative Research Centre, QUT, Australia

##### **Overarching Abstract:**

The aim of this symposium is to present a series of four studies in which music was used in therapeutic ways. The first paper describes a laboratory study investigating the influence of metal music listening on induced anger. The second paper describes a study in progress at a metropolitan Child and Adolescent Mental Health Service where music is used as an adjunct to group CBT for adolescents with severe social phobia. The third paper describes the development of a phone app for young people in which music listening is used to improve emotion

regulation and wellbeing. The final paper describes a controlled trial of “Tuned In”, a brief group intervention in which music listening is used as a method for increasing participants’ awareness and regulation of emotional states as well as their engagement with the service.

## PAPER 1

*Metal music listeners use music to help process their anger*

L. Sharman<sup>1</sup>, G. Dingle<sup>1</sup>, E. Vanman<sup>1</sup>

<sup>1</sup>The University of Queensland, Brisbane, Australia

**Research Aims:** Media, parent groups and some health professionals have claimed that metal music listening causes aggression, delinquency, and suicidality in young people, yet research on these links is small and mostly correlational in design. This laboratory study was designed to examine the influence of participant selected metal music on anger.

**Methodology:** Forty extreme music listeners aged 18 to 25 years were subjected to an anger induction, followed by random assignment to either 10 minutes of listening to music from their own playlist, or silence. Subjective ratings on the Positive and Negative Affect Scale were assessed at three time points: baseline, after the anger induction, and after music / silence, along with continuous heart rate monitoring.

**Results:** Ratings of Hostility, Irritability, and Stress increased from baseline to the end of the anger induction, and then decreased after the music or silence (equally effective in lowering these negative emotions), while Relaxed ratings showed the inverse pattern across time. Heart rate showed a Time x Condition interaction,  $F(2,74) = 6.36$ ,  $p = .003$ ,  $\eta^2_p = .15$ , indicating that the increased heart rate following the anger induction was sustained in the music listeners but not in the silence condition. Interestingly, there was also a Time x Condition interaction for the positively valenced emotions Active and Inspired, which showed little change over time for the silence condition but a marked increase during metal music listening.

**Conclusion:** Metal music did not make angry participants angrier - on the contrary it appeared to match their physiological arousal and result in an

increase in ratings of relaxation and other positively valenced emotions.

**Keywords:** Music listening, Metal Music, Anger, Emotion regulation, Young people

## PAPER 2

*Music apps for mood management in young people*

L. Hides<sup>1,2</sup>, S. Stoyanov<sup>1,2</sup>, G. Dingle<sup>2,3</sup>, D. Tjondronegoro<sup>1,2</sup>, O. Zelenko<sup>1,2</sup>, Z. Papinczak<sup>3</sup>, D. Koh<sup>1,2</sup>, S. Edge<sup>1,2</sup>, D. Kavanagh<sup>1,2</sup>

<sup>1</sup>Institute of Health & Biomedical Innovation, QUT, Australia

<sup>2</sup>Young and Well Cooperative Research Centre, QUT, Australia

<sup>3</sup>University of Queensland, Australia

**Research Aims/Questions:** Music is commonly used by young people to identify, express and regulate their emotions. Music smartphone apps provide an engaging, easily accessible way of assisting young people with developing effective emotion-regulation strategies. This paper reports on a systematic app quality review of existing iPhone apps targeting emotion through music and describes the development and initial usability data on the new *music eScape* app developed as part of the Young and Well Cooperative Research Centre.

**Methodology:** A systematic search of the iTunes store identified 117 music apps, 20 of which met study inclusion criteria (to play songs, not sounds; priced below \$5.00). App quality was evaluated by two independent raters using the Mobile App Rating Scale. The functionality and quality ratings of the five highest-rating music apps will be presented. Three participatory design workshops (PDW; N=13, 6 males, 7 females; age 15-25) were conducted for young people to trial existing music apps and to explore young people’s use of music to manage mood. Key learnings from the mobile app review and PDWs were used to develop the *music eScape* app.

**Conclusion:** The *music eScape* app will be described and initial usability data from a current randomized controlled trial will be reported. Implications for future research and for applying the new app in clinical practice will be discussed.

**Keywords:** Music, app, mobile, mood, young people

### PAPER 3

*"Playing my courage music": How music listening can be used as an adjunct to group CBT for adolescents with severe social phobia*

M. Dalton<sup>1,2</sup>, G. Dingle<sup>2</sup>, H. Shannon<sup>1</sup>, B. Palmer<sup>1,2</sup>, A. Marriott<sup>1</sup>

<sup>1</sup>North West Metropolitan Child and Youth Mental Health Service, Queensland Health, QLD

<sup>2</sup>School of Psychology, University of Queensland, Australia

**Research Aims/Questions:** *Stand Up Speak Out* is a group CBT program for adolescents with social phobia that has been empirically supported (Albano et al., 1995; Hayward et al., 2000). However, clients of Child and Youth MHS experience such severe phobic avoidance that it is often difficult to get them to start or continue in treatment, particularly once exposure therapy sessions commence. This paper describes the process of including music listening as an adjunct to the CBT-A to engage clients into the group and to decrease their arousal before doing exposure tasks.

**Methodology:** The paper will describe how the music was used in the CBT-A program, with the emphasis on process issues that arose and how they were addressed. Case vignettes will be provided.

**Conclusion:** Music listening is an accessible medium that young people can tailor to their needs. These case examples show how music listening can be used for the specific purposes of lowering physiological arousal in preparation for an exposure task and for building courage during CBT-A.

**Keywords:** Social anxiety, social phobia, young people, group CBT, music, exposure

### PAPER 4

*Preliminary findings from a controlled trial of Tuned In, a music based emotion regulation program for young people.*

G. Dingle<sup>1,2</sup>, A. Kunde<sup>1</sup>, J. Hodges<sup>1</sup>

<sup>1</sup>The University of Queensland, Australia

<sup>2</sup>Centre for Youth Substance Abuse Research, University of Queensland, Royal Brisbane and Women's Hospital, Australia.

**Research Aims/Questions:** The Youth Mental Health Report (2014) survey of about 15 000 Australians aged 15-19 found that a fifth of young Australians experience significant emotional problems such as depression and anxiety - yet they are reluctant to seek professional help. *Tuned In Teens* is a brief group program in which young people use their own chosen music to evoke and learn about emotions in a strategic way. The aim of this study was to assess the effectiveness and engagement of the program with a community sample of at-risk adolescents.

**Methodology:** Participants (to date) were 40 adolescents attending the Boystown Youth Connections program at a regional centre in QLD. The average age was 14 years, 75% male, 20% were Indigenous Australians, and 30% were over the clinical cutoff on the K6. *Tuned In Teens* was run in eight weekly 75 minute sessions across the term, with the Behavioural Assessment Scales for Children and a range of other measures collected at pre and post.

**Results:** At pre-program, the adolescents reported listening to music frequently and using it as a primary way of regulating their mood, yet most lack the strategies for matching particular music to their desired emotional state. Pre- to post-program changes on a range of emotion regulation, mood, substance use, and wellbeing measures will be presented, along with participant ratings of engagement with the program and attendance rates.

**Conclusion:** The conclusions will consider how effective *Tuned In Teens* is as a stand-alone program, and other potential uses of the *Tuned In* sessions in combination with other treatment components; in individual therapy; and in an online version.

**Keywords:** Emotion regulation, adolescents, music, engagement, group program

**Symposium Presentation 4, Sirius Room, 23<sup>rd</sup> October 2014, 13:30 – 14:30**

*Recent advances in understanding of the information processing biases that underpin elevated anxiety vulnerability*

J. Basanovic<sup>1</sup>, L. Notebaert<sup>1</sup>, D. Rudaizky<sup>1,2</sup>, B. Grafton<sup>1</sup>, C. MacLeod<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychology, University of Western Australia, Australia

<sup>2</sup>School of Psychology, Murdoch University, Australia

**Overarching Abstract:**

Cognitive models of anxiety have proven highly influential in recent decades (c.f. Clark & Beck, 2010). These models share the premise that biased patterns of information processing play a key role in the development of anxious disposition. There is now considerable evidence showing that such processing biases are characteristic of elevated anxiety vulnerability. The studies presented in this symposium further illuminate the nature of the information processing biases that underpin such anxiety in important new ways. Our first presentation concerns the attentional basis of anxiety, and makes a novel distinction between anxiety-linked differences in the ability vs. tendency to attend to threat. Our second presentation draws on the observation that, while we cannot control all of the threats we face, there are many we can do something about, and reports a study investigating the patterns of anxiety-linked attentional bias to threat that either can, or cannot, be mitigated. Evidence of anxiety-linked memory bias for threat has proven somewhat elusive. However, the study reported in our third presentation suggests that evidence of such memory bias may be more forthcoming if we consider recall for threatening information with future implications. Our final presentation, rather than focusing on the patterns of processing operating subsequent to information having been encoded in terms of its emotional valence, pauses to ask whether elevated anxiety vulnerability is characterised by a particular sensitivity to encode the environment in terms of emotion in the first

place. The ways in which these studies advance understanding of anxiety will be discussed.

**PAPER 1**

*Does anxiety-linked attentional bias reflect biased attentional ability or biased attentional tendency?*

J. Basanovic<sup>1</sup>, C. MacLeod<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychology, University of Western Australia, Australia

**Research Aims/Questions:** It is well established that elevated anxiety vulnerability is characterised by an attentional bias to threatening information (c.f. Bar-Haim, et al., 2007). It is not known, however, whether this pattern of attentional selectivity reflects anxiety-linked differences in the ability to attend to threatening information, or anxiety-linked differences in the tendency to attend to threatening information. The purpose of this study was to investigate whether anxiety-linked attentional bias to threatening information reflects a biased ability vs. a biased tendency to attend to such information.

**Methodology:** High and low trait anxious participants completed an attentional-probe task under two conditions: i) when required to adopt a goal of attending either towards or away from threatening information (constrained); and ii) when no such attentional goal had to be implemented (unconstrained). The patterns of attentional response obtained in the former condition provided a measure of variation in ability to attend to threatening information, whereas the patterns of attentional response obtained in the latter condition provided a measure of variation in tendency to attend to threatening information.

**Conclusion:** The high trait, compared to low trait, anxious participants did not display greater attentional bias to threat information when attentional goals were constrained. They did, however, display greater attentional bias to threat information when attentional goals were unconstrained. These findings suggest that anxiety-linked attentional bias for threatening information reflects a differential tendency, rather than ability, to attend to threatening information. The present study sheds light on the mechanisms that underpin anxiety-linked attentional bias to threat information.

**Keyword:** anxiety, attentional bias, tendency, ability

## PAPER 2

*How the ability to mitigate danger influences anxiety-linked attentional bias to threat*

L. Notebaert<sup>1</sup>, C. MacLeod<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychology, University of Western Australia, Australia

**Research Aims/Questions:** Numerous studies have shown that individuals characterised by high levels of trait anxiety display an attentional bias to threat cues. However, when such threat cues have been presented in previous research, participants typically have not had the opportunity to mitigate the potential danger signalled by the threat cue. Of course, in the real-world, it is often the case that we are able to undertake actions that may serve to mitigate the danger signalled by the presence of threat. Hence, the purpose of the current study was to determine whether the opportunity for danger mitigation influences, either additively or interactively, the observed patterns of anxiety-linked attentional bias to threatening information.

**Methodology:** This issue was investigated across two studies, using an attentional-probe task to assess anxiety-linked attentional bias to threat cues signalling danger (noise bursts) that either could, or could not, be mitigated.

**Conclusion:** Our results demonstrate that trait anxiety, and the opportunity for danger mitigation, interactively determine attentional bias to threat. Specifically, the opportunity for danger mitigation served to amplify the anxiety-linked attentional bias to threat. These findings suggest that the opportunity for danger mitigation is an important factor in determining anxiety-linked attentional responding to threat cues. The ways in which these findings contribute to our understanding of the cognitive underpinning of anxiety dysfunction will be discussed.

**Keyword:** anxiety, attentional bias, danger mitigation

## PAPER 3

*The knot in the anxious' handkerchief: The role of prospective memory in anxiety-linked memory bias for threat*

D. Rudaizky<sup>1,2</sup>, L. Notebaert<sup>1</sup>, C. MacLeod<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychology, University of Western Australia, Australia

<sup>2</sup>School of Psychology, Murdoch University, Australia

**Research Aims/Questions:** Early cognitive models of anxiety shared the common prediction that anxiety-linked advantages in the selective processing of threatening information would be evident across all classes of information processing e.g. attentional, interpretive or memorial. Numerous studies have now shown that elevated anxiety vulnerability is characterised by biases in selective attention and interpretation that favour the processing of threatening information. However, evidence of an anxiety-linked memory bias has been somewhat inconsistent. Given the future-oriented nature of anxiety, it is possible that an anxiety-linked memory bias may only operate on threat cues holding implications for the future. The purpose of the present research was to test this prospective memory bias hypothesis.

**Methodology:** High and low trait anxious participants performed a memory task in which three sets of neutral words were presented. These words acted as either prospective threat cues (i.e. signalling an aversive future event - loud noise burst - that could be avoided by successful word recall), non-prospective threat cues (signalling an aversive future event that could not be mitigated), or non-threat cues (did not signal an aversive event).

**Conclusion:** Consistent with the prospective memory bias hypothesis, high anxious participants showed better recognition of prospective threat cues compared to non-threat cues. Such prospective memory bias was not observed in low trait anxious participants. These results suggest that the hitherto inconsistent findings in the memory bias literature may be amenable to explanation in terms of variation in the degree to which participants consider the future implications of the information they commit to memory.

**Keyword:** anxiety, memory bias, prospective memory

#### PAPER 4

*It's a bird, it's a plane... nope it's just negative:  
Anxiety-linked differences in valence sensitivity*

B. Grafton<sup>1</sup>, C. MacLeod<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychology, University of Western Australia, Australia.

**Research Aims/Questions:** Research into the cognitive basis of anxiety has typically assumed that high and low trait anxious individuals do not differ in the degree to which they encode the environment in terms of its emotional valence. The purpose of the present study was to test the validity of this assumption, by investigating whether elevated anxiety vulnerability is associated with a particularly sensitivity to encoding the environment in terms of its emotional valence.

**Methodology:** Participants selected to vary in trait anxiety were exposed to novel task designed to assess variation in valence sensitivity. On each trial, a face pair was displayed. These face pairs comprised two different individuals who either did, or did not, display the same emotional expression, and who were either the same, or different, in gender. On some trials, participants were required to make judgements concerning whether the two faces were matched in emotional valence, whereas on other trials they were required to make judgements concerning whether the two faces were matched in gender. The degree to which participants were speeded to make decisions concerning valence, relative to gender, provided an index of valence sensitivity.

**Conclusion:** The findings showed that trait anxiety scores were positively correlated with valence sensitivity scores, consistent with the hypothesis that elevated anxiety vulnerability is characterised by a greater tendency to encode the environment in terms of its emotional valence. The ways in which these findings may bear upon our understanding of the downstream information processing biases that characterise elevated anxiety vulnerability will be discussed.

**Keyword:** anxiety, valence sensitivity, encoding bias

**Symposium Presentation 5, Pleiades Room**  
**23<sup>rd</sup> October 2014, 13:30 – 14:30**

*Innovations in the field of internet-delivered cognitive behavioural therapy*

L. Johnston<sup>1</sup>, M. Gandy<sup>1</sup>, V.J. Fogliati, MD.  
Terides<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

#### Overarching Abstract:

**Research Aims/Questions:** Health services are increasingly offering internet-delivered cognitive-behavioural therapy (iCBT) treatments due to their potential in overcoming many common barriers to treatment such as cost, stigma and accessibility. Meta-analyses of existing studies indicate that these treatments are effective for the broader adult population with anxiety and depression, are acceptable to consumers, and result in similar outcomes to face-to-face delivered treatment. Questions remain, however, about the suitability of these treatments for younger adults (aged 18-24), older adults (aged 60+), and for individuals with complex health difficulties, such as chronic pain. Additionally, there is a paucity of psychological models to account for how and why iCBT is effective, making it difficult to inform the provisions of these treatments.

**Methodology:** Data from clinical trials examining the efficacy, acceptability and feasibility of iCBT protocols developed for young adults, older adults and individuals with chronic pain will be presented. Additionally, the development of a questionnaire to measure mechanisms of change for iCBT will be outlined.

**Conclusion:** The field of internet delivered treatments is proliferating. Importantly, the field of iCBT is beginning to take steps beyond questions as to whether or not iCBT is effective, and ask substantial questions about for whom iCBT is effective, and why treatment 'works'. Our innovative research studies examined the delivery of iCBT for populations that have been traditionally under-represented (younger adults, older adults and chronic pain) with encouraging results. Moreover, there is encouraging preliminary

evidence suggesting that skills practice may mediate treatment outcomes.

**Keywords:** Internet, cognitive behavioural therapy

## PAPER 1

### *Internet-delivered cognitive behavioural therapy for young adults aged 18-24*

L. Johnston<sup>1</sup>, BF. Dear<sup>1</sup>, M. Gandy<sup>1</sup>, VJ. Fogliati<sup>1</sup>, R. Kayrouz<sup>1</sup>, J. Sheehan<sup>1</sup>, RM. Rapee<sup>1</sup>, N. Titov<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

**Research Aims/Questions:** The highest prevalence of mental health problems is amongst people aged 18-24, with anxiety disorders and depression the most common disorders in this age group. To date, however, no internet-delivered treatments have been developed specifically for young adults experiencing depression and anxiety. The present research aims to examine the efficacy and acceptability of internet-delivered treatment for young adults aged 18 to 24 with symptoms of depression and anxiety.

**Methodology:** Data from one open trial and one RCT will be presented, to explore the efficacy, acceptability and feasibility of clinician- and self-guided models of transdiagnostic internet-delivered cognitive behavioural therapy (iCBT) for young adults. Both clinician and self-guided iCBT models employed the *Mood Mechanic Course*, which is comprises 4 lessons delivered over 5 weeks, with weekly email reminders. Treatment efficacy will be measured by self-report measures of depression, anxiety, disability, and psychological distress. Acceptability will be measured by Course completion, and participant satisfaction ratings. Feasibility will be measured by demands on service-provider resources to offer treatment.

**Conclusion:** Data from both studies indicate that treatment significantly reduces depression and anxiety symptom severity, disability and psychological distress at post-treatment, and are sustained in the longer-term (Cohen's  $d \geq 1.08$ ). Both studies provide encouraging evidence for the efficacy of iCBT for young adults and contribute to an emerging evidence base indicating this approach has considerable potential in improving access to effective treatment. Implications for research and clinical practice will be discussed.

**Keywords:** Young adults, internet, depression, anxiety, transdiagnostic

## PAPER 2

### *The use of Basic Short Message Service (SMS) prompts to facilitate skills practice in iCBT for chronic pain: a feasibility study*

BF. Dear<sup>1</sup>, M. Gandy<sup>1</sup>, MD. Terides<sup>1</sup>, L. Johnston<sup>1</sup>, VJ. Fogliati<sup>1</sup>, K. Nicholson Perry<sup>2</sup>, C. Newall<sup>1</sup>, N Titov<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

<sup>2</sup>Australian College of Applied Psychology, Australia

**Research Aims/Questions:** Patients face numerous challenges when learning and adopting the self-management skills taught within pain self-management programs. The present study reports the acceptability and feasibility of supplementing an internet-delivered cognitive behavioural therapy (iCBT) course for chronic pain with brief, non-interactive, generic and automated short-message service (SMS) messages to prompt the practice of self-management skills.

**Methodology:** Participants were provided with access to the Pain Course, which comprises 5 online lessons, detailed case stories, additional written resources and brief weekly contact with a clinician. Senior clinicians created 15 SMS prompts and participants were automatically sent 1 random SMS prompt each business day, which encouraged self-management skills use.

**Conclusion:** All participants provided data at each time point. Nine of the 10 (90%) participants reported the SMS prompts were very helpful or helpful, and that they would recommend them. Nine of the 10 (90%) also requested the SMS prompts to continue over the 3-month follow-up period. Consistent with previous research, significant improvements were observed on standardised measures of disability ( $d = 1.25$ ), anxiety ( $d = 1.09$ ), depression ( $d = 0.96$ ) and average pain ( $d = 0.82$ ) from pre-treatment to post-treatment and follow-up. Relatively little clinician time was required for managing the SMS prompts. These results suggest that brief, generic, non-interactive and automated SMS prompts are an acceptable and feasible means of prompting skills use in self-management programs for chronic pain. Further larger scale research is needed to

systematically evaluate the potential of SMS prompts as a means to increase skills practice and facilitate treatment outcomes.

