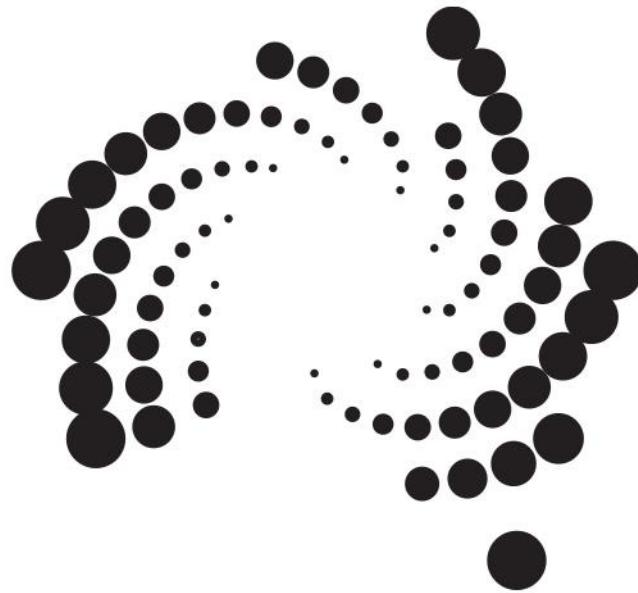


# **41st NATIONAL CONFERENCE OF THE AUSTRALIAN ASSOCIATION FOR COGNITIVE AND BEHAVIOUR THERAPY**

**“RECOVERY AND RECONNECTION”**

## **ABSTRACT HANDBOOK**

28-30 October 2021 (Virtual & Fremantle, Western Australia)



# **AACBT**

**AUSTRALIAN ASSOCIATION  
FOR COGNITIVE AND  
BEHAVIOUR THERAPY**

## Contents

<b>Keynote Speaker .....</b>	<b>9</b>
Professor Christine Padesky .....	9
Virtual Keynote: “Action and dialogue in psychotherapy: dance of equals” .....	9
Virtual Masterclass: “More walk, less talk: action-packed CBT” .....	9
<b>Invited Speakers.....</b>	<b>10</b>
Professor Jennie Hudson.....	10
Master Clinician Session “Using exposure treatment effectively in the treatment of anxiety in children and young people” .....	10
Plenary address “Improving psychological treatments for children with anxiety disorders” .....	10
Associate Professor Brett Deacon .....	10
“Insights from my transition from academia to real-world practice: reflections on a failed paradigm of care and proposed solutions” .....	10
Professor Penelope Hasking.....	11
“A person-centred and strengths-based approach to non-suicidal self-injury”	11
Dr Bronwyn Raykos .....	12
“Cognitive behavioural therapy for eating disorders (CBT-ED): status, innovations, and implications for the therapy room” .....	12
Dr Georgie Paulik-White .....	12
“Imagery-rescripting for trauma affected voice hearers” .....	12
Professor Nick Titov .....	13
“Lessons in delivering digital mental health services: things we wished we knew before we started” .....	13
<b>2021 National Award Winners .....</b>	<b>14</b>
AACBT Early Career Award.....	14
Dr Cele Richardson .....	14
AACBT Mid-career Award Interview .....	14
Associate Professor Genevieve Dingle .....	14
AACBT Distinguished Career Award Interview .....	14
Professor Peter McEvoy.....	14
<b>Workshops.....</b>	<b>15</b>
Scientia Professor Richard Bryant .....	15
Treating trauma in high-risk populations.....	15
Dr Melissa Ree .....	15
CBT-Insomnia: why is it important? What is it? How do I do it? .....	15