**Keywords:** Internet, online, Cognitive behaviour therapy, CBT, chronic pain, anxiety, depression, Short Message Service, SMS

### PAPER 3

#### *Guided and self-guided Internet-delivered cognitive behavioural therapy for older adults*

V.J. Fogliati<sup>1</sup>, BF. Dear<sup>1</sup>, N. Titov<sup>1</sup>, JB. Zou, A. Shehzad, CN. Lorian, L. Johnston<sup>1</sup>, J. Sheehan, LG. Staples<sup>1</sup>, M. Gandy<sup>1</sup>, B. Klein<sup>2</sup>, MD. Terides<sup>1</sup>, R. Kayrouz<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

<sup>2</sup>University of Ballarat, Australia

**Research Aims/Questions:** Anxiety and depression are common and significant health problems among older adults. Despite the availability of effective psychological treatments, few older adults receive access to such treatment. Internet-delivered treatments can potentially increase older adults' access to evidence-based treatments, by overcoming treatment barriers such as cost and reduced mobility. The aim of the present research was to examine the efficacy of internet-delivered treatment for the treatment of anxiety and depression in older adults.

**Methodology:** Data from two RCTs will be presented. These RCTs examined the efficacy and long-term outcomes of clinician- and self-guided forms of internet-delivered cognitive behavioural therapy (iCBT), for the treatment of depression and anxiety in adults aged 60 and above. Both clinician- and self-guided iCBT protocols used the *Wellbeing Plus Course*, which consists of 5 lessons delivered over 8 weeks. Treatment efficacy was measured by self-report measures of depression and anxiety.

**Conclusion:** Both studies demonstrated that treatment significantly reduced symptoms of depression and anxiety (Cohen's  $d > 1.7$ ), and were sustained at 3-month and 12-month follow-up. This research provides evidence for the efficacy of iCBT for older adults, highlighting the potential for iCBT to improve older adults' access to effective treatment. Clinical and research implications of these findings will be discussed.

**Keywords:** Older adults, iCBT, depression, anxiety

### PAPER 4

#### *Skills practice as a mechanism of change in internet-delivered cognitive behavioural therapy*

MD. Terides<sup>1</sup>, N. Titov<sup>1</sup>, B. F. Dear<sup>1</sup>

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**Research Aims/Questions:** There is much evidence suggesting that internet-delivered cognitive-behavioural therapy (iCBT) works for treating disorders such as depression and anxiety, but we do not have a conclusive model of how or why it works. The use of homework and skills tasks (such as cognitive restructuring and behavioural activation) is a central component of CBT therapies and is postulated to be an important mechanism of change. However, research into this area is still in its infancy and the conclusions that can be made about the role of skills practice, based on the available measures of CBT skills, are limited. The aim of this research was to develop a new measure that addresses the limitations of current measures in order to better understand the role that skills practice plays in internet-delivered therapy.

**Methodology:** A community sample (N=661) completed an online questionnaire comprised of 41 items relating to cognitive restructuring and behavioural activation behaviours. Factor analyses were used to explore then confirm the factor structure to develop a questionnaire, which was subsequently used in an open trial of iCBT to investigate its relationship with depression and anxiety outcomes.

**Conclusion:** Results suggested an 8-factor model representing various aspects of cognitive restructuring and behavioural activation resulting in a 24-item questionnaire demonstrating acceptable model fit indices. Skills practice behaviours were found to mediate symptom reduction in iCBT for anxiety and depression.

**Keywords:** iCBT, mechanisms, skills practice

**Symposium Presentation 6, Sirius Room**  
**23<sup>rd</sup> October 2014, 14:30 – 15:30**

*Parents' help-seeking for and stigma of children with emotional and behavioural problems*

J. L. Ohan<sup>1</sup>, R. J. Seward<sup>1</sup>, K. Eaton<sup>1</sup>, H. M. Stallman<sup>2</sup>, J. Badcock<sup>1</sup>, D. M. Bayliss<sup>1</sup>, M.R. Sanders<sup>3</sup>

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**Overarching Abstract:**

**Research Aims/Questions:** Emotional and behavioural problems in children are relatively common. Although we have a variety of therapies to effectively treat these problems, only a small fraction of parents are likely to seek professional help for their child. Stigma is thought to play an important role in discouraging parents from approaching professional services. The proposed presentations will focus on factors that influence parents' help-seeking, with a focus on the role of stigma.

**Methodology:** Two studies are described, both employing an online methodology. The first two presentations describe the results of a qualitative investigation into factors that deter parents from seeking medical (Presentation 1) and psychological (Presentation 2) care. The ensuing two studies describe a study that used a quantitative methodology to examine stigma towards empirically-supported treatments for children (Presentation 3) and its possible relationship to help-seeking (Presentation 4).

**Conclusion:** Parents gave different reasons for being deterred from seeking care from different helping professionals (e.g., psychologist vs school psychologist). One commonality however, was that stigma was often the most frequent reason for avoiding care. Confirming parents' concerns in the first study, parents in the second study highly stigmatized children who were engaged in empirically-supported treatments, especially medication, and these stigmas were related to help-seeking. In sum, increasing parents' engagement in treatment will need to focus on addressing the particular concerns towards each

type of treatment and professional, rather than 'professional services' in general. Having said this, the special role of stigma is clear across treatment and provider types.

**Keywords:** Child and youth issues, treatment, mental health, early intervention

**PAPER 1**

*Parents' attitudes towards seeking mental health care for children from medical professionals*

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**Research Aims/Questions:** When a child is experiencing emotional or behavioural problems (EBP), parents must make decisions about how best to help their child. Media and the lay public often portray parents as being quick to seek medical help, seeing medication as an easy way to solve a difficult problem. We wanted to find out what concerns parents have when seeking help from a medical practitioner for a child's EBP.

**Methodology:** One hundred parents of a child with a current EBP responded to an open-ended question about what would deter them from consulting their general practitioner (GP) or a psychiatrist. We coded the first 50 parents' concerns into the themes: doubts as to competence, not wanting medication, stigma, lack of trust, cost, perception of no help needed, and no issue approaching services.

**Conclusion:** Parents had different concerns about approaching GPs versus psychiatrists. Although more parents had no issue about approaching GPs (22%) than a psychiatrist (0%), more parents doubted the competence of GPs (20%) than psychiatrists (12%). Contrary to how parents are often portrayed in the media, parents expressed that their desire to *not* put their child on medication would stop them from approaching their GP (14%) or a psychiatrist (38%) (e.g., "medication isn't right. It just covers it up.") In sum, our results suggest that past research examining 'barriers to professional services' in general may be too vague

to capture the particular issues that need to be addressed in order to increase parents' help-seeking from the different helping professionals.

**Keywords:** Child and youth issues, treatment, mental health, early intervention

## PAPER 2

### *Parents' attitudes towards seeking psychological care for children with mental health concerns*

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**Research Aims/Questions:** Mental health problems are prevalent among children. Although psychologists can deliver effective treatments, only about one quarter of parents who have a child with emotional or behavioural problems will seek professional treatment—only a fraction of which will be from psychologists. It is crucial to understand what factors influence accessing psychological services. Although past research has explored barriers for children accessing 'professional services' in general, the current study aimed to explore barriers that parents experience in seeking help from a community psychologist or school psychologist.

**Methodology:** We asked 100 parents with a child who has a current emotional or behavioural problem an open-ended question about what would deter them from accessing a community psychologist or school-based psychologist. We coded their responses into the following themes: doubts as to competence, no resources available, stigma, lack of trust, cost, lack of a trustworthy referral, perception of no help needed, and no issue approaching services.

**Conclusion:** Parents held similar types of concerns about accessing community and school psychologists, although these differed in frequency. Most frequent concerns pertained to

stigma (29.4% vs 39.6% for community vs school psychologist) and doubts as to competence (21.8% vs 18.6% for community vs school psychologist). Very few parents reported no concerns (1-2%). These results are relevant to psychologists working with children and parents, and will be discussed alongside suggestions for addressing parents' concerns and increasing engagement, as well as broader international policy issues (e.g., the push to place mental health services in schools).

**Keywords:** Child and youth issues, treatment, mental health, early intervention, schools/educational settings

## PAPER 3

### *Are children receiving empirically-supported treatments stigmatised?*

K. Eaton<sup>1</sup>, H. M. Stallman<sup>2</sup>, J. Badcock<sup>1</sup>, M. R. Sanders<sup>3</sup>, & J. L. Ohan<sup>4</sup>

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**Research Aims/Questions:** Children with mental health problems are stigmatised as being dangerous and unpredictable. Does this stigma persist even when a child is engaged in therapy? Is one type of therapy seen as less stigmatizing than another? The aim of this study was to investigate stigmas towards children with emotional and behavioural problems who are engaged in empirically supported therapies (psychotherapy and medication).

**Methodology:** Parents ( $n = 132$ ) were asked to complete an online survey to assess their personal stigma (i.e., stigma that they themselves hold), as well as perceived stigma (i.e., the stigma that they perceive other parents around them hold). To assess stigma, we included negative beliefs about children with emotional or behavioural problems who were engaged in empirically-supported treatment (medication and psychotherapy separately).

**Conclusion:** Results indicated that parents held more negative stereotypes towards children who were taking medication than engaged in psychotherapy; this was true for both personal stereotypes ( $t[131] = 5.52, p < .01$ ) and perceived

stereotypes ( $t[131] = 2.88, p = .005$ ). For example, 29% of parents agreed or strongly agreed that children engaged in medication would be negatively labelled, whereas 20.7% of parents felt this was the case for psychotherapy. Children with emotional and behavioural problems are stigmatised even when they are actively engaged in empirically-supported treatments, particularly when taking medication.

**Keywords:** Child and youth issues, treatment, mental health, early intervention

#### PAPER 4

*Does stigma relate to lower help-seeking for children's emotional and behavioural problems?*

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**Research Aims/Questions:** Only a small fraction of children with emotional or behavioural problems receive treatment. One possible reason is the stigma surrounding mental illness. For example, the US Surgeon General has called stigma the "most formidable obstacle" to mental health care access. Despite the global condemnations of stigma as a help-seeking barrier, empirical tests of this hypothesis in children are limited. We aim to examine the relationship between parents' stigmas about treatment (psychotherapy and medication) and help-seeking intentions.

**Methodology:** Parents ( $n = 132$ ) completed an online survey to assess their personal stigma (i.e., stigma that they themselves hold), as well as perceived stigma (i.e., the stigma that they perceive other parents around them hold) towards empirically-supported psychotherapy and medication for children's mental health problems. Results: Higher levels of personal, but not public, stigma towards empirically-supported psychotherapy and medication for children's behavioural or emotional problems was correlated with parents' decreased likelihood of help-seeking (psychotherapy:  $r(131) = -.21, p < .05$ ; medication:  $r(131) = -.30, p < .01$ ).

**Conclusion:** In sum, parents' beliefs about stigmas that others around them hold towards treatment do not influence their help-seeking. However, parents' own stigmatic thoughts about both psychotherapy and medication do relate to help-seeking. These findings are consistent with and add to a wealth of evidence that is available in adult mental health, and comment on policy about stigma and discrimination towards mental health and its key role in deterring children from getting effective treatment.

**Keywords:** Child and youth issues, treatment, mental health, early intervention

**Symposium Presentation 7, Pleiades Room**  
**23<sup>rd</sup> October 2014, 14:30 – 15:30**

*Innovation, efficiencies, and effectiveness in real world practice*

#### PAPER 1

*Imagery enhancements increase effectiveness of cognitive behaviour group therapy for social anxiety disorder: a benchmarking study*

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**Research Aims:** Emerging evidence suggests that imagery-based techniques may enhance the effectiveness of traditional verbal-linguistic cognitive techniques for emotional disorders. This study builds on an earlier pilot by reporting outcomes from a naturalistic open trial of an imagery-enhanced (IE) cognitive behaviour group therapy (CBT,  $N = 52$ ) protocol for social anxiety disorder (SAD), and comparing outcomes to historical controls (HCs) who completed a predominantly verbally-based protocol ( $N = 129$ ).

**Methodology:** Patients were consecutive referrals from mental health professionals to a community clinic specialising in anxiety and mood disorders. All patients met criteria for social anxiety disorder based on structured diagnostic interview. Mixed-Methods Repeated Measures ANOVAs and linear contrasts were used to compare trajectories of change across both groups (IE vs. HC). The

predictive utility of self-reported natural tendencies to use imagery and imagery ability were examined. Both treatments involved 12, two-hour group sessions plus a one-month follow-up.

**Results:** Consistent with earlier research, the IE program was highly acceptable to patients with high attendance and completion rates. Effect sizes were large and a larger proportion of patients in the IE group achieved reliable change. The IE group experienced more rapid changes in fear of negative evaluation and symptom measures compared to HCs. Better imagery ability was associated with better outcomes.

**Conclusions:** IE group outcomes compared favourably to published group and individual treatments for SAD which, together with less than three allocated hours of treatment per patient, suggests that group-based IE CBT may be an effective and efficient mode of treatment delivery.

**Keywords:** Imagery, cognitive behaviour therapy, social anxiety disorder

## PAPER 2

*Transdiagnostic metacognitive group therapy for repetitive negative thinking in emotional disorders: An open trial*

D. Erceg-Hurn<sup>1,2</sup>, P. McEvoy<sup>1,3</sup>, R. Anderson<sup>1,3</sup>, B. Campbell<sup>1</sup>, P. Nathan<sup>1,2</sup>

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**Research Aims:** Generalised anxiety disorder (GAD) is characterized by repetitive negative thinking (RNT). Metacognitive therapy (MCT) aims to reduce engagement in the *process* of RNT rather than challenging diagnosis-specific *content* and, as such, is a promising approach in real world clinics with highly comorbid and complex patient groups. The first aim of this open trial was to evaluate a brief group MCT protocol targeting RNT in patients with GAD. The second aim was to test a mediational model where changes in metacognitive beliefs were associated with fewer symptoms via changes in RNT.

**Methodology:** Patients (n=52) referred to a specialist community clinic with a diagnosis of GAD attended six, two-hour weekly group MCT

sessions plus a one-month follow up. Importantly, reflecting real world practice, patients were not required to have a primary diagnosis of GAD. Measures of metacognitive beliefs, worry, rumination, and symptoms were completed at the first, last, and follow-up sessions. Analyses were intent-to-treat.

**Results:** Dropout rates were low (11%) and very large effects were observed, particularly for negative metacognitive beliefs, RNT, and worry (Cohen's *d*'s > 2.0). Treatment gains increased between post-treatment and follow-up. Benchmarking comparisons demonstrated that outcomes were as good as those obtained using longer (up to 30 sessions) protocols. The mediational model demonstrated a large indirect effect of changes in negative (but not positive) metacognitive beliefs on changes in symptoms via RNT.

**Conclusions:** Brief metacognitive therapy is an acceptable and powerful treatment for RNT and symptoms amongst highly comorbid 'real world' patients with emotional disorders.

**Keywords:** repetitive negative thinking, metacognitive therapy, generalised anxiety disorder

## PAPER 3

*Therapeutic alliance in Enhanced Cognitive Behavioural Therapy for Bulimia Nervosa: Probably necessary but definitely insufficient*

B. Raykos<sup>1</sup>, P. McEvoy<sup>1,2</sup>, D. Erceg-Hurn<sup>1,3</sup>, S. Byrne<sup>1,3</sup>, A. Fursland<sup>1</sup>, P. Nathan<sup>1,3</sup>

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**Research Aims:** Manual-based treatments, such as Enhanced Cognitive Behaviour Therapy (CBT-E), are amongst the most effective treatments for bulimia nervosa (BN) currently available. Yet a prevailing view is that treatment outcome is related to individual therapist differences over and above therapeutic approach, and that manual-based treatment approaches are less caring, intuitive, authentic, and are even inappropriate for 'real world' clients. The aim of the current paper was to examine the relationship between therapeutic

alliance during CBT-E and treatment retention and outcomes.

**Methodology:** A large (N = 112) sample with bulimia nervosa (BN) or atypical BN were treated with CBT-E in a community mental health clinic. Alliance was assessed at three time points (the start, middle and end of treatment) and the relationship between alliance and treatment retention and outcome was explored.

**Results:** Therapeutic alliance was strong at all stages of CBT-E, and even improved in the early stages of treatment when behaviour change was initiated (weekly in-session weighing, establishing regular eating, and ceasing binge-eating and compensatory behaviours). The present study found no evidence that alliance was related to treatment retention or outcomes, or that symptom severity or problematic interpersonal styles interacted with alliance to influence outcomes. Alliance was also unrelated to baseline emotional or interpersonal difficulties.

**Conclusions:** This study found no evidence that alliance has clinical utility for the prediction of treatment retention or outcome in CBT-E for BN, even for individuals with severe symptoms or problematic interpersonal styles. Early symptom change was the best predictor of outcome in CBT-E.

**Keywords:** bulimia nervosa, enhanced cognitive behavior therapy, therapeutic alliance

#### PAPER 4

*An Australian trial of enhanced cognitive behaviour therapy for adolescents with eating disorders*

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We present data from an open trial of enhanced cognitive behavioural therapy (CBT-E) for adolescents with the full range of eating disorders. There is robust evidence of the effectiveness of CBT-E as a treatment for adults with eating disorders. CBT-E has been adapted for use with adolescents and there is emerging evidence for its effectiveness in this population, although the only outcome data available in this age group come from one study (N=51). Our trial aimed to add to

the evidence for the efficacy of CBT-E in adolescents with all eating disorders.

**Methodology:** A case series involving 50 patients, (16-18 years) referred to a public outpatient clinic in Perth. Almost 40% of these patients had a BMI < 17.5. Patients attended, on average, 28 individual CBT-E sessions, plus up to 4 family sessions, with a clinical psychologist. Treatment outcomes were compared with those for adults (> 18 years) attending the same service during the same time period.

**Results:** Of those who accepted treatment (n=47) 68% completed the full course. By the end of treatment, good outcome was achieved by 65% of those who completed treatment and 39% of the total sample. Compared to those > 18 years referred to this same service, adolescents were more likely to complete treatment and their outcome was similar. The results compare favourably to those reported in the only previous case series of CBT-E with adolescents.

**Conclusion:** There is encouraging evidence to support the use of CBT-E with adolescent patients.

**Keywords:** Eating disorders, enhanced cognitive behavior therapy, adolescents, treatment outcome

#### Symposium Presentation 8, Orion Room 24<sup>th</sup> October 2014, 10:30 – 11:15

*Child and adolescent obesity: The research which influences our practice*

J. Doust<sup>1</sup>, G. Minshall<sup>2</sup>, S. Byrne<sup>3</sup>

<sup>1</sup>Princess Margaret Hospital, Perth, Australia

<sup>2</sup>The Children's Hospital at Westmead, Sydney, Australia

<sup>3</sup>University of Western Australia, Perth, Australia

#### Overarching Abstract:

**Research Aims/Questions:** This symposium will synthesise current aspects of obesity research and how it can be used in clinical practice. The focus is on research topics which are particularly salient in clinical practice and have potential for cognitive-behavioral intervention – for example mental health consequences of obesity, the role of eating disorders and the neuro-cognitive profile of the obese clientele.

**Methodology:** Each speaker will take an area of research, integrate the existing scientific literature, describe their own research and provide guidelines for clinical practice.

**Keywords:** Health, treatment, mental health, child and youth issues

## PAPER 1

*Obese adolescents: Mental health profile and interventions*

Justine Doust<sup>1</sup>

<sup>1</sup>Princess Margaret Hospital, Perth, Australia

**Research Aims/Questions:** The prevalence of childhood obesity has doubled to tripled in recent decades in Australia and the mental health consequences are often not understood. What is the mental health profile of this clientele likely to be? How do they compare to a normal weight population? Adolescent obesity is known to be associated with significant psychological morbidity, with obese adolescents experiencing more anxiety, depression and social isolation than their healthy weight peers. How can this information be incorporated into effective weight loss treatments? Do specific psychological characteristics predict drop out or treatment success. Dr Doust will describe her own research from a tertiary obesity treatment centre and synthesise the extant literature on the topic.