Dr Georgie Paulik-White .....	16
Treating trauma using Imagery-rescripting in individuals who hear voices of have psychosis.....	16
Dr Clair Lawson & Mr Paul Jeffery .....	16
Operating effectively as a psychologist in a private practice setting.....	16
<b>Symposiums .....</b>	<b>17</b>
Symposium 01: Transdiagnostic treatment for depression & anxiety.....	17
Symposium 02: The good, the bad and the ugly: The psychosocial impacts of COVID-19 on children, adolescents, and families in Australia .....	23
Symposium 03: The role of interpretation bias in chronic health conditions .....	29
Symposium 04: Biased expectancies in anxiety and depression .....	35
Symposium 05: Perinatal OCD: Prevention, treatment, and management .....	41
Symposium 06: Group CBT for social anxiety disorder: outcomes and mechanisms of change .....	48
Symposium 07: Understanding loneliness and improving social connectedness..	53
Symposium 08: Predictors of individual differences in recovery from adversity ....	60
Symposium 09: Death anxiety in anxiety-related conditions .....	67
Symposium 10: The role of cognitive processes in unhealthy patterns of consumption.....	72
Symposium 11: Exposure therapy: diverse clinical applications and novel delivery methods .....	79
Symposium 12: Loneliness – theory and practice.....	86
Symposium 13: From measurement to mechanisms: examining impairments in attentional control and their relationship with anxiety vulnerability .....	92
<b>Open Papers .....</b>	<b>99</b>
Rodrigo Becerra .....	99
Psychometric properties of the Emotion Beliefs Questionnaire and the mediating role of emotion regulation between beliefs and affective symptoms .....	99
Madelyne Bisby.....	100
A meta-analytic review of online treatments for anxiety: eligibility, engagement, and outcomes .....	100
Simon Byrne .....	101
The prevalence and burden of insomnia among U.S. military veterans .....	101
Miranda Cashin.....	102
A meta-analysis and systematic review of quality of life in lower-limb amputees .....	102

Joan Chan.....	103
Assessing alexithymia across Asian and Western cultures: psychometric properties of the Toronto alexithymia scale-20 and Perth alexithymia questionnaire in Singaporean and Australian samples.....	103
James Clarke .....	104
Restoring our emotional tank: the effects and management of emotional labour in psychotherapy .....	104
Rachelle Dawson .....	106
Brief telehealth-delivered expressive writing therapy for post-traumatic stress .....	106
Mark Donovan.....	107
Mind the family: mindfulness and imagery integrated behavioural parent training.....	107
Danielle Fynn .....	108
<i>Validity and reliability of the Perth alexithymia questionnaire in adults with acquired brain injury .....</i>	108
Nicole Gray .....	109
Cognitive and emotional factors associated with the desire to cease non-suicidal self-injury .....	109
Sophie Haywood.....	110
Emotional regulation in non-suicidal self-injury.....	110
Amy Joubert.....	111
Managing rumination and worry – a randomised controlled trial of an internet intervention delivered with and without clinician guidance versus treatment as usual.....	111
Ratih Arruum Listiyandini .....	112
Developing a culturally-attuned internet-delivered mindfulness program for university students in Indonesia: outcome of end-user consultation and pilot study .....	112
Sylvanna Mirichlis .....	114
Correlates of disclosure and non-disclosure of non-suicidal self-injury .....	114
Bronte Morgan .....	115
Australians under strain: the experience of the COVID-19 pandemic for families with young children.....	115
Kristin Naragon-Gainey.....	116
Understanding the temporal dynamics of decentering on clinical outcomes in daily life .....	116
Jennifer Nicholas .....	117

Implementation lessons from the transition to telehealth during COVID-19: perspectives of clinicians and youth mental health service users.....	117
Jennifer Nicholas .....	118
Implementing a CBT-based digital mental health intervention within Victorian youth mental health services: barriers and facilitators .....	118
Jaimie Northam.....	119
More than a feeling? Investigating emotional reactivity in children with conduct problems and callous-unemotional traits .....	119
Shaunagh O'Sullivan .....	121
Piloting an integrated face-to-face and virtual clinic to enhance specialist treatment for complex youth mental health disorders: eOxygen.MOST .....	121
Shaunagh O'Sullivan .....	122
Characterising usage of a multicomponent digital intervention to predict treatment outcomes in first-episode psychosis.....	122
David Preece .....	123
Advancing the assessment of emotional regulation: psychometric properties of the Perth Emotion Regulation Competency Inventory (PERCI).....	123
Seyran Ranjbar .....	124
The factor structure of the Emotion Beliefs Questionnaire and examining the mediating role of emotion regulation between maladaptive beliefs about emotions and affective disorder symptoms among adolescents .....	124
Melissa Ree .....	126
Improving sleep to promote healthy brain aging: a CBT-insomnia intervention study .....	126
Gemma Sharp.....	127
“I felt seen by this chatbot”: a qualitative focus group study with young people and parents/carers to develop a positive body image chatbot called “KIT”... .....	127
Eileen Stech.....	128
Using artificial intelligence (AI) to run more efficient and flexible clinical trials .....	128
Heidi Sturk .....	129
Connecting with the digital mental health world: increases in use of digital mental health services as a result of COVID-19.....	129
Zoe Walter .....	130
Parental behaviours and protective factors for children in the context of parental substance use: an exploratory analysis of factors identified by practitioners .....	131
<b>Posters .....</b>	<b>133</b>