**Keywords:** Health, Treatment, Mental Health, Child and Youth Issues

## PAPER 2

*Are our obese clients neurocognitively different?*

Gerri Minshall<sup>1</sup>

<sup>1</sup>Weight Management Service, the Children's Hospital at Westmead

**Research Aims/Questions:** Can the research into the executive functions help explain why weight loss is so hard? There's a recent but well established body of literature that obesity in children, adolescents and adults is associated with deficits in executive functioning. So how are the brains of obese people different and how relevant is this difference in treatment? The research

linking obesity to problems with executive functioning is synthesized and recommendations on how to tailor your CBT treatments to this population are detailed.

**Keywords:** Health, Treatment, Mental Health, Child and Youth Issues

## PAPER 3

*Overlapping Childhood Obesity*

Sue Byrne<sup>1,2</sup>

<sup>1</sup>University of Western Australia

<sup>2</sup>Centre for Clinical Interventions

The incidence of eating disorders has increased significantly in Australia in the last 20 years. And yet so has obesity. Are obese children and adolescents more likely to have an eating disorder? The overlap between obesity, eating disorders and body image can only be disentangled by researcher/clinicians like Sue Byrne. Known for her work in eating disorders, Sue is also widely published on many aspects of childhood obesity and her work spans issues as diverse as parental concerns, psycho-social correlates of childhood obesity and overlap with eating disorders. She will discuss her findings and describe the implications for preventative programs and treatment.

**Keywords:** Health, Treatment, Mental Health, Child and Youth Issues

**Symposium Presentation 9, Sirius Room  
24<sup>th</sup> October 2014, 11:15 – 12:15**

*Enhancing the effectiveness of group CBT and patient care: Considerations from planning to outcomes evaluation*

A.C. Page<sup>1,2</sup>, A.A.H. Sng<sup>1</sup>, S. Kashyap<sup>1</sup>, N. Flood<sup>1</sup>, E.A. Newnham<sup>1</sup>, G.R. Hooke<sup>2</sup>

School of Psychology, The University of Western Australia, Perth, Australia

<sup>2</sup>Perth Clinic, Perth, Australia

## Overarching Abstract:

**Research Aims/Questions:** While psychotherapy has been shown to be effective, a substantial proportion of clients show no reliable change and

between 5 to 10% of clients are likely to deteriorate over the course of therapy (Lambert & Ogles, 2004). The implementation of monitoring systems that track client's progress session-by-session, and the provision of feedback to clients and therapists in real time, are promising means of identifying preventing treatment failure. The papers in this symposium aim to describe the rationale and application of such systems within the context of cognitive-behaviour group therapy.

**Methodology:** The papers will present a variety of methods for testing the effectiveness of monitoring and feedback applications for clients receiving group CBT. Studies reported include a survey of trainee therapists and clinical data collected from a naturalistic treatment setting. Techniques such as latent class growth analysis aim to demonstrate how we can begin to observe specific subgroups of clients and their patterns of change over the course of therapy.

**Conclusion:** The implementation of monitoring and feedback within psychotherapy is an important example of how practice-based evidence complements evidence-based practice. The provision of progress feedback may enable clients and therapists to communicate openly about progress and the therapeutic process. Monitoring client progress is also valuable in helping therapists to identify clients who are at risk of treatment failure, and can even provide specific information to assist therapists in assessing and managing risk.

**Keywords:** CBT, groups, monitoring, feedback, risk, deterioration, evidence-based practice, practice-based evidence.

## PAPER 1

*When CBT fails: Using practice-based evidence to complement evidence-based practice*

A.C. Page<sup>1,2</sup>

<sup>1</sup>School of Psychology, The University of Western Australia, Perth, Australia

<sup>2</sup>Perth Clinic, Perth, Australia

**Research Aims/Questions:** In 1985 Robin Winkler wrote about CBT of the day that "(t)he major threats ... stem from its very success in professional practice. There is a continuing demand from the profession to learn techniques

without necessarily understanding or developing their theoretical and empirical foundations. The danger of such a demand is that behaviour modification becomes simply a technology defined by its procedures." The great steps forward in manualisation and online presentation of CBT has done much to standardize and disseminate treatments, but it risks losing the responsiveness by the clinician to the nuances of clients that was keep to early behavior modification. Such responsiveness if not always needed but when it is, how can it be achieved? The present talk will outline how the balance can be struck between standardized CBT and responsiveness to clients who fail to progress. It will do so by introducing a broad conceptual framework of practice and describing the practical means of delivering such feedback by individual clinicians and the benefits that accrue.

**Keywords:** Feedback, feedback presentation, practice-based evidence, evidence-based practice

## PAPER 2

*Using progress monitoring data as feedback in therapy: Exploring therapists' perceptions of feedback presentation style*

A.A.H. Sng<sup>1</sup>, E.A. Newnham<sup>1</sup>, A.C. Page<sup>1,2</sup>

<sup>1</sup>School of Psychology, The University of Western Australia, Perth, Australia

<sup>2</sup>Perth Clinic, Perth, Australia

**Research Aims/Questions:** Providing progress feedback to clients and therapists enhances therapy outcomes for clients who are not doing well (Lambert et al., 2001; Newnham, Hooke, & Page, 2012). Recent studies show that therapists use the feedback to support discussions with the client about progress and the therapeutic process (Lutz, Böhnke, Köck, & Bittermann, 2011). Accordingly, the way in which feedback is visually presented may highlight different aspects of the client's progress or therapeutic experience, and subsequently influence the content of ensuing feedback discussions. The aim of the present study was to investigate therapists' perceptions of the utility and impact of different styles of feedback presentation.

**Methodology:** Trainee therapists ( $n = 44$ ) completed a survey of three different styles of feedback graphs, depicting the progress of a

hypothetical client who was either doing well or not making expected progress. They were asked to rate how useful each feedback graph was for discussing different topics (e.g., discussing whether to terminate or extend therapy), and the impact that presenting the graph might have on the client's self-esteem.

**Conclusion:** Trainee therapists rated the feedback graphs as equally useful for discussion, regardless of the client's progress status. However, the therapists perceived that feedback conveying that the client is not making expected progress may diminish the client's self-esteem. Preliminary practical suggestions for the graphical presentation of progress feedback will be discussed, with a view of facilitating useful discussions between therapists and their clients.

**Keywords:** Feedback, feedback presentation, therapists' perceptions, therapist variables.

### PAPER 3

*Identifying the risk of self-harm through symptom monitoring in an inpatient psychiatric population*

S. Kashyap<sup>1</sup>, G.R. Hooke<sup>2</sup>, A.C. Page<sup>1,2</sup>

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<sup>2</sup>Perth Clinic, Perth, Australia

**Research Aims/Questions:** Despite being aware of risk factors for suicidal behavior such as suicidal ideation and self-harm; it is still difficult to predict who will display these behaviours and when. Continuously monitoring any change in symptoms during treatment may reveal groups of patients who improve at different rates. One or more groups may be at a higher risk of exhibiting self-injurious behaviours. Factors such as perceived burdensomeness, thwarted belongingness and acquired capability proposed by Joiner's Interpersonal Theory of Suicide may further improve the precision with which people at high risks of self-injurious behavior can be identified.

**Methodology:** Latent Growth Curve Analysis was used to check for longitudinal patterns of change in symptoms such as suicidal ideation between groups of inpatients (N=525) at a psychiatric hospital. Group relationships with rates of self-harm were then measured.

**Conclusion:** Distinct groups of inpatients were found, and each group was associated with significantly different levels of self-injurious behavior. Continuous monitoring of inpatients therefore provides a practical approach for risk management. If it is known which group any patient belongs to, their risk of self-harm can be estimated and procedures can be put in place to prevent any adverse events.

**Keywords:** Risk, self-harm, symptom monitoring.

### PAPER 4

*Identifying different groups of patients at risk of treatment failure in a cognitive behavioural therapy program utilising progress feedback*

N. Flood<sup>1</sup>, G.R. Hooke<sup>2</sup>, A.C. Page<sup>1,2</sup>

<sup>1</sup>School of Psychology, The University of Western Australia, Perth, Australia

<sup>2</sup>Perth Clinic, Perth, Australia

**Research Aims/Questions:** Cognitive Behavioural Therapy (CBT) is an evidence-based treatment that is not effective in treating all patients. Research suggests that providing progress feedback to patients improves outcomes; especially for patients who are not on track (NOT), relative to an expected trajectory of improvement (Newnham et al., 2010). Previously, NOT patients have been treated as a homogenous group. However, research suggests that NOT patients exhibit heterogeneous outcome trajectories. Therefore, the aim of this research was to explore differences in outcomes between different groups of NOT patients.

**Methodology:** Participants were patients in a private psychiatric clinic who took part in a 10-day group CBT program. Four groups of patients were analysed: patients who were: always on track; veered on track; veered off track; and always off track. Analysis of Variance was used to contrast the four groups in both their symptom and wellbeing scores across the 10 days.

**Conclusion:** It was found that patients who veered on track ended treatment with similar symptom scores to patients who veered off track. This may be a function of the nature of feedback that is given to the patients in the veered on track vs. veered off track groups. Based on staff feedback, therapists might pay more attention to

patients who have veered off track at Day 5 (when feedback is given). Therefore, the patients who veered on track may not be receiving the skills they need to maintain their positive improvement.

**Keywords:** Symptom monitoring, feedback, treatment failure.

**Symposium Presentation 10, Pleiades Room**  
**24<sup>th</sup> October 2014, 11:15 – 12:15**

*The effects of parenting intervention on multiple child, parent and family outcomes*

J. Batch<sup>3</sup>, A. Filus<sup>1</sup>, A. Gelmini<sup>1</sup>, M. Guo<sup>1</sup>, J. Hodges<sup>1</sup>, A. Lohan<sup>1</sup>, T. Mazzucchelli<sup>1,2</sup>, A. Mitchell<sup>1</sup>, A. Morawska<sup>1</sup>, K. Sofronoff<sup>1</sup>

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**Overarching Abstract:**

**Research Aims/Questions:** Numerous evidence based parenting interventions exist, nevertheless many concerns remain and many population groups have to date received relatively little attention. There continues to be a pressing need to make evidence based parenting interventions more widely available. In addition, there is increasing emphasis on assessing a diverse range of outcomes for children, parents and families to ensure that interventions are most effective and efficient.

**Methodology:** The papers in this symposium will use the Triple P – Positive Parenting Program as an example in illustrating the diverse targets of parenting intervention. We will begin by providing a brief overview of Triple P. The first paper will focus on Stepping Stones Triple P, which is aimed at parents of children with a disability. The second paper will examine the effects of Group Triple P on children's academic behaviours. The third and fourth presentations will explore parenting needs in two different contexts and then summarise the application of the outcomes to the development and implementation of a targeted parenting intervention. The third paper will focus on the needs of parents of children with Type 1 diabetes, while the fourth will explore parental needs in relation to infant obesity.

**Conclusion:** The symposium will illustrate how a variety of intervention targets, across different groups can be addressed by a parenting intervention, utilizing different delivery formats. The interventions are all assessed in the context of a population approach to parent education and support, with the aim of assisting the greatest number of parents and children.

**Keywords:** Behavioural problems, parenting, early intervention, intervention targets.

**PAPER 1**

*Stepping Stones Triple P Research Project: An overview and update*

T. Mazzucchelli<sup>1,2</sup>, J. Hodges<sup>2</sup>

<sup>1</sup>Curtin University, Perth, Australia

<sup>2</sup>The University of Queensland, Brisbane, Australia

**Research Aims/Questions:** The overarching aim of the present project is to evaluate the effectiveness of the system of evidence based parenting programs, Stepping Stones Triple P, in reducing the prevalence of emotional and behavioural problems in children with disabilities at a population level.

**Methodology:** A trial involving the sequential roll-out of Stepping Stones Triple P across Queensland, Victoria, and New South Wales is being employed. Prior to this roll-out, all parents or caregivers of children with a disability were invited to complete a survey on the types of emotional, social and behavioural difficulties experienced by their children and their awareness of available parenting services and preferences for accessing parenting support. This information was used to determine base-rate levels of difficulties experienced by children with disabilities and inform the large-scale roll-out of parenting interventions. Subsequently, professionals were given the opportunity to be trained in the Stepping Stones Triple P programs. Following a 2 year-roll-out of Stepping Stones Triple P, all parents or caregivers will again be invited to complete a survey to assess for population level change in rates of emotional and behavioural problems.

**Conclusion:** Data will be presented from a large survey of parents and caregivers of children with disabilities in Queensland. Progress on the trial will be reported along with future steps and lessons that have been learned.

**Keywords:** Disability, evaluation, parenting program, population level intervention, Triple P

## PAPER 2

*The effects of Group Triple P on parenting in academic setting and children's academic outcomes in a Chinese context*

M. Guo<sup>1</sup>, A. Morawska<sup>1</sup>

<sup>1</sup>The University of Queensland, Brisbane, Australia

**Research Aims/Questions:** The study aimed to evaluate the effects of Triple P-Positive Parenting Program on parenting in the academic setting and children's academic outcomes in a Chinese context.

**Methodology:** Eighty six Chinese parents and their children participated in this study in Shanghai, and parents were randomly assigned to either an intervention or waitlist control condition. Parents in the intervention condition received Group Triple P after all parents and their children completed pre-assessment questionnaires. Parents and their children in the intervention condition also completed follow-up assessment six months after the intervention. The intervention was the regular Group Triple P intervention but examples were tailored appropriately to target children's behaviours and problems in the academic context.

**Conclusion:** The results of parent measures showed that Triple P produced significant improvement in dysfunctional parenting in the academic setting and children's academic problem behaviours after intervention, and parents' satisfaction with children's academic achievement also increased after intervention. All these effects were maintained at 6-month follow-up. However, parents' perception of children's academic achievement did not change significantly after intervention or at 6-month follow-up. For child-report measures, children's academic intrinsic motivation and external regulation changed significantly after intervention, but the effects were not maintained at follow-up. There were no significant changes in children's academic identified regulation, introjected regulation and learning stress after intervention or at 6-month follow-up. The results are promising because they show that parenting intervention can improve

parenting and children's problem behaviours in academic context.

**Keywords:** Parenting intervention, academic outcomes, Chinese context

## PAPER 3

*Efficacy of Triple P for parents of young children with type 1 diabetes*

A. Lohan<sup>1</sup>, A. Morawska<sup>1</sup>, A. Mitchell<sup>1</sup>, K. Sofronoff<sup>1</sup>, J. Batch<sup>2</sup>, A. Filus<sup>1</sup>

<sup>1</sup>University of Queensland, Brisbane, Australia,

<sup>2</sup>Royal Children's Hospital, Brisbane, Australia

**Research Aims/Questions:** Type 1 diabetes is a serious, life-long disease and diabetes management involves a strict adherence to a complex regimen. Parent-child interactions and parenting have been identified as crucial points of intervention, yet there is a paucity of parenting intervention literature with young children. This presentation will summarise findings from a survey examining parental needs and challenges associated with their child's diabetes management, and their preferences for accessing parenting program. This will be followed by an overview of a current randomized controlled trial of a brief, group-based parenting intervention for parents of young children (2-10 years) with type 1 diabetes.

**Methodology:** Parents of children with type 1 diabetes aged 2-10 years throughout Australia participated in an online survey. A randomized controlled trial evaluating the efficacy of Triple P utilizing a waitlist control design is currently underway.

**Conclusion:** Parents reported low levels of child behavior problems, and high self-efficacy in diabetes management. Despite that, 51% parents have indicated that they are concerned about diabetes management, and 57% indicated that they would like more assistance. Parents also indicated that parenting interventions would at least be somewhat helpful in increasing their skills and confidence in managing their child's diabetes. All intervention elements were rated between somewhat to extremely helpful. It is expected that participating in a group based parenting intervention has the potential to reduce ineffective and coercive parenting practices, and lead to

improved child behavioural and emotional adjustment, better family quality of life, and healthier children.

**Keywords:** Type 1 diabetes, Triple P, parenting, group intervention.

#### PAPER 4

*Infant obesity prevention survey: Informing the development of a parenting intervention to promote healthy habits from the start*

A. Gelmini<sup>1</sup>, A. Morawska<sup>2</sup>

<sup>1,2</sup>Parenting and Family Support Centre, The University of Queensland, Brisbane, Australia

**Research Aims/Questions:** Studies have demonstrated that children in the first two years of life can become obese and that overweight in infancy strongly predicts overweight in pre-school years and onwards. However, investigation of obesity prevention within this early age is still an emerging research area. The present study addressed gaps in previous literature by focusing primarily on psychological factors related to parental feeding practices. As part of a larger research project, this survey contributed to the development of a Triple P preventive parenting program targeting parents with infants at risk for childhood obesity. The efficacy of this intervention is currently being trialed.

**Methodology:** The survey, an online self-reported questionnaire, was completed by 232 Australian parents of infants aged 0 to 27 months. Data were utilised to inform aspects of a brief Triple P intervention, as well as ways this program would be promoted in the population. Unique challenges in recruitment for the randomised control trial currently testing the efficacy of the intervention will be discussed.

**Conclusion:** This research is important because it is one of the few studies in childhood obesity prevention research that focuses on parents with children under the age of two. The survey results provide detailed data about parents' perceptions, beliefs and behaviours related to feeding and other parenting practices and also parents' needs for psychological support.

**Keywords:** Parenting intervention, childhood obesity, early prevention, health, infancy.

#### Symposium Presentation 11, Orion Room 24<sup>th</sup> October 2014, 11:15 – 12:15

*Anxiety: Maintenance factors and interventions*

H. Liebregts<sup>1</sup>, L. White<sup>2</sup>, C. Essau<sup>3</sup>, J. Chen<sup>4</sup>, T. Shechner<sup>2</sup>, E. Leibenluft<sup>2</sup>, Y. Bar-Haim<sup>2</sup>, D.S. Pine<sup>2</sup>, N. A. Fox<sup>2</sup>, C. MacLeod<sup>1</sup>, K. Lester<sup>5</sup>, L. Notebaert<sup>1</sup>, B. Grafton<sup>1</sup>, O. Mocan<sup>6</sup>, L. Visu-Petra<sup>6</sup>

<sup>1</sup>University of Western Australia, Perth, Australia

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#### Overarching Abstract:

**Research Aims/Questions:** Anxiety symptoms in children and adults have been associated with cognitive biases. Cognitive theories suggest that such biases in information processing play a crucial role in the development and maintenance of anxiety. It is increasingly recognised that the manifestation of these attentional biases in early development is complex, and is associated with attentional control development, emotional development and anxiety disorder type.

**Methodology:** This symposium will explore evidence concerning how anxiety-linked attentional biases interact with behavioural inhibition and attentional control deficiencies. Two new treatment protocols that address cognitive and behavioural aspects of anxiety will also be presented, concerning children and adults respectively.

**Conclusion:** Heather Liebregts will demonstrate the nature of the relationship between anxiety and attentional bias to threat in children with high and low levels attentional control abilities. Cecilia Essau will provide evidence for the effectiveness of a transdiagnostic prevention programme, Super Skills for Life (SSL), in children with anxiety problems. Finally, Junwen Chen will present research showing the effectiveness of combining audience feedback with video tape feedback and cognitive review to alleviate social anxiety.

**Keywords:** Anxiety, social anxiety, child anxiety, development, attention, attentional bias, cognitive

bias, attentional control, behavioural inhibition, emotion

## PAPER 1

*The role of attentional control abilities in the relationship between anxiety and attentional bias to threat*

H. Liebregts<sup>1</sup>, C. MacLeod<sup>1</sup>, K. Lester<sup>2</sup>, L. Notebaert<sup>3</sup>, B. Grafton<sup>1</sup>, O. Mocan<sup>4</sup>, L. Visu-Petra<sup>4</sup>

<sup>1</sup>University of Western Australia, Perth, Australia

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**Research Aims/Questions:** Research exploring cognitive components of anxiety has focused on either attentional biases for threat or deficiencies in attentional control abilities, both of which are characteristic of heightened anxiety vulnerability. Previous research has not, however, attempted to understand the nature of the relationship between these two anxiety-linked attentional anomalies. The current project attempts to investigate the relationship between anxiety-linked attentional bias and anxiety-linked attentional control deficiencies by simultaneously measuring these two anxiety-linked attentional processes.

**Methodology:** An Attentional Bias and Attentional Control Assessment Task (ABACAT) was developed as a simultaneous measure of anxiety-linked attentional bias and anxiety-linked attentional control to be used in children and adolescents. Anxiety-linked attentional bias and anxiety-linked attentional control deficiencies were assessed in children and adolescents aged 10-14 using the ABACAT, a task adapted from the attentional probe task and the antisaccade task that each measure anxiety-linked attentional bias and anxiety-linked attentional control deficiencies, respectively. Using the ABACAT, the two anxiety-linked attentional processes were measured on the same materials and with the same spatial and temporal configuration.