Amy Black .....	133
The effect of the fear of positive and negative evaluation on state anxiety and repetitive negative thinking in high and low socially anxious individuals .....	133
Jack Brett .....	133
<i>Am I happy or sad? How autistic traits relate to alexithymia and its sequential impacts.</i> .....	133
Emma Bryant .....	133
The role of fibroblast growth factor 2 in predicting psychological outcomes during the COVID-19 pandemic .....	133
Simon Byrne .....	133
Coaching parents to conduct powerful exposure therapy with their child .....	133
Wenting Chen .....	134
Investigating empathy in hoarding: a potential target for improving interpersonal connection .....	134
Cassandra Crone .....	134
Supporting relationship diversity: can extended and imagined social contact reduce bias toward consensual non-monogamy? .....	134
Jonathan David .....	134
Getting distracted by reward cues: evidence that hoarding and compulsive buying are similar to behavioural addictions .....	134
Jessica De Agrela .....	134
Profiling emotion regulation abilities across negative and positive emotions in psychopathology symptoms .....	134
Nicole Gray .....	134
Cognitive and emotional factors associated with the desire to cease non-suicidal self-injury .....	135
Kirsty Hird .....	135
Emotion regulation difficulties and self-efficacy to resist NSSI moderate the relationships between outcome expectancies and NSSI .....	135
Anthony Joffe .....	135
The heart of the issue: Understanding the relationship between emotion regulation and emotional labour .....	135
Amy Joubert .....	135
Understanding rumination and worry: Clinical and theoretical implications from an online qualitative survey .....	135
Amy Joubert .....	135
Managing rumination and worry: a pilot study of an internet intervention targeting repetitive negative thinking in Australian adults .....	136

Isabelle Kaiko.....	136
Cognitive flexibility and mind-wandering: different profiles in anxiety .....	136
Erin Kelly.....	136
Is self-compassion an important intervention target for adolescents with problematic alcohol use and anxiety symptoms? .....	136
Erin Kelly.....	136
The school-led prevention study: preventing adolescent mental illness and substance use through teacher-delivered intervention .....	136
Olivia Kingsley .....	136
The ecological validity of the Flexible Regulation of Emotional Expression Scale .....	137
Ian Li .....	137
COVID-19 related differences in the uptake and effects of internet-based cognitive behavioural therapy.....	137
Stephanie Lu.....	137
Will it be worth it? Investigating depression-linked anomalies in reward expectancy formation .....	137
Tamsin Mahalingham.....	137
Attention control moderates the relationship between social media use and psychological distress.....	137
Mahdi Mazidi.....	137
Eating disorder-specific rumination moderates the association between attentional bias to high-caloric foods and eating disorder symptoms: evidence from a reliable eye-tracking task.....	138
Mahdi Mazidi.....	138
Worry mediates the association between general intolerance of uncertainty, health-specific intolerance of uncertainty and health anxiety.....	138
Mahdi Mazidi.....	138
Emotion regulation mediates the relationship between alexithymia and affective disorder symptoms among adolescents and adults .....	138
Owen Myles .....	138
Anxiety and inhibition: the interactive role of state and trait anxiety in inhibitory attentional control deficits .....	138
Jaimie Northam.....	138
Developing the growing minds check-up: a narrative review and scoping study .....	139
Ethan Pemberton .....	139
Alexithymia profiles characterising affective disorder psychopathologies ....	139