**Conclusion:** Results of this study are yet to be confirmed. The effectiveness of the ABACAT as a measure for differences in anxiety-linked attentional bias and anxiety-linked attentional control will be discussed.

**Keywords:** Anxiety, child anxiety, attention, attentional bias, cognitive bias, attentional control, development

## PAPER 2

*"Super Skills for Life": A transdiagnostic treatment protocol for children with internalizing problems*

C. Essau<sup>1</sup>

<sup>1</sup>University of Roehampton, London, UK

**Research Aims/Questions:** Cognitive behaviour therapy (CBT) is the treatment of choice for childhood anxiety, with 50 to 70% of children with an anxiety disorder responding positively to CBT. These moderate remission rates might be because almost all studies have been based on interventions that are designed for anxiety disorders despite the high comorbidity between anxiety and depression. The present study examined the effectiveness of a transdiagnostic prevention programme, Super Skills for Life (SSL), in children with anxiety problems. SSL is based on the principles of CBT, behavioural activation, social skills training, and uses video-feedback and cognitive preparation as part of the treatment.

**Methodology:** Sixty-one primary school children, aged 8 to 10 years, participated in this study. They were referred by their teachers as having significant anxiety problems. Children were video-recorded during a 2-minute speech task in sessions 1 and 8, during a social interaction task, and at a follow-up assessment. All the children completed measures of anxiety symptoms, social skills, and self-esteem before and after participating in the 8-week SSL and at the 6-months follow-up assessment.

**Conclusion:** Anxiety symptoms were significantly reduced at post-test and follow-up assessments. SSL also had a positive effect on hyperactivity, conduct, and peer problems although it took longer for these effects to occur. Behavioral indicators of anxiety during the 2-minute speech task decreased, indicating that the independent raters observed behavioral change in the children from pre-treatment to follow-up. This study provides preliminary empirical support for the effectiveness of SSL in children with anxiety problems.

**Keywords:** Anxiety, child anxiety, development

## PAPER 3

*The effect of combining audience feedback with videotape feedback and cognitive review on social anxiety*

J. Chen<sup>1</sup>

<sup>1</sup>The Flinders University of South Australia, Adelaide, Australia

**Research Aims/Questions:** Negative self-perception is a maintenance factor in social anxiety disorder (SAD) (Hofmann, 2007). Although video feedback (VF) is an effective method to modify biased self-perception of performance, some research has failed to demonstrate its effect on state anxiety (Rodebaugh, 2004). The present study aims to test whether combining VF and cognitive review (CR) with audience feedback (AF) can improve state anxiety.

**Methodology:** Fifty-one socially anxious students (mean age: 23.29 years, SD=8.20) were asked to deliver a 3-minute speech, following which they were allocated into 4 groups: AF with VF and CR (AFVFCR); VF and CR (VFCR); VF only; and no feedback. VF and CR procedures were based on Orr, et al. (2010). AF was provided after participants watched the video of their speech performance by pre-recorded 3 volunteers who gave feedback on participant's speech. Participants rated their anxiety after the 3-minute speech (T1), after feedback (T2) and after a second speech (T3).

**Conclusion:** ANOVAs showed a significant interaction between group and time ( $F(6, 94) = 2.49$ ,  $p=0.04$ ) on anxiety. Post hoc analyses indicated that AFVFCR showed significantly lower anxiety than VFCR and control groups after feedback and this effect was maintained at a second speech. There was no significant difference between AFVFCR and the VF only group. Other results will be available for the conference. Participants who received the addition of AF may improve their anxiety in a faster manner compared to those who did not receive it.

**Keywords:** Anxiety, social anxiety, cognitive bias

## Symposium Presentation 12, Sirius Room 24<sup>th</sup> October 2014, 14:00 – 15:00

*Suicide risk and resilience: Advances in assessment and innovation in experimental designs*

D. Harrison<sup>1</sup>, S. George<sup>1</sup>, K. Collins<sup>1</sup>, E. Hartley<sup>1</sup>

<sup>1</sup>University of Western Australia, Perth, Australia

### Overarching Abstract:

**Research Aims/Questions:** According to the Interpersonal Theory of Suicide (ITS), thwarted belongingness and perceived burdensomeness underlie suicidal desire, while acquired capability is essential for an individual to act on that desire. Evidence in support of this theory has been promising but limited by (a) not accounting for protective factors such as zest for life, (b) measures of acquired capability with poor psychometric properties, and (c) lack of experimental manipulations to test the causal role of the core components of the ITS. To address these gaps in the literature, this symposium reports on advances in assessment of suicide risk using both implicit and explicit measures, and novel experimental designs to test the causal predictions of the ITS.

**Methodology:** Presenter 1 reports on three studies using implicit measures of suicide risk in clinical and non-clinical samples including 6-month follow-ups of suicidal patients. Multiple-mediator analyses examine the meaning of implicit suicide risk. Presenter 2 reports on three studies using confirmatory factor analyses and structural equation modelling to test the validity of two new measures of suicide risk and resilience. Presenter 3 reports on two experiments using a novel task (Burdensomeness and Belongingness Suicide Analogue Task; BABSAT) manipulating core constructs to test causal predictions of the ITS and the moderating influence of resilience. Presenter 4 reports on one experiment using the BABSAT to test the influence of individual differences in neuroticism on task performance and suicide risk.

**Conclusion:** Results strongly support the ITS, but the theory requires refinement to better account for resilience.

**Keywords:** interpersonal theory of suicide, assessment, resilience, experimental analogue

## PAPER 1

### *Probing the Implicit Suicidal Mind: What does the Death/Suicide Implicit Association Test Actually Measure?*

D. Harrison<sup>1</sup>, W. Stritzke<sup>1</sup>, N. Fay<sup>1</sup>, M. Ellison<sup>1</sup>, J. Leong<sup>1</sup>, A. Hudaib<sup>2</sup>

<sup>1</sup>University of Western Australia, Western Australia, Australia

<sup>2</sup>Monash Medical Centre, Victoria, Australia

**Research Aims/Questions:** Assessment of implicit self-associations with death relative to life, using a death/suicide implicit association test (d/s-IAT), has shown promise in suicide risk prediction. The studies presented here aimed to further test the predictive utility of the d/s-IAT in clinical and non-clinical samples and to better understand what the implicit measure is actually measuring.

**Methodology:** In Study 1, undergraduates (N=408) completed the d/s-IAT and questionnaires assessing suicide risk and survival and coping beliefs. The d/s-IAT predicted suicide risk beyond the strongest traditional indicator of risk (prior suicide attempts) and this effect was mediated by survival and coping beliefs, suggesting the d/s-IAT measures the desire to live rather than a desire to die. Study 2 replicated these finding in patients (N=128) presenting to an emergency department with acute suicidality. Study 3 tested in undergraduates (N=100) a multiple-mediator model to determine if the d/s-IAT measures the dynamic competition between the desire to live and acquired capability for suicide to overcome this desire, as hypothesised by the interpersonal theory of suicide.

**Conclusion:** The association between the d/s-IAT and suicide risk was mediated through two competing pathways: acquired capability for suicide and the desire to live. The relative influence of each pathway depended on how proximal or distal the risk indicators were to suicide itself. Theories of suicide and risk management must consider the influence of the desire to persevere and (re)engage with life.

**Keywords:** Implicit association test, suicide risk, acquired capability for suicide, desire to live

## PAPER 2

### *Assessment of risk and resilience for suicide: Development and validation of the Acquired Capability with Rehearsal for Suicide Scale (ACWRSS) and the Zest for Life Scale (ZLS)*

S. George<sup>1</sup>, A. Page<sup>1</sup>, W. Stritzke<sup>1</sup>

<sup>1</sup>University of Western Australia, Perth, Australia

**Research Aims/Questions:** The interpersonal theory of suicide proposes that acquired capability (AC) facilitates the transformation of suicidal desire into suicidal behavior by overcoming the evolutionarily ingrained desire to live (Joiner, 2005). Evidence for the role of AC is mixed, which may be partly due to conceptual and psychometric limitations of existing measures. Two new scales, the Acquired Capability with Rehearsal for Suicide Scale (ACWRSS) and the Zest for Life Scale (ZLS) were developed. The theoretical predictions of the roles of AC and Zest in the pathway to suicide risk were then tested.

**Methodology:** Three studies were conducted to validate the measures. In Study 1 (n = 200), the factor structure of each scale was examined using exploratory factor analysis. In Study 2 (n = 417), the resulting models were tested using confirmatory factor analysis. In Study 3 (N = 617) measurement invariance across gender was analysed, and validity was tested using structural equation modelling.

**Conclusion:** Findings suggest that the new scales are reliable and valid. The addition of the measures into a structural theoretical model demonstrated excellent fit (RMSEA = .048 (90% CI = .045, .051); CFI = .95; TLI = .94) and indicated that AC moderates the path from desire to readiness for suicide, while Zest mitigates risk. Findings are limited by the use of cross-sectional data, whereby the causal nature of the pathways cannot be inferred. Both scales have important implications for suicide risk assessment.

**Keywords:** interpersonal theory of suicide, acquired capability, zest for life, resilience, psychometrics

## PAPER 3

*A test of the interpersonal theory of suicide and zest for life as a suicide resilience factor using a novel experimental analogue task*

K. Collins<sup>1</sup>, S. George<sup>1</sup>, T. Cao<sup>1</sup>, W. Stritzke<sup>1</sup>, A. Page<sup>1</sup>

<sup>1</sup>The University of Western Australia, Perth, Australia

**Research Aims:** Study 1 tested the interpersonal theory's posited causal relationship between perceived burdensomeness, thwarted belongingness, and suicidal desire using a novel experimental analogue task. Zest for life, a positive psychological trait, was also examined as a potential suicide resilience factor. Study 2 examined potential rebound effects in high zest individuals following aversive experiences and attempted to clarify the role of hopelessness within the interpersonal theory.

**Methodology:** In Study 1 ( $N = 98$ ), the Burden and Belongingness Suicide Analogue Task (BABSAT), a team-based reaction-time game, was used to test the effects of induced burdensomeness and thwarted belongingness on desire to quit, a proxy for the desire to give up on life. Participants were recruited based on scores on a zest for life measure (high or low). Study 2 ( $N = 92$ ) replicated Study 1 but used an extended BABSAT and accounted for hopelessness by assessing the stability of participants' feelings of burdensomeness and thwarted belongingness.

**Conclusion:** Study 1 found elevated levels of burdensomeness and thwarted belongingness caused significant deficits in persistence, providing the first experimental evidence supporting the posited causal link between these constructs and suicidal desire. Moreover, individual differences in zest for life partially buffered the adverse effects of these risk factors, providing support for zest as a suicide resilience factor. Study 2 found no evidence for rebound effects, but instead demonstrated a more sustained buffering influence of zest over time. No support was found for the role of hopelessness as posited by the interpersonal theory of suicide.

**Keywords:** Interpersonal theory of suicide, experimental analogue, resilience

## PAPER 4

*Neuroticism as a vulnerability factor in the relationship between belongingness, burdensomeness, and suicide risk*

E. Hartley<sup>1</sup>, W. Stritzke<sup>1</sup>, A. Page<sup>1</sup>, C. Blades<sup>1</sup>, K. Parentich<sup>1</sup>

<sup>1</sup>The University of Western Australia, Perth, Australia

**Research Aims/Questions:** According to the Interpersonal Theory of Suicide (ITS) two factors are thought to contribute to suicidal desire; perceived burdensomeness and thwarted belongingness. There is evidence to suggest aspects of personality, such as neuroticism, may have a bearing on suicide risk, via an influence on perceived burdensomeness and thwarted belongingness. Specifically, neuroticism is hypothesised to convey increased sensitivity to interpersonal cues of burdensomeness and belongingness. That is, compared to low levels of neuroticism, at high levels of neuroticism, high levels of burdensomeness or thwarted belongingness will be associated with higher levels of suicide risk.

**Methodology:** Participants were selected to form two groups on the basis of extreme scores for neuroticism ( $N=116$ ). A computerised task designed to manipulate feelings of belongingness and burdensomeness was administered, and the participants' desire to drop out of the computer task was used as an analogue for suicide risk. Participants were randomly assigned to either a high or low burdensomeness/ thwarted belongingness condition.

**Conclusion:** The relationship between core components of suicidal desire and the desire to drop out of the computer task was moderated by neuroticism. That is, individuals in the high neuroticism group appeared to be more sensitive to experiencing high levels of thwarted belongingness and perceived burdensomeness, such that this resulted in higher desire to drop out of the game. Thus, neuroticism appears to act on interpersonal risk factors, conferring additional risk for suicidal behaviours.

**Keywords:** Suicide, risk, resilience, Interpersonal, Belongingness, Burden and Belongingness, Personality, Neuroticism

**Symposium Presentation 11, Pleiades Room**  
**24<sup>th</sup> October 2014, 14:00 – 15:00**

*New developments in the research and treatment of Hoarding Disorder*

C. Brennan<sup>1</sup>, J. Malcom<sup>1</sup>, M. Nedeljkovic<sup>1</sup>, M. Kyrios<sup>1,2</sup>, M. Hughes<sup>1</sup>, J. Jiang<sup>1</sup>, R. Moulding<sup>3</sup>, M. Fitzpatrick<sup>1</sup>, D. Osborne<sup>1</sup>

<sup>1</sup>Swinburne University of Technology, Melbourne, Victoria, Australia

<sup>2</sup>Australian National University, Canberra, Australian Capital Territory, Australia

<sup>3</sup>Deakin University, Melbourne, Victoria, Australia

**Overarching Abstract:**

**Research Aims/Questions:** The recent recognition of Hoarding Disorder (HD) as a separate diagnosis in the DSM-5 has seen increased interest in research on its aetiology and treatment. While previously considered as a subtype of Obsessive-Compulsive Disorder, there is now mounting evidence suggesting that HD has a distinct phenomenological, neurological and cognitive profile. Consistent with this, treatments targeting specific factors identified as important in the aetiology and maintenance of HD have shown promise. This symposium presents a collection of papers presenting research into the phenomenology, cognitive, neurocognitive and treatment factors in HD.

**Methodology:** In the first paper, Brennan and Malcom examined the relationship between HD, loneliness and attachment in a community sample. The second paper by Nedeljkovic and colleagues, presents the results from an fMRI study comparing brain functioning in individuals with and without Hoarding Disorder, particularly focusing on attentional and executive processes. The last two papers have a treatment focus, with Fitzpatrick and colleagues reviewing current psychological and pharmacological treatments of HD, while the last paper presenting the outcomes of a 12-week CBT-based group treatment program for Hoarding Disorder.

**Conclusion:** Studies discuss results in the context of current research on Hoarding Disorder and implications for its treatment.

**Keywords:** Hoarding Disorder, Neurocognitive factors, attachment, treatment.

**PAPER 1**

*Do hoarders substitute possessions for people? An exploration of attachment, loneliness and compulsive hoarding*

C. Brennan<sup>1</sup>, J. Malcolm<sup>1</sup>

<sup>1</sup>Swinburne University of Technology, Melbourne, Australia

**Research Aims/Questions:** There is increasing interest in how the areas of interpersonal attachment and attachment to possessions may interact. Insecurely attached individuals may substitute material possessions for meaningful interpersonal relationships when they perceive a lack of social support. While, in compulsive hoarding maladaptive beliefs about possessions and their ability to provide a sense of security and identity contributes to the pattern of excessive acquiring and difficulty discarding characteristic of this disorder. The aim of this study was to investigate the relationship between adult insecure attachment and compulsive hoarding.

**Methodology:** A community sample of 211 responded to a survey about insecure attachment style, loneliness, materialism and hoarding.

**Conclusion:** Findings indicate that those who are insecurely attached and lonely might use material goods as a substitute for interpersonal security; when this is combined with heightened emotional attachment to belongings there is an increased risk of hoarding behaviours.

**Keywords:** Hoarding Disorder; Attachment; Loneliness; Materialism; Interpersonal Security

**PAPER 2**

*Differences in brain functioning between those with and without Hoarding Disorder*

M. Nedeljkovic<sup>1</sup>, M. Kyrios<sup>1,2</sup>, M. Hughes<sup>1</sup>, J. Jiang<sup>1</sup>, R. Moulding<sup>3</sup>

<sup>1</sup>Swinburne University of Technology, Melbourne, Victoria, Australia

<sup>2</sup>Australian National University, Canberra, Australian Capital Territory, Australia

<sup>3</sup>Deakin University, Melbourne, Victoria, Australia

**Research Aims/Questions:** Neuropsychiatric models of Hoarding Disorder have emphasized the involvement of orbito-fronto-striatal regions in the symptomatology of hoarding. In particular, regions involved in organisation, decision-making and selective attention have been proposed to play an important role. This is consistent with the small number of neuropsychological findings demonstrating difficulties with selective attention, response inhibition and organization.

**Methodology:** This study utilized functional Magnetic Resonance Imaging (fMRI) to explore differences in function of specific brain regions (i.e., anterior cingulate gyrus) among individuals with Hoarding Disorder and those without the disorder, while performing a task proposed to be subsumed by this region.

**Conclusion:** Implication for treatment are discussed.

**Keywords:** Hoarding Disorder; Neurocognitive factors, fMRI

### PAPER 3

*Review of treatments of Hoarding Disorder: A meta-analysis*

M. Fitzpatrick<sup>1</sup>, M. Nedeljkovic<sup>1</sup>

<sup>1</sup>Swinburne University of Technology, Melbourne, Victoria, Australia

**Research Aims/Questions:** Hoarding disorder (HD) is a pervasive and debilitating disorder characterised by a pattern of behaviour involving excessive acquisition, and a difficulty in discarding possessions, that are generally of limited value, leading to excessive clutter which prevents the use of living spaces for their intended purposes (Frost & Hartl, 1996). Prior to the DSM-5 publication, hoarding behaviour was considered as a subtype of Obsessive Compulsive Disorder (OCD), and therefore treated within the context of OCD (Ayers, Saxena, Golshan & Wetherell, 2010). However, over the last 15 years, there has been much research suggesting that individuals who demonstrate hoarding tendencies have limited success in OCD based treatment (Grisham & Barlow, 2005; Grisham & Norberg, 2010; Steketee & Frost, 2003). This has led to increased research into the effectiveness of a range of pharmacological and psychological treatments

varying in format and duration in treating Hoarding Disorder. However, despite increasing support for the effectiveness of psychological and pharmacological treatments in treating HD, questions remain regarding the most effective approach. The results are discussed in the context of the limitations of the current research with suggestions for future research.

**Methodology:** The objective of this review and meta-analysis was to evaluate the efficacy of pharmacological, behavioural and cognitive-behavioural interventions for individuals with Hoarding Disorder, using systematic review methodology.

**Conclusion:** Psychological treatments are found to be effective for hoarding disorder. The results are discussed in the context of the limitations of the current research with suggestions for future research.

**Keywords:** Hoarding Disorder, treatment, review

### PAPER 4

*Cognitive-behavioural group treatment for Hoarding Disorder: A treatment outcome study*

R. Moulding<sup>3</sup>, M. Nedeljkovic<sup>1</sup>, M. Kyrios<sup>1,2</sup>, D.Osborne<sup>1</sup>

<sup>1</sup>Swinburne University of Technology, Melbourne, Victoria, Australia

<sup>2</sup>Australian National University, Canberra, Australian Capital Territory, Australia

<sup>3</sup>Deakin University, Melbourne, Victoria, Australia

**Research Aims/Questions:** Hoarding Disorder is a highly debilitating disorder with relatively poor treatment outcomes. Traditionally considered a subtype of OCD, past OCD specific treatment have shown little efficacy in dealing with hoarding symptoms. However, with the recognition of hoarding problems as a separate diagnostic entity, more effective treatments have been developed that specifically target hoarding symptoms.

**Methodology:** This study reports on the outcomes of a 12-week group CBT program based on Frost et al.'s longer treatment, in a program designed to fit within the confines of the Australian healthcare system.

**Conclusion:** The findings demonstrate the efficacy of the group program, providing support for effective and cost-efficient psychological treatments for this disorder.

**Keywords:** Hoarding Disorder, Cognitive Behavior Therapy, Treatment

## **ORAL PRESENTATIONS**

### **Open Paper Session: Trauma & Youth, Pleiades Room**

**23<sup>rd</sup> October 2014, 11:00 – 11:45**

#### **PAPER 1**

##### *Psychological impact of the Great East Japan Earthquake among adolescents in Japan*

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**Research Aim:** The present study examined the psychological impact of the Great East Japan Earthquake among adolescents in Japan at the time of the disaster (March 2011) and currently (2 years later of the disaster).

**Method:** A total of 435 students (mean age = 19.98) from universities in Tohoku (i.e., in Fukushima), Kyoto, and Tokyo participated in the study. Two hundred and forty-six were males, 186 were females, and 3 did not indicate sex. They completed the same set of questionnaires which were used to measure trauma response, anxiety and depression, functional impairment, and anger, retrospectively at the time of the earthquake (T1: March, 2011) and at present (T2: from September to December, 2013). For T1 ratings, the students were asked to visualize themselves as clearly as they could and retrospectively describe how they felt immediately after March 11<sup>th</sup>, 2011.

**Results:** Contrary to our hypothesis, adolescents from Tokyo scored the highest levels of trauma response and internalizing symptoms immediately after the earthquake. Adolescents in Tohoku reported high levels of externalizing symptoms instead of post-traumatic and internalizing symptoms. Specifically, they showed significantly

higher scores of trait anger, anger-in, and anger-out than adolescents in Kyoto or Tokyo. In Kyoto, the overall scores of anxiety and depression increased from immediately after to two years later.

**Conclusion:** Proximity to the Great East Japan Earthquake area moderated the type of psychological distress experienced by the adolescents in Japan.

**Keywords:** trauma, earthquake, tsunami, nuclear, adolescents

#### **PAPER 2**

##### *Delivering cognitive behavioral therapy for war-affected youth in post-conflict settings*

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**Research Aims/Questions:** War-affected youth are at heightened risk of psychological distress, yet the rate of unmet need is almost 100% in many low-resource nations (Verhulst et al, 2003). Opportunities exist to bridge this gap through training of local mental health workers, however the evidence base for effective psychological treatments in post-conflict settings is in its nascence. To address this concern, an evidence-based treatment for war-affected youth in Sub-Saharan Africa was developed. This study aimed to investigate the effectiveness of the treatment and its delivery in Sierra Leone.

**Methodology:** The Youth Readiness Intervention is a transdiagnostic, group-format, 10-session treatment for youth who report ongoing psychological distress following war. Community mental health workers were trained using a collaborative model of capacity building. Clinical training comprised didactic learning, role play, and within group-feedback on intervention components that further informed delivery of the intervention. A randomized controlled trial (n=436, 54% female,

ages 15-24) was conducted to determine treatment effectiveness.

**Conclusion:** A collaborative approach to training was vital: for each technique, trainees highlighted locally-relevant examples and ethical challenges, which informed further refinement of the treatment. The collaborative training model provided a strong grounding in evidence-based practice, and guided culturally-relevant implementation, highlighting a model applicable to other limited-resource settings. The Youth Readiness Intervention was effective in improving emotion regulation, prosocial behaviors, social support and reducing functional impairment among participants. The findings highlight opportunities to adapt and deliver CBT in low-resource settings for the benefit of war-affected youth.

**Keywords:** War, youth, clinical training, treatment

### PAPER 3

*The impact of natural disaster on child and adolescent mental health in China: A systematic review*

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**Research Aims:** China experiences more natural disasters than any other nation. The frequency of earthquakes, landslides, typhoons and major floods has potential for detrimental effects on child mental health and development. Disasters and resulting hardship are significant contributors to mental disorders globally, however less is known about the impact of natural disasters among children and adolescents living in China. We aimed to determine the psychological impacts, and specific risk and protective factors that influence psychological distress among children exposed to natural disaster in China.

**Methodology:** A systematic review of the Chinese- and English- language scientific literature was conducted.

**Conclusions:** The reported prevalence of post-traumatic stress disorder, depression and behavioral disorders will be presented, as well as the specific risks and protective factors at each level of the child's social ecology. Individual demographics, extent of traumatic exposure, coping style, family support and schooling were among the factors associated with the development and maintenance of psychological distress. The findings have potential to inform clinical treatment for children and families delivered in the aftermath of traumatic disaster in China, and in the broader Asia Pacific region.

**Keywords:** child, adolescent, disaster, post-traumatic stress, China

**Open Paper Session: Anger, Imagery & Revenge, Orion Room**

**23<sup>rd</sup> October 2014, 11:00 – 11:45**

### PAPER 1

*Phase 1 trial of a bibliotherapy program for anger*

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**Research Aims/Questions:** There is an increasing trend towards flexibly-delivered self-help treatment modalities using books and web-based programs. Such programs theoretically increase access and reduce treatment cost. They have been shown to be effective across a wide range of treatments and disorders. Anger, however, despite its significant cost in relationships, health, on the road, and in workplace and forensic contexts, has not been the target of such trials. To the present authors' knowledge, there are no controlled treatment trials of self-help anger management programs. The present paper presents the development of a cognitively-oriented bibliotherapy program for anger, and its initial trial.

**Methodology:** *Participants:* 24 adults with significant self-reported anger issues were recruited via social media on a volunteer basis. *Pre/post Measures:* In addition to a battery of

measures exploring mood and general functioning, the Novaco Anger Scale and Provocation Inventory, and The State-Trait Anger Expression Inventory, 2<sup>nd</sup> Edition were administered pre and post-treatment, as well as at nine month follow up. **Procedure:** Participants were sent the anger manual to read at their own pace and given up to three months to complete it. Participants also tracked reading progress and anger in response to weekly email prompts.

**Conclusion:** Participants showed a high rate of book completion, and a marked pre-post improvement in anger scores at book completion. Preliminary data support the use of bibliotherapy in anger treatment.

**Keywords:** bibliotherapy; anger; anger-management; book; Phase 1

## PAPER 2

*Differentiating anger and resentment: Is resentment the bigger bad guy?*

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**Research Aims:** Forgiveness researchers and philosophers have stated that anger and resentment are different emotions, yet these assertions have been made in the absence of empirical evidence. The present study is the third in a series of studies investigating this proposition. It also investigates the differential relationship anger and resentment have with psychological distress.

**Methodology:** Psychology undergraduate students (N = 123) were randomly assigned to an anger or resentment condition. Participants completed an internet survey where they described an anger or resentment autobiographical memory. Participants rated the intensity of a number of emotions present at the time of the emotion experience and when they think about the experience now. They also completed the Depression Anxiety and Stress Scale (DASS-21), the SF-36v2 Health Survey, the anger sub-scale of the Aggression Questionnaire and the resentment sub-scale of the Buss-Durkee Hostility Inventory.

**Conclusion:** Resentment experiences were associated with higher levels of resentment, envy and jealousy and lower levels of anger, than anger experiences. Psychological distress and some health domains were differentially explained by anger and resentment. Compared to resentment, anger reduced more over time and resentment accounted for significantly more variance in a number of the psychological and health domains. These results support assertions that anger and resentment are different emotions and have different relationships with psychological distress and health variables. Furthermore, the results indicate that resentment may be a bigger bad guy. The results have implications for broadening treatment protocols to include strategies that specifically target resentment in addition to, yet independent of anger.

**Keywords:** Depression, Anxiety, Stress, Anger, Resentment

## PAPER 3

*Imagery rescripting of past bullying experiences using forgiveness, avoidance, and revenge*

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**Research Aims:** The aim of the current study was to evaluate the impact on emotional and attitudinal reactions of imagined forgiveness, avoidance, or revenge towards a perpetrator among victims of bullying.

**Methodology:** 135 undergraduate psychology students aged 17 to 24 who reported a recent or current experience of being victimized were led through imagery rescripting where they imagined an altered ending of a personal bullying event to one where they forgave, avoided, or took revenge on the bully. The PANAS was administered before and after rescripting, as well as a measure of cognitive appraisals of the event, and skin conductance stress responses.

**Conclusion:** Results indicated significant differences between Time 1 (imagining the event as it occurred), to Time 2 (imagining an alternate ending). Negative affect decreased significantly in the forgiveness and avoidance conditions, but not in the revenge condition. Positive evaluations of

coping decreased significantly in the revenge condition, but not in the avoidance or forgiveness conditions. In addition, imagined forgiveness of the bully was more stressful than either imagined avoidance or revenge. Results reveal a new understanding of pathways for common behavioural responses to bullying behaviour. The impact of focusing on immediate stress reduction in dealing with bullying is explored, and forgiveness is described as a difficult yet potentially effective longer-term strategy to deal with the negative emotional consequences of victimisation.

**Keywords:** Child and youth issues, mental health, schools/educational settings

**Open Paper Session: Trauma, Orion Room**  
**23<sup>rd</sup> October 2014, 13:30 – 14:30**

## PAPER 1

*Practice-based exploration of complex trauma*

M. Hourigan<sup>1</sup>

<sup>1</sup>Australian College of Applied Psychology

**Research Aims/Questions:** PTSD and Complex PTSD have recently been investigated with relation to the DSM-5 and ICD-11, and spurred by the publication of research by Cloitre et al. (2011) which found that expert clinicians identified disturbances in affect regulation and relationships as being the primary concern and the first point of intervention compared to core symptoms of PTSD. While Cloitre et al.'s (2011) study highlighted a significant disjunction between evidence-based research and practice-based research, the methodology was limited to rating nominated items on anchored scales, which may reflect more manualised, intellectualised approaches to treatment, rather than actual practice. Further, the research design does not allow for elaboration on factors that may impact the clinician's decision making process. This study aims to contribute to the understanding of and treatment of complex trauma by expanding on practice-based evidence using qualitative research, investigating the decision making process of clinicians, how clinicians conceptualise the client's presentation, navigate approaches to treatment, and identify as practitioner.

**Methodology:** Qualitative research using a thematic analysis of data from ten psychologists/clinical psychologists conducted using a semi-structured interview.

**Conclusion:** PTSD and complex PTSD are not sufficient to ease with the conceptualization and treatment of clients with complex trauma. Clinicians initially focus on stabilizing clients, but are drawing from multiple therapeutic modalities, including schemas, personality, and development/attachment theory, and integrating these into a core practice, with PTDS symptomology presenting as less acute or sub-threshold compared to more enduring, pervasive difficulties that generalize beyond trauma-specific stimuli.

**Keywords:** Trauma, PTSD, Complex PTSD, Practice-based

## PAPER 2

*Prevention of chronic pain and posttraumatic stress disorder following motor vehicle accidents: a pilot study translating research into practice*

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**Research Aims/Questions:** While most individuals who experience a motor vehicle accident (MVA) make a full recovery, a significant number go on to develop posttraumatic stress disorder (PTSD) or disabling chronic pain. The presence of one of these conditions increases the chance of the other occurring, and complicates treatment and recovery. The literature suggests it is possible to identify those at risk of developing each of these individual conditions and that early intervention based on cognitive behavioural (CB) models can prevent their development. The present study aims to determine the acceptability and feasibility of a low intensity screening and early intervention package.

**Methodology:** 41 individuals were recruited through online advertising, posters and media

releases and completed an online screening survey. 8 respondents were eligible for the study (aged 18 years and over, MVA in past month and living in NSW). Participants were categorized as being either low or high risk of developing the conditions, and those in the latter category were emailed an intervention package.

**Results:** While the number of respondents to the survey was satisfactory, the proportion who were eligible was very low. Two participants were identified as having low and 6 as having high risk of developing either condition, and the latter were provided with the intervention packages.

**Conclusion:** Recruitment of participants in the weeks following the MVA proved challenging and most were not eligible to participate. The majority of those eligible for the study were found to be at high risk of developing one of the conditions.

**Keywords:** pain; mental health; early intervention.

### PAPER 3

#### *Trauma exposure and PTSD within Fire & Emergency Services in Western Australia*

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Curtin University, Perth, Australia

**Research Aims/Questions:** The aim of this study was to gather information about the types of PTEs Fire and Emergency Service personnel are exposed to in Western Australia, as well as the associated impact of these exposures on Posttraumatic Stress Disorder (PTSD), depression and anxiety. The relationship between the protective factors of social support and coping style and mental health outcomes was also explored using a hierarchical regression. Whilst it is widely accepted that fire and emergency work is of high risk for PTE exposure and post-trauma pathology, there has been limited published data regarding Australian fire and emergency service workers, with no published studies, to date, regarding fire and emergency service workers in Western Australia.

**Methodology:** 210 current serving Department of Fire and Emergency Services (DFES) members were surveyed regarding exposure to Potentially Traumatic Events (PTEs), PTSD symptomatology,

current symptoms of depression, stress and anxiety, perceived social support and coping style.

**Conclusion:** A detailed understanding of the nature and consequences of PTE exposure and a snapshot of current coping within the DFES confirms the suitability of DFES as a recipient of a resilience program and exploration of the contribution of perceived social support and coping style within this sample informs the tailoring of a psychological strength training program for DFES career recruits.

**Keywords:** PTSD, anxiety, mental health, trauma, resilience, coping, training

**Open Paper Session: DBT & Borderline PD,  
Orion Room  
23<sup>rd</sup> October 2014, 14:30 – 15:30**

### PAPER 1

#### *Schema therapy for Borderline Personality Disorder: Patients' and therapists' perceptions*

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**Research Aims/Questions:** Schema therapy (ST) is effective in promoting clinically meaningful gains that ameliorate symptomatology for borderline personality disorder (BPD), however it remains unclear which elements of ST are effective from patients' and therapists' perspectives. The aim of this study is to explore BPD patients' and therapists' experiences of receiving and delivering ST respectively to better understand and enhance treatment delivery.

**Methodology:** Qualitative data were collected through semi-structured interviews with 12 patients with a primary diagnosis of BPD who had received schema therapy for at least 12 months and eight trained schema therapists. Interview data were analysed following the procedures of an inductive, content analysis.

**Conclusion:** Patients' broad perceptions of ST included, but not limited to the experience of greater self-understanding and better access to and management of one's emotions. While the process of ST was perceived as emotionally

confronting, patient narratives informed that this was necessary. Therapists generally regarded their experience as rewarding as reflected by patients' positive responses to treatment. However therapists described being confronted with novel challenging situations. Patients and therapists were concordant on several therapeutic components of ST (e.g. ST provides insight, benefits of interactions with peers with similar experiences during group ST and use of humour in group ST). These findings may lead to more effective implementation of the schema therapy protocol for BPD and inform specialist therapies in integrating some of the therapeutic elements that are important to patients.

**Keywords:** Schema therapy, treatment, borderline personality disorder, training, supervision

## PAPER 2

### *Evaluation of an adapted DBT skills training program for regional and rural Australia*

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<sup>1</sup>South West Mental Health Services, Bunbury, Western Australia

**Research Aims:** The research aims to evaluate an adapted Skills Training Program, informed by a Dialectical Behaviour Therapy (DBT) model, for people with Borderline Personality Disorder in a Regional and Rural Australian Setting.

**Methodology:** The researchers developed an adapted module based skills training program informed by Linehan's DBT for a population of 18 to 65 year olds with a diagnosis of Borderline Personality Disorder living in the catchment area of the Upper South West Mental Health Service. Pre and post measures were conducted with each participant before and after each module was completed using self-report measures targeting specific symptom sets associated with emotion dysregulation and issues targeted in each module. Case studies of program graduates identify behavioural changes made as a result of the intervention. Comparative research with another service of a similar demographic using DBT informed programs is in progress. Implications of this adapted format are to be considered.

**Conclusion:** Data suggests that components of the adapted program are effective in decreasing

symptomatology and distress. Case study data indicates a decrease in the number of psychiatric hospital admissions, cessation or decrease in self-harming behaviour and improved engagement in adaptive functioning and meaningful occupation. Comparative data analysis is currently in progress.

## PAPER 3

### *On the borderline: A meta-analysis of psychological interventions for Borderline Personality Disorder*

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<sup>4</sup>Department of General Practice, University of Melbourne, Australia

**Research Aims/Questions:** The aim of this study was to examine effective psychological interventions for borderline personality disorder.

**Methodology:** A systematic literature search and meta-analysis were undertaken. Three hundred and eleven abstracts were screened resulting in 47 studies assessed for eligibility. Thirty-three articles, examining twelve treatment types, were included in the final review.

**Conclusion:** Treatment types included DBT (N=11), SFT (N=2), CBT (N=5), MBT (N=2), MACT (N=1), STEPPS (N=3), IPT (N=2), TFP (N=1), DDP (N=2), MOTR (N=1) studies. A number of structured psychological therapies showed some improvements on some outcomes. DBT showed the most extensive and consistent outcomes. STEPPS also showed some promising results across multiple outcomes. The degree of improvement in outcome measures was relatively small for most therapies, compared with the comparator treatment. Effective structured therapies were based on an explicit and integrated theoretical approach, provided by a trained therapist suitably supported and supervised, attends to emotion regulation, focused on achieving change, focused on the relationship between the person receiving treatment and the clinician, and occurred regularly over the planned course of treatment for a minimum of three

months.

**Keywords:** mental health, treatment

**Open Paper Session: Attention, Pleiades Room**  
**23<sup>rd</sup> October 2014, 16:00 – 17:00**

## PAPER 1

*The effects of attentional bias and attentional control on anxiety vulnerability*

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**Research Aims:** Biased attention to threatening information and compromised attentional control is causally implicated in anxiety. It is known that these processes bear on anxiety vulnerability, but their relative role in terms of initial emotional responses to stressful events and the subsequent attenuation of this anxious response remains unclear. While it has been demonstrated that these attentional mechanisms do impact individual stress response, it is still unclear how this response is impacted by individual differences in anxiety elevation and maintenance. The aim of the present study is to examine the relationship between these attentional factors and differential anxiety responding to a performance-based stressor.

**Methodology:** Participants with varying levels of trait anxiety were exposed to novel methodologies designed to assess individual differences in the mechanisms underpinning anxiety-linked attentional bias to threat and anxiety-linked impairment in attentional control. Participants were exposed to the anticipation of a stressor, with mood measurements taken at intervals during and after the anticipatory period.

**Conclusion:** Results from this study inform the relative contribution of anxiety-linked attentional bias toward threat and anxiety-linked impairments in attentional control in emotional response to the anticipation of stressful events, and following the conclusion of these events, across participants varying in anxiety vulnerability.

**Keywords:** anxiety, attentional control, attentional bias, mental health, stress, cognition, emotion

## PAPER 2

*A brain-computer interface based attention training program: Seeing hyperactivity/impulsivity improvement in behavioral ratings and the color-stroop Task*

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**Research Aims/Questions:** We previously reported that our patented electroencephalography (EEG)-based brain-computer interface (BCI) training program (BrainPal<sup>TM</sup>), which targets inattention in Attention Deficit Hyperactivity Disorder (ADHD), improved both inattentive and hyperactive-impulsive symptoms (HI) on the ADHD Rating Scale-IV as rated by parents (Lim et al., 2012). Here we try to understand the incidental improvement in HI by exploring interference control using Stroop Commission Rate (SCR) in the Color-Stroop Task (CST).

**Methodology:** This is a prospective, single-arm, open-label, pilot study. Participants underwent 24 individualized BCI intervention sessions over 2 months, followed by 3 once-monthly booster sessions. Each 30-minute session involved playing a computer game driven by an EEG-derived attention score computed from the CST completed by subjects at baseline, post-intervention and 3-month follow-up. SCR reflects the percentage of errors committed at each time-point during the CST.

**Conclusion:** There were significant and sustained improvements in both parent-rated HI and participants' impulsivity according to the SCR. HI scores were under-reported compared to SCR scores, but both were strongly associated at follow-up. This suggests that SCR is a good indicator of impulsivity and supports CST as both a quantification method and the basis for training interference control in ADHD children. HI has been attributed to executive functions deficits in attention, inhibition, and working memory. Our BCI-based attention-training program has improved both attention and inhibition. Future

modules of our training can focus on working memory in order to further reduce HI in ADHD.

**Keywords:** Behavioral problems, child and youth issues, mental health, treatment

### PAPER 3

*The impact of a targeted Attentional Bias Modification procedure on worry and sleep quality in individuals with insomnia*

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**Research Aims/Questions:** Attention Bias Modification (ABM) is an emerging psychotherapeutic approach that seeks to target patterns of cognition implicated in the maintenance of psychopathology. Lab-based studies demonstrate that the induction of an attentional bias away from negative information leads to the attenuation of emotional vulnerability. Subsequent research has sought to determine the potential clinical benefits beyond the lab by delivering ABM at regular intervals across days or weeks. While such studies have delivered promising results, it is possible that the ability of ABM to produce reductions in anxiety vulnerability at targeted points in time will be equally important. In the present study we sought to examine whether an attention bias modification (ABM) procedure delivered before sleep could exert a transient impact on worry that would serve to mitigate sleep difficulties.