Anastasia Pourliakas .....	139
A co-design process to assess the feasibility and acceptability of a group-based psycho-oncology program .....	139
Seyran Ranjbar .....	139
Attentional control moderates the relationship between pain catastrophizing and selective attention to pain faces on the antisaccade task .....	139
Tanika Sgherza .....	139
Testing the mindfulness-to-meaning theory in daily life .....	139
Lexy Staniland .....	140
Application of the nonsuicidal self-injury stigma framework .....	140
Laura Strachan .....	140
Post-traumatic stress symptoms, voice hearing, and associated psychological mechanisms of maintenance and change: a systematic review .....	140
Alyssa Tan .....	140
Emotion regulation strategy profiles that characterise loneliness and general distress .....	140
Kate Tonta .....	140
Modelling pathways to non-suicidal self-injury: the roles of perfectionism, negative affect, rumination, and attentional control .....	140
<b>AACBT Supporters.....</b>	<b>141</b>
Networking Partner .....	141
University of Western Australia .....	141
Conference Partner.....	142
Woodslane .....	142
Conference Partner.....	142
St John of God Health Care .....	142
Conference Supporter (Volunteers) .....	143
Curtin Psychology Clinic.....	143
Physical Destination Partner .....	143
Business Events Perth .....	143

## Keynote Speaker

Professor Christine Padesky

Center for Cognitive Therapy, California

*Virtual Keynote: "Action and dialogue in psychotherapy: dance of equals"*

The evolution of Cognitive Behaviour Therapies (CBT) has often involved a tug-of-war between those who emphasise behavioural interventions, those who focus on cognitive inquiries and dialogues, and those who advocate for mindfulness and acceptance. Padesky shares her current integrative vision of CBT as a collaborative quest for discovery that can incorporate all these perspectives. In her approach, therapists emphasize action therapy methods to elicit emotion, full body experiencing, beliefs, imagery, behaviours and values within interpersonal and cultural contexts in order to foster deeper learning and change. Padesky offers a collaborative, strengths-based model in which the full power of psychotherapy is revealed when action therapy methods and Socratic dialogue interact in a dance of equals.

*Virtual Masterclass: "More walk, less talk: action-packed CBT"*

Lasting learning and change are more likely to result from active experience and doing than from book knowledge alone. If we apply this idea to psychotherapy, we need to consider that talk therapy by itself is not always the best therapy. The phrase, "action-packed CBT" describes a therapeutic approach that combines talk with active learning experiences embedded into each session. Action methods demonstrated in this workshop include interactive writing/drawing, imagery, role playing, and behavioural experiments used to test out beliefs and to try out new behaviours.

## Invited Speakers

### Professor Jennie Hudson

Black Dog Institute, University of New South Wales

*Master Clinician Session “Using exposure treatment effectively in the treatment of anxiety in children and young people”*

Exposure is considered a critical component to effective treatment for child and adolescent anxiety disorders. Yet, there are multiple barriers that prevent the delivery of effective exposures. Although this session will provide a brief update on the literature regarding the rationale, evidence and barriers to delivering exposure in the treatment of anxiety disorders in children and adolescents, the main focus of the session will be discussing the design and implementation of effective exposure hierarchies. The workshop will address common issues clinicians experience when delivering exposure treatments with children, adolescents and their parents/carers.

*Plenary address “Improving psychological treatments for children with anxiety disorders”*

Anxiety Disorders are the most common mental disorders and are the first to appear, more often than not in childhood. We have made considerable progress over the past 25 years showing, most notably, that cognitive behavioural therapy (CBT) is an effective treatment for childhood anxiety disorders. With a remission rate of around 50-60%, we do not yet know what modifications are needed to extend the efficacy of treatment to all children. Non-responders continue to be at risk for mental health problems across the lifespan, and thus the importance of improving treatments cannot be overstated. This talk will highlight what we know about predictors and moderators of treatment and explore possible models for improving mental health care for this often-overlooked group of children.

### Associate Professor Brett Deacon

Cairnmillar Institute

*“Insights from my transition from academia to real-world practice: reflections on a failed paradigm of care and proposed solutions”*

Five years ago, after a lengthy career as an academic, I changed careers and became a full-time practitioner. The experience proved rewarding, confronting, and enlightening. In this invited address, I discuss the insights I gained from my transition. They converge around a central message: our training, practice, and supervision models do not adequately prepare us for effective real-world practice. Major themes of my address include: (a) our mental health system is founded on a biomedical model “skills and pills for reducing symptoms” approach that is