**Methodology:** Individuals reporting high levels of worry and insomnia-related sleep difficulties completed either an ABM task or a no-ABM control task before sleep on alternating nights across six days (i.e., ABM, no-ABM, ABM, no-ABM, etc.). It was found that participants reported shorter sleep-onset latency and less pre-sleep worry on nights when they had completed the ABM task as compared to nights when they had completed the no-ABM control task.

**Conclusion:** This outcome highlights the potential benefits of delivering ABM at targeted points in time when biased attention and worry are likely to be most problematic. Implications will consider whether the optimal delivery of ABM may involve more discrete targeting of times and situations

where attentional vigilance is most likely to be detrimental to functioning.

**Keywords:** Sleep, anxiety, mental health, health

### PAPER 4

*The efficacy of targeted Attention Bias Modification (ABM) on anticipatory anxiety in socially anxious individuals: Evaluating a novel training paradigm*

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**Research Aims/Questions:** Cognitive bias modification (CBM) training has been identified in previous research as a technique that may have practical benefits in enhancing emotional functioning, however, it has been presupposed that the real world benefits of CBM training will only be obtained when the delivery techniques serve to produce an enduring change in emotional vulnerability. This means that research has not addressed the impact of CBM training in producing enduring benefits from a transient change in cognitive bias that impacts state anxiety. The current study aimed to produce enduring benefits using a novel attentional bias modification (ABM) task, to assess whether it was able to modify attentional bias and ameliorate anticipatory anxiety in addition to anxiety to an unanticipated stressor.

**Methodology:** Across two studies participants were exposed to either an unanticipated (Study 1) or anticipated stressor (Study 2) and received the novel attentional training. This was followed by a short speech. Mood was assessed throughout.

**Conclusion:** Results indicated that ABM encouraged an attentional bias in the desired direction in both studies, but neither anticipatory anxiety nor anxiety reactions to unanticipated events were attenuated. This is inconsistent with previous findings, wherein ABM reduced anxiety, indicating that training effects observed in this task may not affect the same processes as traditional tasks.

**Keywords:** Anxiety, CBM, Attention Bias

**Open Paper Session: Eating Disorders, Orion Room**  
23<sup>rd</sup> October 2014, 16:00 – 17:00

**PAPER 1**

*Fluctuation in readiness to change during treatment Anorexia Nervosa: A case series*

O. Carter<sup>1</sup>, S. Byrne<sup>1</sup>, K. Allen<sup>1</sup>, A. Fursland<sup>2</sup>

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**Research Aims/Questions:** Lack of motivation and “readiness to change” is one of the key obstacles to effective treatment of eating disorders, particularly disorders of the anorexic phenotype (anorexia nervosa [AN] or atypical AN). Previous research has suggested a possible link between increased pre-treatment *readiness to change*, and more positive outcomes, however findings have been inconsistent, and researchers have suggested the need for more frequent measurement of this construct across the course of treatment. The current study sought to achieve this through a case series of 9 adult clients being treated through Enhanced Cognitive Behaviour Therapy (CBT-E) for AN or atypical AN at two outpatient treatment services in Perth.

**Methodology:** Clients’ ages ranged from 17 to 54 with a mean of 27.3 (SD=12.37), and all were female. In addition to measures collected as part of standard clinical care, participants completed the Anorexia Nervosa Stages of Change Questionnaire (ANSOCQ) at each treatment session. Fluctuations in readiness and motivation to change across the entire course of treatment were examined for each individual. In addition, the relationships between changes in ANSOCQ score and change in BMI and eating disorder symptomatology were also examined (as assessed by the Eating Disorder Examination Questionnaire).

**Conclusion:** There was significant variation both between participants and within individuals in levels of readiness to change over the course of treatment. Overall, however, lack of improvement in motivation to change was associated with treatment dropout and with minimal increase in BMI. Lack of improvement in readiness to change may indicate the possibility of potential poor treatment outcome.

**Keywords:** Eating disorders, treatment

**PAPER 2**

*The pros and cons of Anorexia Nervosa: Clients’ perceptions of their illness during enhanced cognitive behaviour therapy*

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**Research Aims/Questions:** This study investigated whether the perceived costs and benefits of having Anorexia Nervosa (AN) prior to treatment influences treatment outcome, using longitudinal data from an open trial of Enhanced Cognitive Behaviour Therapy (CBT-E) for AN. In addition, we examined fluctuations in patients’ perceptions of the pros and cons of AN across the entire course of treatment in a separate case series involving 9 patients.

**Methodology:** The longitudinal study involved 88 patients aged 18 to 50 with a mean of 24.87 (SD=8.18); 98% were female. These individuals completed The Decisional Balance Scale (DBS) prior to commencing treatment and scores on the DBS were used to predict treatment retention and outcome (remission vs. non-remission as well as improvement in symptoms as measured by the Eating Disorder Examination Questionnaire and change in BMI). The nine patients in the case series were aged 17 to 54 with a mean of 27.3 (SD=12.37), and all were female. In addition to measures collected as part of standard clinical care, these participants completed the Pros and Cons of Anorexia Nervosa (PCAN) questionnaire at each treatment session.

**Conclusion:** Results for the first study showed no significant relationship between pre-treatment perception of the pros and cons of AN and treatment outcome. The case series indicated that while there was considerable variation between patients, there was little change in patients’ perceptions of AN over time. This suggests that patients who perceive AN to have positive elements will not necessarily face poor treatment outcomes.

**Keywords:** Eating disorders, treatment

### PAPER 3

#### *Cognitive bias modification reduces selective processing of food cues in obesity*

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**Research Aims/Questions:** Accumulating research shows that obese individuals selectively process food and eating cues. Such biased cognitive processing is thought to play a role in the development and maintenance of (over)eating. This study investigated whether cognitive biases for food cues in obese individuals can be modified.

**Methodology:** Using a dot probe paradigm, 96 community dwelling obese women (24-67 years) were trained to direct their attention either toward ('attend'), or away from ('avoid') food pictures. Attentional bias was assessed before and after training. Following post-training assessment, participants were administered a word stem completion task. In this task, participants were presented with 3-letter word stems (e.g., ROA), which could be completed as a food-related word (e.g., roast), or a word that is not related to food (e.g., road).

**Conclusion:** As predicted, attentional bias for food cues increased in the 'attend' group, and decreased in the 'avoid' group. Importantly, these re-training effects generalised to an independent measure of biased information processing, such that participants in the 'avoid' group produced relatively fewer food-related words on the word stem task than those in the 'attend' group. These results are consistent with recent neuro-cognitive perspectives of obesity. They further suggest that cognitive bias modification, which targets the cognitive processes that underlie the heightened food responsivity in the obese, could help combat pathological (over)eating and improve the success of weight-loss treatments.

**Keywords:** Obesity; cognitive bias modification; food cues; dot probe paradigm; word stem completions

### Open Paper Session: Treatment Outcomes and Access, Pleiades Room

24<sup>th</sup> October 2014, 10:30 – 11:15

### PAPER 1

#### *Sudden gains: A pluralistic approach to the patient and therapist experience*

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**Research Aims/Questions:** Qualitative and quantitative research methods were used to study instances of sudden gains within the case load of a private practice practitioner. Five clients whose progress was marked by such changes were contrasted with the views of five clients whose progress was marked by significant setbacks. Results from the quantitative analyses indicated that clients who experienced sudden gains during therapy tended to retain their therapeutic gains over a 2-year time period. In contrast, individuals who experienced setbacks in therapy generally continued to be distressed at the 2-year reassessment. Clients who experienced sudden gains were more distressed prior to treatment and were more satisfied with their experience looking back. A stronger working alliance was found amongst those who experienced sudden gains, although there was no difference between the groups' ratings regarding the strength of the therapeutic bond. Qualitative results suggested that therapy was helpful in bringing about many changes in clients' lives, but clients who experienced sudden gains generally recalled more positive aspects of therapy, demonstrated greater utilization of therapeutic techniques, endorsed more long-term changes, accepted more responsibility for their treatment outcomes, and were less likely to react negatively to therapeutic techniques. Clients who experienced setbacks in therapy were generally less optimistic about the future, felt that they had regressed since termination, and demonstrated more resistance to therapeutic techniques.

**Keywords:** sudden gains, rapid response, rapid responders, therapy outcome, working alliance, off-track, deteriorators, therapist factors, satisfaction, blue, red, interpretative phenomenological analysis, case-based,

pluralistic, super shrink, outcome questionnaire, phenomenology, measuring change, helpful factor

## PAPER 2

### *Three-year trajectory of individuals with anxiety and related disorders following cognitive behavioural therapy*

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**Research Aims/Questions:** Anxiety disorders are highly prevalent and costly to society. A large number of randomised controlled trials (RCTs) have now demonstrated the short term and long term efficacy of cognitive behavior therapy (CBT) in the treatment of anxiety and related disorders. In addition, a smaller number of effectiveness studies have also demonstrated that similar outcomes to RCTs can be obtained in "real-world" treatment settings with more clinically representative samples. There is minimal research, however, into long-term outcomes in effectiveness research. The present study aims to address this gap in the literature and investigate the long term trajectory of individuals with anxiety and related disorders being treated in an outpatient clinic.

**Methodology:** The sample consisted of 98 individuals with anxiety and related disorders that were treated in an outpatient, fee-for-service setting using a case formulation approach. Participants were followed up and assessed each year after their treatment discharge, for a period of 3 years. Outcome measures included the NIMH Clinical Global Impression (CGI) scale as a global measure of symptom severity and the Sheehan Disability Scale (SDS) as a measure of functional impairment.

**Conclusion:** The results indicated that clients generally maintain their treatment gains, with large effect sizes obtained from pre-treatment to each follow-up time point ( $d = 1.11-1.60$ ). These results provide preliminary evidence to suggest that individuals treated with CBT in "real world" settings maintain their treatment gains for at least 3 years post treatment termination.

**Keywords:** Anxiety, cognitive-behaviour therapy, CBT, case formulation, effectiveness, long term outcomes

## PAPER 3

### *"Stupid little pointy needle!" Dismantling a cognitive-behavioural treatment for chronically ill children with needle-related distress*

J.A. McIvor<sup>1</sup>, J.E Taylor, K.J Ross, N.M Blampied, R. Gammon

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**Research Aims/Questions:** For some chronically ill children, having an injection is a regular occurrence and can result in distress and avoidance behaviour for the child and their family. There can also be negative health implications of these children not having their injections. Research supports the effectiveness of various cognitive-behavioural therapy (CBT) packages for childhood needle-related distress (NRD), although which components are most effective has yet to be identified. The aim of the present study was to replicate previous research findings from McIvor (2011), by dismantling an existing manualised CBT package to determine whether cognitive and/or behavioural components were necessary for a reduction in NRD.

**Methodology:** Three treatment manuals were used to conduct this research, namely (1) a CBT manual, (2) a cognitive therapy (CT) manual, and (3) a behavioural therapy (BT) manual. Treatments were evaluated using a multiple-baseline across participants single-case design. Twelve children aged 7-13 of New Zealand European/Pākehā and Māori descent were randomly allocated to one of the three treatment conditions, with four children and their carers assigned to each condition.

**Conclusion:** Case study and group analysis indicated that CBT was more effective than CT or BT based on the magnitude of change displayed in relation to NRD symptoms and the number of promising single-case replications. However, when assessing individual case results in certain areas (e.g., coping and cognitions related to injections), CT and BT were just as effective as CBT for some children. Finally more specific analysis indicated that exposure tasks tend to produce the most change.

**Keywords:** Needle-related distress, injections, cognitive-behavioural therapy, children and adolescents

**Open Paper Session: OCD, Pleiades Room**  
24<sup>th</sup> October 2014, 13:15 – 14:00

## PAPER 1

*Training adaptive cognitive biases in obsessive-compulsive checking*

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**Research Aims/Questions:** Pathological doubting and checking is a common symptom presentation in obsessive-compulsive disorder (OCD). Previous research has established that compulsive checkers do not display an actual memory deficit, but lack confidence in their memories and experience intolerance of uncertainty regarding the completion of tasks. The focus of this series of studies is on further examining the effect of a novel training procedure aimed at modifying these types of beliefs.

**Methodology:** In Study 1, we conducted an investigation of the application of cognitive bias modification (CBM) targeting maladaptive thinking styles related to memory distrust and intolerance of uncertainty in analogue OCD checkers. In Study 2, we examined the possible enhancement of CBM for OCD through imagery training and facilitated imaginal engagement. We also investigated whether imagery ability influenced engagement with verbal or imagery-enhanced CBM.

**Conclusion:** The results for Study 1 provided some evidence for the enhancement of adaptive beliefs in compulsive checking. However, there were few differences between the positive and neutral conditions. Preliminary results for Study 2 provide mixed evidence that participants who received positive imagery CBM training may have interpreted novel ambiguous checking scenarios more adaptively and checked less on a behavioural measure relative to participants in the neutral imagery CBM condition. In addition, findings were mixed in relation to the effect of imagery ability on engagement with imagery versus standard verbal training. CBM may be

useful as an adjunct to traditional cognitive-behavioural strategies or as an online intervention to target maladaptive beliefs in OCD.

**Keywords:** Anxiety, assessment, treatment, dissemination

## PAPER 2

*Self-guided internet-delivered treatment for obsessive-compulsive disorder: Short-term and long-term outcomes*

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**Research Aims/Questions:** Effective treatments for obsessive compulsive disorder (OCD) exist; however, there are many barriers to accessing traditional face-to-face treatment. Internet-delivered cognitive behavior therapy (iCBT) has the potential to reduce these barriers to treatment. There is now promising evidence supporting the efficacy of iCBT for OCD. To date, however, most iCBT programs are offered with weekly contact with a clinician and there is some anecdotal evidence that this contact may itself prevent some individuals with OCD from participating in iCBT. The aim of this study was to evaluate the short-term and long-term efficacy and acceptability of a self-guided iCBT program for individuals with symptoms of OCD.

**Methodology:** Twenty-eight adults were invited to participate in the OCD Course; a new 10 week self-guided iCBT treatment for adults with OCD. Participants completed symptom measures immediately post-treatment and again at 3- and 12-month follow-up. The primary outcome measure was the Yale Brown Obsessive Compulsive Scale (YBOCS), which was administered via the internet in a self-report format.

**Conclusion:** Sixty-four percent of participants completed the OCD Course within the 10 weeks. Mixed-linear models analyses revealed large clinical changes in OCD symptoms at post-treatment ( $d=1.37$ ), 3-month follow-up ( $d=1.17$ )

and 12-month follow-up ( $d=1.08$ ). Participants also rated the Course as highly acceptable. The results of this study highlight the potential of self-guided iCBT treatment for adults with OCD. Large randomized controlled trials are currently planned and future research should focus on understanding who responds to self-guided iCBT and how adherence and engagement can be optimised.

**Keywords:** Obsessive-compulsive disorder, OCD, CBT, internet, iCBT, treatment

### PAPER 3

#### *A contemporary psychometric evaluation of the Obsessive Compulsive Inventory - Revised*

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**Research Aims/Questions:** Traditionally, hoarding symptoms were coded under obsessive-compulsive disorder (OCD), however, in DSM-5 hoarding symptoms are classified into a new independent diagnosis, hoarding disorder (HD). This change will likely have a considerable impact on the self-report scales that are commonly used to measure symptoms of OCD. Therefore the aim of this study was to evaluate the psychometric properties of one of the most commonly used self-report scales, the Obsessive Compulsive Inventory – Revised (OCI-R), taking into consideration the new DSM-5 structure.

**Methodology:** This study evaluated the psychometric properties of the OCI-R, in a sample of 474 individuals with either OCD ( $n=118$ ), HD ( $n=201$ ) or no current or past psychiatric disorders (healthy control) ( $n=155$ ). For the purposes of this study the OCI-R was divided into two scales; the OCI-OCD (measuring the 5 dimensions of OCD) and the OCI-HD (measuring the hoarding dimension). The reliability and validity of each of these measures were assessed and a clinical cut off point for each measure was obtained.

**Conclusion:** The reliability and validity of both measures was good. The receiver operating characteristic analyses demonstrated that a clinical cut off of 6 on the OCI-HD and 12 on the OCI-OCD provided the best balance between sensitivity and specificity. The results of this study highlight the potential of the OCI-R as a screening measure for individuals with OCD and HD and demonstrate the utility of separate clinical cut offs for assessing likely diagnosis of both HD and OCD.

**Keywords:** Hoarding disorder, obsessive compulsive disorder, OCD, hoarding, assessment, psychometrics

### Open Paper Session: Cancer and Epilepsy RCTs, Orion Room

24<sup>th</sup> October 2014, 13:15 – 14:00

### PAPER 1

#### *Cognitive behaviour therapy to improve mood in people with epilepsy: A randomised controlled trial*

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**Research Aims/Questions:** This study compared a 9-week individualized Cognitive Behaviour Therapy (CBT) programme to improve mood in adult with epilepsy, with a wait-list control.

**Methodology:** We developed a 9-week manualised CBT intervention that aimed to improve depressive symptoms in the context of living with epilepsy. Fifty-nine adults with epilepsy were randomized and 45 (75%) completed post-treatment outcomes. People with lower quality of life, particularly for cognitive functioning, were more likely to drop out. Analyses based on

treatment completers demonstrated significant improvements on the Neurological Depressive Disorders Inventory for Epilepsy ( $p = .045$ ) and Hospital Anxiety Depression Scale-Depression subscale ( $p = .048$ ). Importantly, CBT significantly reduced the likelihood of clinical depressive symptoms ( $p = .014$ ) and suicidal ideation ( $p = .005$ ). Improvements were not observed for anxiety, quality of life or maintained overtime (3 month follow up) for depression.

**Conclusion:** Results suggest that CBT was effective, however, could be improved to increase patient retention and long-term outcomes. Future directions of how this might be achieved, including the role of internet-delivered CBT will be discussed.

**Keywords:** Health psychology, mood; psychopathology; psychotherapy; neurological disorders

## PAPER 2

*Mechanisms of adjustment in young cancer survivors: Autobiographical memory, future imaginings, and the life narrative*

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**Research Aims/Questions:** 'E-health' technologies have significant potential to extend the reach of evidence-based psychological support to vulnerable, isolated populations. For adolescents and young adults (AYAs) with cancer, the time following cancer treatment completion can be a time of psychological vulnerability as they attempt to return to 'normal'. Assisting AYAs to develop adaptive coping skills at this time of transition may prevent later distress. Our team has developed 'ReCaPTure LiFe' (Resilience and Coping skills for young People To Live well Following Cancer), an online intervention for AYAs aged 15-25 years in the first year post-treatment. This national phase II randomised controlled trial (RCT) aimed to establish the feasibility, acceptability, and efficacy

of Recapture Life, relative to an online peer-support group control, and a 12-week waitlist.

**Methodology:** Recapture Life is a manualised program that promotes resilience using cognitive behavioural therapy (CBT) techniques tailored to the AYA cancer experience. It involves six, weekly, small-group sessions, delivered online by a psychologist using innovative video-conferencing technology. To date, 21 AYAs have completed the program from across five states in Australia. Groups have been conducted with participants >4000km apart, across different timezones. Early data indicate improved quality of life ( $p=0.033$ ), and reduced distress ( $p=0.021$ ), anxiety ( $p=0.015$ ), and need for help ( $p=0.024$ ) following the program.

**Conclusion:** Recapture Life is a promising model of support for AYAs across Australia. This talk will examine how CBT can be tailored to the experiences of young people with cancer, and discuss the benefits and challenges of online delivery mechanisms in this context.

**Keywords:** Anxiety, child and youth issues, depression, dissemination, early intervention, health, mental health, rehabilitation, treatment

## PAPER 3

*Psychological mechanisms for improving cognitive function in cancer survivors: A randomised controlled trial*

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<sup>1</sup>Griffith University, Gold Coast, Australia

**Research Aims/Questions:** Several published studies of brief cognitive-behavioural interventions following non central nervous system malignancies have shown improvement in both subjective and objective cognitive functioning. This study aimed to (a) evaluate the previously successful ReCog intervention using a more rigorous research design and (b) further investigate potential psychological mechanisms of intervention effectiveness, namely cognitive self-efficacy and illness perceptions.

**Methodology:** Twenty-nine cancer survivors participated in a waitlist randomised controlled trial of ReCog. Assessments at pre-treatment, post-treatment and 3-month follow-up examined objective and subjective cognitive functioning, quality of life, distress, benefit finding, illness

perceptions, and cognitive self-efficacy. A comparison group of 16 people without a history of cancer, matched to the intervention group for age, sex, and education, also participated. Compared with waitlist and community groups, participating in the intervention was associated with significantly greater improvements in performance on visuospatial/constructional measures, delayed memory, and processing speed. The intervention group also showed significantly greater gains on subjective cognitive function, social quality of life, and cognitive self-efficacy as well as reduced distress. There was some evidence supporting illness perceptions as a mechanism of subjective changes associated with the intervention. Participants were highly satisfied with the intervention.

**Conclusion:** Overall, these results provide support for the efficacy and feasibility of the ReCog group psychological intervention that targets cancer-related cognitive decline. The results also suggest that further attention to psychological mechanisms such as cognitive self-efficacy and illness perceptions could help in maximising effectiveness of psychological interventions with this population.

**Keywords:** Health, rehabilitation, treatment

**Open Paper Session: Health related issues, Orion Room**  
**24<sup>th</sup> October 2014, 14:00 – 15:00**

## PAPER 1

*Three-year follow up of a smoking and healthy lifestyles intervention among people with a psychotic disorder*

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**Research Aims:** The Healthy Lifestyles Project is the first RCT to evaluate a cognitive-behavioural intervention addressing smoking and other health behaviours among people with psychotic disorders.

**Methodology:** Participants were randomly assigned to receive a single face-to-face session consisting of feedback and motivational interviewing and nicotine replacement therapy, plus either: (i) a face-to-face intervention targeting multiple health risk behaviours; or (ii) a predominantly telephone-delivered intervention involving monitoring.

**Results:** At baseline, participants (N=235, Age, M=41.6 years, 59% male) were smoking on average 28.6 (SD= 15.3) cigarettes per day (CPD). CO verified point-prevalence abstinence (last 7 days) was 16% at 15-weeks and 11% at 12-months for the face-to-face condition and 15% and 11% for the telephone condition. By 2-year follow-up, preliminary univariate analyses revealed both conditions had point prevalence abstinence of 14%, but this increased in the face-to-face condition by the three-year follow-up to 18%, while remaining similar in the telephone condition, 13%. Participants in the face-to-face intervention had an increase in minutes per week of walking from baseline to 12-months (M=231.1, SD=373.3; M= 353.1, SD=546.1, respectively), and maintained this increase at 24-months, but reduced their walking by the 36-month follow-up (M=314.88, SD=438.94; M=218.95, SD=296.59, respectively). Those who received the telephone intervention had a decrease from baseline to 12-months (M= 231.9, SD=413.8; M= 209.2, SD=206.6, respectively), p=0.037, which increased slightly at the 24 and 36-month follow-ups (M=256, SD=287.98; M=252.62, 316.04).

**Conclusion:** Face-to-face and telephone-delivered interventions for smoking are feasible and effective among people with severe mental disorders. Interventions for multiple health behaviour change appear worthy of further research among people with psychotic disorders.

**Keywords:** Smoking cessation, psychosis, health behaviour change, CBT

## PAPER 2

*A role for cognitive behavioural therapy in the treatment of vestibular migraine*

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**Research Aims/Questions:** Vestibular migraine (VM), a disorder characterized by true vertigo, disequilibrium or imbalance that is temporally related to migraine phenomena, is currently poorly understood. High rates of psychiatric comorbidity, especially anxiety and depression, have been reported by patients with VM; however, there has been no investigation into how psychological interventions may assist in its treatment. Our study aimed to assess the efficacy of cognitive behavior therapy (CBT) to improve the severity and frequency of dizzy spells, dizziness handicap, psychological functioning, and quality of life in people with vestibular migraine.

**Methodology:** Twelve patients with vestibular migraine referred by a neurootologic clinic completed the manualised intervention, which comprised eight sessions of CBT, administered by a clinical psychologist. Treatment included psychoeducation, interoceptive and in vivo exposure, behavioural experiments, cognitive therapy, and relapse prevention. Outcome measures assessed illness specific disability, quality of life, depression and anxiety, and diagnoses of anxiety and depression pre- and post-intervention. Results showed that those who received treatment reported significant improvements in dizziness handicap ( $p = 0.038$ ), vertigo symptoms ( $p = 0.038$ ), and quality of life ( $p = .029$ ), but no change was evident for the indices of depression and anxiety ( $p > .05$ ). However, while 83% of patients met criteria for at least one anxiety or depressive disorder prior to treatment, only 50% did so following treatment.

**Conclusion:** This is the first study to apply CBT to patients with vestibular migraine and provides preliminary evidence for the benefits of CBT for vestibular migraine patients.

**Keywords:** Vestibular migraine, dizziness, anxiety, depression, cognitive behaviour therapy, treatment

## PAPER 3

*Exploring vulnerability to fear of pain in chronic pain: The role of anxiety sensitivity and distress tolerance*

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**Research Aims/Questions:** The current study aimed to extend the Fear Avoidance Model of chronic pain in an Australian clinical sample by examining the relationships between Anxiety Sensitivity (AS), Distress Tolerance (DT), fear of pain and gender. It was hypothesised that AS and DT would moderate the relationship between pain catastrophising and fear of pain. It was also hypothesised that females experiencing chronic pain would be higher in AS than males, and that males experiencing chronic pain would be lower in DT than females.

**Methodology:** Participants (N = 54) were recruited from the Pain Clinic at the Royal Park Campus of the Royal Melbourne Hospital. Participants completed the Anxiety Sensitivity Index – 3, the Distress Tolerance Scale, the Depression, Anxiety and Stress Scale – 21, the West Haven-Yale Multidimensional Pain Inventory, the Pain Anxiety Symptoms Scale – 20 and the Pain Catastrophising Scale. After controlling for age, pain duration, pain severity, depression, anxiety and stress, hierarchical multiple regression analyses showed that AS moderated the relationship between pain catastrophising and fear of pain, but DT did not. Independent samples t-tests showed that females and males did not differ significantly in measures of AS and DT.

**Conclusion:** Current results establish the role of AS in moderating the relationship between pain catastrophising and fear of pain in an Australian chronic pain sample. These results appear to show that AS is an important variable for those experiencing chronic pain. Further research to

replicate these results in a larger and gender balanced sample are needed.

**Keywords:** Pain, health, anxiety

**Open Paper Session: Children and Adolescents, Pleiades Room**

**24<sup>th</sup> October 2014, 15:45 – 17:00**

**PAPER 1**

*The relation between parents' explanatory beliefs for childhood depression and their stigma, prognostic pessimism, and help-seeking*

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<sup>1</sup>The University of Western Australia

**Research Aims/Questions:** Biogenetic explanations for depression (e.g., genetic inheritance, chemical imbalance) are thought to decrease stigma. Research shows that although these decrease blame, they also increase perceived dangerousness, discrimination, and prognostic pessimism (expected symptom duration, perceived ineffectiveness of psychotherapy). Alternatively, psychosocial explanations (e.g., significant life event, general stress) increase help-seeking. However, these issues have only been investigated for adult—not childhood—depression. This study investigated whether parents' biogenetic and psychosocial explanations for depression are associated with their stigma towards, prognostic pessimism about, and help-seeking for children with depression.

**Methodology:** Parents (n=128) completed a survey about children with depression. They rated their biogenetic and psychosocial explanatory beliefs about childhood depression, as well as the following dependent variables: blame, perceived dangerousness, discrimination toward, prognostic pessimism, and likelihood of help-seeking.

**Conclusion:** Hierarchical multiple regression analyses with personal experience of depression in step one and biogenetic and psychosocial explanatory beliefs in step two were conducted. More biogenetic explanatory beliefs predicted longer expected symptom duration ( $R^2=.11$ ,  $F(6, 121)=2.39$ ,  $p<.05$ ;  $B=.05$ ,  $p<.01$ ). Greater psychosocial explanatory beliefs predicted less discrimination ( $R^2=.07$ ,  $F(3, 122)=3.15$ ,  $p<.05$ ;  $B=.25$ ,  $p<.05$ ), increased perceived effectiveness of

psychotherapy ( $R^2=.07$ ,  $F(3, 124)=2.96$ ,  $p<.05$ ;  $B=.05$ ,  $p<.05$ ) and increased likelihood of parents seeking help from friends ( $R^2=.10$ ,  $F(4, 116)=3.07$ ,  $p<.05$ ;  $B=.12$ ,  $p<.05$ ). Neither biogenetic nor psychosocial explanatory beliefs were related to blame or perceived dangerousness. This differs from previous literature on adults with depression. The theoretical and practical implications of these findings will be discussed.

**Keywords:** Child and youth issues, depression, treatment

**PAPER 2**

*Assessing the efficacy and social validity of a manualised, family-based group Cognitive Behavioural Therapy for adolescents with high-functioning autism and comorbid anxiety disorder*

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**Research Aims/Questions:** The aim of this study was to investigate the efficacy of a manualised group-based cognitive behavioural therapy intervention (CBT) for adolescents with high functioning autism spectrum disorder (HFASD), and co-occurring anxiety disorder/s (AD), using a randomized controlled trial. It was hypothesized that compared to participants in the wait-list condition, lower levels of anxiety, improved social functioning, and greater family quality of life would be reported by adolescents and/or parents in the CBT condition upon completion of the study.

**Methodology:** Employing an adaptation of the 'Cool Kids' ASD anxiety program (Chalfant, Lyneham, Carroll, & Rapee, 2010), 44 participants (12-18 years) were randomly assigned to either a waiting list (WL) or intervention group condition. Adolescents in the intervention group attended 12 CBT sessions while one of their primary caregivers participated in concurrent psychoeducation sessions. A combination of self-report and parent measures of anxiety, social functioning and family quality of life were taken at pre-and-post treatment for both the treatment and waitlist groups, and at 6-month follow-up for the intervention group. Multi-level mixed effects linear regression (MLM) was employed for assessing the efficacy of treatment, and qualitative methodology determined the social validity of treatment.

**Conclusion:** Results will be presented in terms of (i) reduction of anxiety and depressive symptoms, and increases in social functioning and family quality of life from pre-test to post-test and 6-month follow-up for the intervention group; and (ii) the social validity of the intervention to the participants. Limitations of the study and recommendations will be discussed.

**Keywords:** Anxiety, behavioural problems, Child and youth issues, comorbidity, mental health, treatment

### PAPER 3

*Teens that fear screams: A comparison of fear conditioning, extinction, and reinstatement in adolescents and adults*

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**Research Aims/Questions:** Most laboratory-based studies of fear conditioning and extinction are conducted in adults, with little known about these processes during adolescence. This is surprising given the majority of anxiety disorders emerge during adolescence, and preclinical studies indicate a unique adolescent profile of fear learning and inhibition. Therefore, the current study investigated differences between adolescents and adults on fear conditioning, extinction, and reinstatement (the recovery of conditioned fear following exposure to the unconditioned stimulus [US] post-extinction) using the *Screaming Lady* procedure. The impacts of symptoms of depression, anxiety, and stress, were also examined.

**Methodology:** Adolescents and parents completed questionnaires assessing mood and stress, and then underwent a differential conditioning procedure where one neutral face (CS+) was followed by the same face expressing fear and a scream (US) while a second neutral face (CS-) remained neutral. Extinction involved non-reinforced presentations of both CSs, after which half the participants were reinstated (2xUSs) or not. Eye-tracking data and self-report ratings (i.e., "like", "scary", and "outcome expectancy") were collected immediately after each phase.

**Conclusion:** Adolescents showed stronger conditioning as indicated by self-report ratings and eye-tracking measures, and greater stimulus generalisation (attributing danger to the CS-), than adults. Both age groups showed good extinction learning and reinstatement-induced relapse, with no age differences observed. Within the adolescent group only, greater depression scores on the DASS predicted stronger conditioning and weaker extinction. These findings will be discussed in terms of broader implications for the aetiology, maintenance, and treatment of anxiety in adolescence.

**Keywords:** Adolescence, Anxiety, Conditioning, Extinction.

### PAPER 4

*The Depression Anxiety Stress Scales for Youth (DASS-Y): Overview and recommendations for clinical practice*

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<sup>2</sup>The University of New South Wales, Sydney, Australia

**Research Aims/Questions:** The Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 1995) is one of the most widely used measures of negative affect in adults. In a series of studies, we developed a similar measure to assess anxiety, depression and stress in 8-18-year-old children and adolescents. Guided by the item content of the adult DASS, our main aims were to identify the core symptoms of depression, anxiety and stress in youth, and to establish the youngest age at which these three emotional states are distinguishable from each other via self-report.

**Methodology:** A series of exploratory and confirmatory factor analytic studies was conducted with a combined sample size of more than 4000 primary and high school students. Alternative sets of draft items were tested in successive samples. Multigroup Confirmatory Factor Analyses were used to identify any age-related differences. This strategy allowed us to determine the set of items that perform 'best' across the whole target age range. Correlational analyses assessed the relationships between Depression, Anxiety and

Stress, as measured by the DASS-Y, and related measures in different age groups. Severity cut-offs were established based on z scores, to provide severity ratings similar to those available for the adult DASS.

**Conclusion:** The Depression Anxiety Stress Scales for Youth (DASS-Y) may prove to be a valuable new instrument in assessing self-reported negative affect in 8-18-year-olds in research and clinical practice. An internet portal is being developed to facilitate use and interpretation by clinicians.

**Keywords:** Child and youth issues; Anxiety; Depression; Assessment

**Open Paper Session: Understanding Clinical Issues, Orion Room**  
**24<sup>th</sup> October 2014, 15:45 – 17:00**

**PAPER 1**

*Does cognitive reactivity to sad mood increase with each depressive episode experienced?*

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**Research Aims/Questions:** Risk of depression recurrence is positively associated with the number of major depressive episodes (MDE) that an individual has previously experienced. The Differential Activation Hypothesis (DAH; Teasdale, 1988) proposes that with each MDE, the extent to which low mood reactivates depressogenic patterns of thinking (i.e., cognitive reactivity) increases, thus increasing the likelihood that transient low mood will persist and intensify into clinical depression. While the DAH is a widely cited cognitive account of previously depressed individuals' increasing vulnerability to depression, predictions about the relationship between the number of prior MDE and cognitive reactivity are yet to be directly tested.

**Methodology:** Participants were administered a structured clinical interview to determine whether they had experienced any previous MDEs, and if so, how many. Recovered (n = 66) and never-depressed (n = 108) participants also completed self-report measures that indexed cognitive reactivity, depressive rumination, and attributional style for negative events.

**Conclusion:** Consistent with previous findings, preliminary data suggest that recovered individuals are more likely to engage in unhelpful thinking and behaviour when sad compared to never-depressed controls. However, counter to the predictions of the DAH, we found no evidence that the extent of self-reported cognitive reactivity increased with the number of MDE previously experienced. We are currently investigating whether shifts in the endorsement of dysfunctional attitudes from pre- to post-sad mood induction are associated with the number of MDE previously experienced, and exploring whether cognitive control ability plays a role in suppressing or concealing depressogenic thinking.

**Keywords:** Cognitive Reactivity, Depression, Recurrence

**PAPER 2**

*Associations between avoidance and autobiographical memory specificity*

T. Ganly<sup>1</sup>, K. Salmon<sup>1</sup>, J. McDowall<sup>1</sup>

<sup>1</sup>Victoria University of Wellington, Wellington, New Zealand

**Research Aims/Questions:** Overgeneral memory is a reduction in the specificity of autobiographical memory. It occurs in depression and is characterised by a tendency to recall categoric memories (e.g., "When I used to go to the beach") rather than specific memories (e.g., "Last Saturday at the beach"). Previous research suggests remembering in this way forms part of an avoidant coping repertoire and that it serves an affect-regulation function, helping some individuals avoid painful specific memories. Often used in this field is the Autobiographical Memory Test (AMT) in which participants are instructed to recall specific memories in response to cue words. The present study examined the relationship between specificity of autobiographical memory and avoidance in young adults. The research aims were: (1) replicate and extend previous research that showed that individuals higher on avoidance retrieved fewer specific memories on the AMT, and (2) test if avoidance was associated with reductions in performance on the AMT-Reversed (AMT-R), in which participants are instructed to report categoric memories.

**Methodology:** Undergraduate students ( $N = 81$ ) completed the AMT and the AMT-R. They also completed self-report measures of cognitive and behavioural avoidance.

**Conclusion:** There was no association between avoidance and indices of interest on the AMT-R, indicating that individuals high on avoidance do not avoid categoric memories. Inconsistent with previous literature, higher levels of self-reported avoidance was associated with reporting fewer numbers of categoric memories on the AMT. Overall, results did not support the affect-regulation account of overgeneral memory.

**Keywords:** Avoidance, depression, autobiographical memory specificity, overgeneral memory

### PAPER 3

#### *Shame, mindfulness and self-compassion: Empirical relationships in non-clinical and clinical settings*

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<sup>2</sup>University of South Australia, Adelaide, Australia

**Research Aims/Questions:** The tendency to experience shame or guilt is associated differentially with anxiety, depression and substance abuse, with shame being associated with greater psychopathology. Recent interventions designed to decrease shame in order to address mental disorders emphasize mindfulness or self-compassion. In addition, there is evidence that the therapeutic effects of Mindfulness-Based Cognitive Therapy (MBCT) are mediated by self-compassion. Relationships between dispositional shame, mindfulness and self-compassion were explored in two studies: a correlational study with non-clinical participants and an intervention study with participants who experienced depression or anxiety.

**Methodology:** The first study investigated correlational relationships of shame-proneness and guilt-proneness with mindfulness and self-compassion in undergraduate participants. Shame-proneness but not guilt-proneness was negatively correlated with multiple facets of mindfulness and with self-compassion.

Hierarchical regression analysis showed that shame-proneness was predicted by self-compassion but not by mindfulness. In addition, more frequent meditation was associated with lower shame-proneness and there was evidence that self-compassion mediated this relationship. In the second study, dispositional shame, self-compassion, depression and anxiety were measured in participants who attended an 8-week Mindfulness-Based Cognitive Therapy group. Changes in shame, self-compassion, depression and anxiety following MBCT training and implications for addressing dispositional shame will be discussed.

**Conclusion:** Mindfulness meditation approaches increase self-compassion and may be helpful in reducing dispositional shame, which is linked to anxiety and depression. Further studies of the relationship of mindfulness meditation to shame in non-clinical populations and of the effects of mindfulness interventions on shame in clinical populations are warranted.

**Keywords:** Anxiety, depression, mental health, treatment

## **POSTER PRESENTATIONS**

Prince Regent Room, 15:00 – 15:45

### **POSTER 1**

*Modifying cognitive biases in OCD: Comparing control conditions*

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<sup>1</sup>School of Psychology, The University of New South Wales, Sydney, NSW, Australia

**Research Aims/Questions:** Previous studies investigating the effect of cognitive bias modification (CBM) in modifying beliefs has found mixed effects for control conditions. The conventional half positive/half negative control condition may unintentionally positively or negatively alter the interpretation bias for some participants, and research investigating effective control conditions is warranted. The following pilot study aimed to address this by directly comparing a positive training condition with three alternative control conditions for a training procedure designed to train adaptive beliefs related to compulsive checking.

**Methodology:** Before and after CBM training, participants completed a number of self-report questionnaires and a recognition test of ambiguous scenarios to measure interpretive bias. Participants were randomly assigned to one of four CBM conditions: positive (100% positive scenarios), half positive/half negative (50% positive/50% negative scenarios), neutral ending (scenarios ended with a neutral resolution), or no resolution (scenarios remained ambiguous).

**Conclusion:** Preliminary data showed that while the positive training had the largest positive effect on adaptive interpretive biases related to compulsive checking, the next largest effect was found for the half positive/half negative training. Both the neutral ending and no resolution conditions had minimal effects on cognitive biases compared to baseline ratings. These results along with methodological considerations suggest that a neutral ending condition would be optimal in future CBM research. Challenges for developing training items with neutral endings as well as future directions will be discussed.

**Keywords:** Anxiety, Assessment, Treatment, Dissemination

## **POSTER 2**

*Psychological information as a tool for reducing the incidence of child sexual abuse*

M. Cicchini<sup>1</sup>

<sup>1</sup>Clinical Psychologist in Independent practice, Perth, Western Australia

**Research Aims/Questions:** Child sexual abuse is a destructive behaviour with adverse and sometimes catastrophic consequences on the victim and their families. Abusers can be siblings, other children, adolescents and adults. What can psychology offer to promote prevention? This presentation reports on an innovative preventative project in Western Australia - a printed booklet & online resource

[www.preventingchildsexualabuse.org](http://www.preventingchildsexualabuse.org) – developed with the goal of reducing the incidence of children being sexually abused by adults.

**Methodology:** The project builds on previous efforts by addressing both long-term child-rearing practices and shorter-term interventions to reduce risk. Information is presented about the developmental causes of child sexual abuse, and the risk factors (stresses) which can increase the likelihood of predisposed adults engaging in inappropriate sexual activity with children. It advocates the use of psychological treatment to break the intergenerational cycle of child sexual abuse. A unique feature is that the resources encourage adults in the community to identify the risk factors in themselves that could contribute to offending, and to seek professional help to reduce their risk to children.

**Conclusion:** Psychologists with expertise in the field have praised the comprehensive and balanced nature of the information presented, as have members of the community, including former childhood victims.

**Keywords:** Behavioural problems, early intervention, mental health, treatment

## POSTER 3

*Therapist predictors of working alliance and therapeutic outcome when treating children's mental health problems*

K. M. Dyason<sup>1</sup>, D. C. Shanley<sup>1</sup>, S. Morrissey<sup>1</sup>, M. J. Zimmer-Gembek<sup>1</sup>

<sup>1</sup>Griffith University, Gold Coast, Australia

**Research Aims/Questions:** Therapist factors, such as low coldness, low detachment, low hostility, high comfort with closeness and good social support, have been demonstrated in adult therapy to be predictive of a good therapeutic alliance and good therapeutic alliances are predictive of better therapeutic outcomes. No studies have explored the effect of therapist variables on working alliance and therapeutic outcomes in a child population. The present study explored predictors of outcome and working alliance, particularly therapist predictors, in a sample of children with behavioural and emotional problems.

**Methodology:** Preliminary analyses have been conducted using 52 children aged 4-17 ( $M = 9.37$ ;  $SD = 3.59$ ) seeking therapy at two university training clinics, and 23 therapists ( $M = 29.91$ ;  $SD = 10.24$ ) who treated these clients.

**Conclusion:** Overall, therapy was effective. Twenty-nine percent of the variance in outcome was predicted by problem severity, where more severe problems resulted in a better outcome. Therapist warmth (low coldness) and comfort with closeness explained a significant 32% of the variance in working alliance. These factors did not predict outcome when entered alone in a hierarchical regression, but interestingly, once working alliance was controlled, therapist warmth, comfort with closeness, and social support predicted therapeutic outcome. Therefore, working alliance may act as a moderator between therapist factors and outcome. Results from a larger sample will be presented. These preliminary results highlight how therapist characteristics may influence working alliance and therapy outcomes in a child sample, which may be different to the characteristics that are important in adult therapy.

**Keywords:** Clinical Sample, Therapeutic Outcome, Therapist Characteristics, Working Alliance, Child Therapy

## POSTER 4

*Cognitive-behavioural therapies for depression in Asian populations. A literature review and proposed guidelines*

A. V. Farcas<sup>1</sup>, P. McEvoy<sup>1</sup>, R. Rooney<sup>1</sup>

Curtin University, Perth, Australia

**Research Aims/Questions:** The first aim of the present paper is to review the effectiveness of cognitive therapy, mindfulness and acceptance and commitment therapy for depression in Asian populations. The second aim is to review evidence within Asian migrants in particular.

**Methodology:** A literature search was conducted in the following databases: PsycINFO, Medline and EBSCO. A selection of published articles was made from 1998 to 2014 using the terms "cognitive behavioural therapy", "cognitive therapy", "mindfulness-based cognitive therapy" and "acceptance and commitment therapy". The inclusion criteria include randomized controlled trials, systematic reviews, narrative reviews and case studies. The exclusion criteria refer to studies conducted for children and adolescents and comorbidities with other mental disorders. Data were collected on the number of the participants, the mean age, gender, ethnic characteristics, intervention (duration, format, techniques, follow-up). Randomized controlled trials with more than 20 % of Asian participants including Chinese, Japanese, Indian, Korean, Vietnamese and Malaysian people, were investigated further. Studies investigating communication style in Eastern countries, coping mechanisms, cultural beliefs and values, spirituality, and case studies which explored an adapted version of CBT for Asian groups were also analyzed.

**Conclusion:** CBT has a strong evidence base for depression (Butler, Chapman, Forman & Beck, 2006; Driessen & Hollon, 2010; O'Neal, Jackson & McDermott, 2014). Hence, adapting CBT to the Asian populations holds great promises (Hay, 2009), although cultural factors need to be considered. Implications of the findings and recommendations for further research are discussed.

**Keywords:** depression, treatment, cognitive behavioural therapies, cultural competence

## POSTER 5

*Australian undergraduate alcohol use: Is co-consumption of energy drinks associated with more acute problems?*

A. Henry<sup>1</sup>, M. Norberg<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

**Research Aims/Questions:** This study seeks to examine if co-consumption of alcohol mixed with energy drinks (AmEDs) is associated with more acute risks than consuming alcohol alone by 1) examining alcohol-related consequences (ARCs) among those who do and do not drink AmEDs 2) examining ARCs during non-AmED and AmED sessions among AmED users 3) and examining the actual and relative risk of ARCs for each type of drinking occasion by reporting absolute values, and episodic averages. Importantly, non-energy drink caffeine also will be assessed to gauge whether these issues are specific to AmED use, or all caffeinated beverages.

**Methodology:** Alcohol use, ARCs, drug use, estimated BAC, caffeinated-beverage use, and motives data are collected in person via a modified Timeline Followback (mTLFB). The application of a mTLFB allows for collection of event-level data, thereby providing a more comprehensive assessment than most existing research, which has relied upon gathering summary information from participants.

**Conclusion:** Since March, data have been collected from 72 (22% male;  $M_{age}=19.1$ ) undergraduate participants. 37 (51.4%) participants have reported consuming AmEDs over the past 90 days. 33 (89.1%) AmED users have reported also engaging in alcohol-only drinking occasions. Based on this recruitment rate, we expect to enrol 120 participants by September in order to detect medium effect size differences with 80% power and alpha set at the 5% level (two-tailed) for between-groups analyses. Results will be evaluated with effect sizes and confidence intervals. Our results will determine if harm-reduction messages for university students may need to target AmED use.

**Keywords:** Alcohol, alcohol-related problems, caffeine, energy drink

## POSTER 6

*The consequences of abstract recall of a happy memory in depression*

K. Hetherington<sup>1</sup>, M.L. Moulds<sup>1</sup>

<sup>1</sup>University of New South Wales, Sydney, Australia

**Research Aims/Questions:** The capacity to repair sad mood through the deliberate recall of happy memories has been found to be impaired in depressed individuals. There is some preliminary support for the hypothesis that this may be the consequence of adopting an abstract processing mode during happy memory recall resulting in a dampening of the memories positive affective impact. These findings highlight the importance of understanding the consequences of recalling happy autobiographical memories in either an abstract or concrete way.

**Methodology:** We examined the impact of abstract and concrete recall of a happy autobiographical memory on memory features (including vividness, distancing) as well as affect. Currently depressed and never depressed participants were instructed to recall a happy memory and then focus on their memory in either an abstract or concrete way, or engage in distraction.

**Conclusion:** Contrary to our hypotheses, focusing on a happy memory in either an abstract or concrete way did not have differential consequences for memory features or affect. Further, we observed no interaction between the processing mode adopted and depression status. Implications for memory as a clinical target in depression will be considered.

**Keywords:** Processing Mode, Memory, Memory features, Depression, Rumination

## POSTER 7

*Responses to positive affect in dysphoria: an experimental investigation*

K. Hetherington<sup>1</sup>, M.L. Moulds<sup>1</sup>

<sup>1</sup>University of New South Wales, Sydney, Australia

**Research Aims/Questions:** Recent research suggests that the way in which individuals respond

to positive affect could play an important role in the development and maintenance of dysphoria and depression. To date, no published studies have examined whether people's self-reported responses to positive affect have consequences for the affective impact of a positive event. The current study examined the potential mechanisms of dampening, emotion focused positive rumination, and self-focused positive rumination (as measured using the Responses to Positive Affect questionnaire) in a non-clinical sample.

**Methodology:** In a non-clinical sample we examined whether self-reported responses to positive affect (i) varied with level of dysphoria, and (ii) had consequences for the affective impact of an experimentally manipulated positive experience.

**Conclusion:** Results indicated that dysphoria was positively associated with dampening and negatively associated with both self-focused and emotion focused positive rumination. The tendency to engage in self-focused positive rumination in response to positive affect was associated with greater increase in positive affect immediately following a positive experience. Follow-up analyses suggested this association was driven by low and mid dysphoric participants, as it was not observed for high dysphoric participants. These preliminary results suggest that self-focus in response to positive affect may have some adaptive consequences for the immediate affective impact of a positive experience, but not for dysphoric individuals. Future research directions and potential clinical implications will be considered.

**Keywords:** Response to Positive Affect, Dampening, Positive rumination, Dysphoria

## POSTER 8

*The impact of victims' responses to bullying on the attitudes and behaviours of peer bystanders*

N. Sokol<sup>1</sup>, K. Bussey<sup>1</sup>, R. Rapee<sup>1</sup>

<sup>1</sup>Macquarie University, Sydney, Australia

**Research Aims/Questions:** School bullying is increasingly being recognised as a group phenomenon, which affects and is affected by bullies, victims, and bystanders alike. Through their attitudes towards victims and behaviours,

peer bystanders have the potential to influence bullying situations and to reduce the negative consequences experienced by victims. While various individual and situational factors have been found to influence peer bystander attitudes and reactions, the effect of the victim's response to bullying has yet to be clarified. This study aimed to examine how different victim responses influence peer liking and bystanders' behavioural intentions when witnessing physical and verbal bullying.

**Methodology:** Australian fifth- and seventh-grade students ( $M_{age} = 11.13$  and  $13.18$  years, respectively;  $N=206$ ; predominantly Caucasian) completed online questionnaires about hypothetical videotaped bullying scenarios in which the victims' responses (angry, sad, confident, ignoring) were experimentally manipulated.

**Conclusion:** Peer liking was found to be the lowest for angry victims, especially among females. Bystanders were most likely to tell teachers about incidents involving sad victims and were least likely to report incidents involving confident victims. Seventh graders also showed greater intentions to defend passive victims (sad and ignoring) compared to active victims (angry and confident).

These findings suggest that the victim's emotional and behavioural response to bullying is a salient situational factor affecting peer bystanders' attitudes and behaviours.

This research informs our understanding of peer relationship processes in late childhood and early adolescence and assists in the development of improved cognitive-behavioural interventions aimed at victims of bullying and the broader peer group.

**Keywords:** victim response, bullying, bystander, peer

## POSTER 9

### *Who's to blame? Attributions in child sexual abuse*

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<sup>1</sup>University of Western Australia, Western Australia, Australia

<sup>2</sup>James Cook University, Queensland, Australia

**Research Aims/Questions:** Attributions of blame relating to child sexual abuse (CSA) may be associated with community attitudes toward different types of perpetrators and thus influence reporting behavior. In a forensic context, views about blame might affect decision-making processes of jurors and judges and influence victims' interactions with legal and mental health professionals. An improved understanding of any existing stereotypes concerning blame may be valuable in forensic and mental health settings.

**Methodology:** Undergraduates (n=162) evaluated one of eight experimental vignettes describing a case of CSA. In a 2 x 2 x 2 between-subjects design, victim-perpetrator gender and victim-perpetrator relationship (parent or non-parent) were varied. Participants rated blame attributable to the victim, perpetrator, victim's family and society more generally. The degree to which prevention was thought possible, level of perceived abusiveness, acceptability of the act and individualism/collectivism attitudes were measured.

**Conclusion:** Male perpetrators were blamed more and considered stronger candidates for CSA prevention than female perpetrators. Victim's families were attributed higher blame and prevention capability when CSA occurred within the family. Perpetrators were assigned more blame in different-sex than same-sex cases. Higher collectivism scores were associated with a higher perceived ability for the rest of the victim's family to prevent CSA. The finding that blame varied according to characteristics of the perpetrator, intrafamilial or extrafamilial CSA, and homosexual versus heterosexual interactions suggest that participants hold certain stereotypes regarding CSA. Individualism and collectivism attitudes could help us understand and predict some of these stereotypes.

**Keywords:** Child and youth issues, Anxiety, Formulation

## POSTER 10

### *The metacognitive model of anxiety in young children: Towards a reliable and valid measure*

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**Research Aims/Questions:** Anxiety disorders are the most commonly diagnosed mental illnesses amongst children, however the contributing beliefs and cognitive processes are not well understood. The metacognitive model proposes that GAD and OCD may be triggered and maintained by an individual's dysfunctional beliefs about their worrying thoughts. Recent research has extended this theory to childhood anxiety, however the results have been confounded by poor comprehension of the Metacognitions Questionnaire for Children (MCQ-C) amongst 7-8 year olds. The aim of this study was therefore to improve comprehension of the MCQ-C, to enable reliable and valid evaluation of the metacognitive model of anxiety in young children.

**Methodology:** Poorly comprehended items of the MCQ-C were revised to a Grade 2 reading level. Following a pilot study with 7-8 year olds, 187 children aged 7-12 years completed an online version of the revised MCQ-C (MCQ-CR) and self-report measures of anxiety symptoms, excessive worry and externalising thoughts.

**Conclusion:** The MCQ-CR was well understood by children as young as 7 years and exhibited sound psychometric properties. Confirmatory factor analysis broadly supported the construct validity of the scale, but raised questions about the relevance of positive beliefs about worry amongst this age group. As predicted, children's negative beliefs about their worry, thoughts in general and memories were found to be significantly positively related to symptoms of anxiety disorders. These results provide support for the integral role played by metacognitions in childhood anxiety disorders, and suggest that these mechanisms may be appropriate targets for future treatment programs.

**Keywords:** Childhood anxiety; metacognitions; psychometrics.

## POSTER 11

*A preliminary examination of the prevalence and clinical features of primary tokophobia in a university sample*

A. Moody<sup>1</sup>, B. Wootton<sup>1</sup>, E. Davis<sup>2</sup>

<sup>1</sup>University of Tasmania, Hobart, Australia

<sup>2</sup>Anxiety Disorders Center, Institute of Living, Hartford, CT, USA

**Research Aims/Questions:** Tokophobia is characterised by a significant fear of pregnancy and childbirth. It is estimated that 9.1% of pregnant women meet the cut-off criteria for tokophobia, however the prevalence in women who have never been pregnant is currently unknown. An additional limitation of the literature is that prevalence data that has been published to date is based on self-report questionnaires and unstructured interviews. The aim of this study was to improve our understanding of the prevalence and clinical features of tokophobia in a more representative sample, using a structured diagnostic interview, in addition to self-report measures.

**Methodology:** This study is an exploratory investigation of the prevalence and clinical features of tokophobia using 100 female first-year psychology students from the University of Tasmania. Participants were assessed for tokophobia according to the specific phobia section of the Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders (DIAMOND), a structured diagnostic interview that assesses DSM-5 criteria for a variety of mental health conditions. Self-report measures include the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ), Tokophobia Severity Scale (TSS), Patient Health Questionnaire-9-item (PHQ-9), Overall Anxiety Severity and Impairment Scale (OASIS) and Intolerance of Uncertainty Scale (IUS).

**Conclusion:** Preliminary analysis of data indicates that the prevalence of tokophobia in a college sample is high (approximately 13%), however data collection is ongoing (expected completion August, 2014). This study has important implications for improving our understanding of the prevalence and clinical features of tokophobia, an understudied clinical condition.

**Keywords:** Tokophobia, anxiety

## POSTER 12

*The Depressive Symptoms Scale (DSS): A preliminary psychometric analysis*

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**Research Aims/Questions:** The aim of the study is to assess the initial psychometric properties of a new self-report measure of depressive symptoms, the Depressive Symptoms Scale (DSS). The DSS proposes to measure symptoms of depression across three domains (cognitive, behavioural and somatic/physiological) within a 12-item self-report questionnaire. The DSS aims to address limitations of existing measures of depressive symptoms, which do not provide subscale scores of each domain of depression. As such, clinicians seeking to monitor their clients' progress in each domain, or researchers seeking to understand the mechanisms of treatment change, must currently use multiple measures. As the DSS provides subscale scores for cognitive, behavioural and somatic symptoms, it has the potential to benefit both clinicians and researchers who work in the field of internalising disorders.

**Methodology:** Participants will include 300 first year psychology students. The factor structure of the DSS will be explored with both exploratory and confirmatory factor analysis. The convergent validity will be assessed by correlating scores on the DSS with the Patient Health Questionnaire (9 item) and depression subscale of the Depression Anxiety Stress Scale. Divergent validity will be assessed by correlating scores on the DSS with the Obsessive-Compulsive Inventory-Revised. Reliability will be assessed by investigating the internal consistency of the scale, as well as correlations between two administrations of the DSS (test-retest reliability). Data collection is underway and initial analyses (on 102 participants) are promising.

**Conclusion:** The DSS could serve as a useful tool in clinical practice and research into depression.

**Keywords:** Depression, assessment

## POSTER 13

### *Parenting characteristics of parents of primary school children in Singapore*

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<sup>1</sup>Khoo Teck Puat Hospital, Singapore

<sup>2</sup>Ministry of Social and Family Development, Singapore

**Research Aims/Questions:** At present, literature on the parenting attributes of Singapore parents is very much lacking. In addition, clinicians use questionnaires developed in Western countries with children and families, which may not be entirely applicable and relevant to the Singapore population. This study aims to gather information to better understand parenting characteristics of local parents while validating three parenting questionnaires for use in Singapore.

**Methodology:** 298 parents of primary school children completed a battery of questionnaires which included; the modified Parent Behaviour Inventory (PBI; Weis & Toolis, 2010), the parent version of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), and the Parenting Stress Index, 4<sup>th</sup> Edition Short Form (PSI-4-SF; Abidin, 2012).

**Conclusion:** Singapore parents display less warm parenting behaviors and are more controlling compared to American parents. Local parents perceived boys to be more difficult compared to girls. Living with extended family was found to contribute to parenting stress in comparison to intact nuclear family households. Other parenting information and trends unique to the local parent sample were also found. Results are discussed in the context of the local culture. Exploratory Factor Analyses done supported the factor structure of all three scales. While the subscales of PBI and PSI-4-SF can be used to measure various parenting constructs, it is recommended that the SDQ should be used in its entirety as a total score. As all three questionnaires were found to be valid for local use, subsequent research with larger samples will help with the determination of local norms

**Keywords:** Child and youth issues, mental health

## POSTER 14

### *Can Japanese parents accurately report the sleep habits and sleep-related symptoms of their junior high school children? : A multi-site questionnaire survey*

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**Research Aims/Questions:** In Japan, it has been regarded important to ask parents about their children's sleep habits and sleep-related symptoms when assessing children's sleep problems. However, no research has examined the parents' suitability as informants in the assessment of children's sleep habits and sleep-related symptoms. The aim of this study is to examine the extent to which Japanese parents can accurately report their children's sleep-related information.

**Methodology:** A set of 3,002 junior high school students and their parents from 18 sites in Japan completed the Japanese Sleep Questionnaire for Junior High School Students. The survey consists of self- and parent-report questionnaires for assessing sleep habits: wake-up/bedtime, TV viewing, etc. and sleep-related symptoms such as obstructive sleep apnea syndrome, parasomnias, restless legs syndrome, etc. Parents' and children's scores were compared using paired t-tests. Regression analyses were conducted to examine the associations between parents' evaluation on their children's sleep health and children's subjective sleep symptoms subscales.

**Conclusion:** Children reported that they go to bed later and sleep less than parents reported. ANOVA revealed that the discrepancy between parents'

and children's report of children's sleep habits was significant and increased as their grade goes up. The association between parents' evaluation about their children's sleep health and children's subjective sleep symptoms was significant but weak ( $\beta = -.11$ ,  $p < .001$ ). Our findings suggest that it would be better to ask the child directly or to use a self-report questionnaire since the parent's report is not always accurate.

**Keywords:** sleep problems, youth issues, assessment