dehumanising, scientifically invalid, and often harmful, (b) the academics who train practitioners are heavily incentivized to follow this model and are largely incapable of deviating from it, (c) psychological training is woefully inadequate, leaving many practitioners to learn their most valuable skills on their own with little guidance, (d) placing a shockingly thick bureaucracy around psychological education, practice, and supervision does not necessarily make them effective and is no substitute for adequate training, (e) the science of psychotherapy, as it has traditionally been conducted, is often inapplicable to real-world practice in our healthcare system, (f) the science-based approaches that are applicable to real-world practice are rarely used, (g) mental health practitioners are effectively a branch of law enforcement with the power to rob people of their civil rights, (h) our work within the mental health system fits disturbingly well within a capitalist economic system that blames understandable suffering caused by problematic societal conditions as “mental illness” which we are tasked to “treat,” and (i) the pandemic has brought these realities into sharp relief. Despite these confronting revelations, there is some good news. A growing worldwide movement, including within the CBT community, is challenging the status quo, and demonstrating the effectiveness of alternative approaches to addressing human suffering. I discuss examples of these approaches, the heartening evolution of CBT away from the biomedical paradigm toward a process-based approach, and ways forward for those of us working with the healthcare system.

Professor Penelope Hasking

Curtin University

*“A person-centred and strengths-based approach to non-suicidal self-injury”*

Traditionally, the understanding of NSSI has focused on factors that may increase risk of initiation or maintenance of the behaviour. Here the focus tends to be on deficits that people have, particularly with regard to emotion regulation or alternative coping skills. More recently, researchers have moved to study factors that might increase cessation of the behaviour. Here ‘recovery’ from self-injury is often defined as not having engaged in the behaviour for at least 12 months.

However, this conceptualisation of NSSI, and recovery from NSSI, is at odds with what people tell us about the lived experience of self-injury. People with a history of self-injury report ongoing thoughts and urges to self-injure, long after they cease engaging in the behaviour. Further, a medicalised, deficits-based approach fails to take into account the significant resilience held by many people who self-injure.

In this presentation I present a new model of recovery that outlines how: realistic expectations for recovery, the role of thoughts and urges, processing of scarring resulting from NSSI, considerations regarding disclosure of NSSI, self-efficacy, self-acceptance, and self-compassion are all critical to an ongoing recovery.

Dr Bronwyn Raykos

Centre for Clinical Interventions (CCI), North Metropolitan Health Service, WA

*“Cognitive behavioural therapy for eating disorders (CBT-ED): status, innovations, and implications for the therapy room”*

The first manuals describing cognitive behavioural therapy for eating disorders (CBT-ED) were published over 13 years ago (Fairburn, 2008; Waller et al., 2008). Since this time, CBT-ED has been recommended as the leading evidence-based treatment for bulimia nervosa and binge-eating disorder in clinical guidelines (RANZCP, NICE) and one of very few recommended interventions for the treatment of anorexia nervosa in adults. Initial treatment recommendations were for 40 sessions of CBT-ED delivered over 12 months for underweight eating disorders and 20 sessions for non-underweight eating disorders (Fairburn, 2008). CBT-ED has high drop-out rates and outcomes can be poor, even when treatment is completed in full, particularly for anorexia nervosa. Eating disorder services are experiencing pressures from growing waiting lists, with patients waiting 6-12 months to access treatment for an eating disorder. There is a need to deliver evidence-based treatments with fidelity whilst conducting innovative research to improve on existing treatments so that they are accessible, acceptable, and effective in treating more people with eating disorders.

This talk will explore the current status of CBT-ED and focus on emerging and innovative research that is evaluating whether we can improve the effectiveness, accessibility, and speed with which we can treat individuals with eating disorders within CBT-ED.

Dr Georgie Paulik-White

Perth Voices Clinic; University of Western Australia; Murdoch University

*“Imagery-rescripting for trauma affected voice hearers”*

Despite a strong link between trauma and voices ('auditory hallucinations'), there have been no trials of psychological trauma interventions in this transdiagnostic population. High dropout rates in trials of prolonged exposure in psychosis have been linked to anxiety around reliving the hot parts of trauma. We were interested to overcome this potential barrier by using Imagery Rescripting (ImRs) which does not require the prolonged reliving of the most intense part of the memory. The primary aims of this talk are twofold: (1) to investigate whether ImRs reduces PTSD symptoms in voice hearers; and (2) to investigate whether ImRs leads to a reduction in voice frequency or distress.

Professor Nick Titov

MindSpot, Department of Psychology, Macquarie University

*“Lessons in delivering digital mental health services: things we wished we knew before we started”*

A large number of research trials have demonstrated that psychological interventions can be effectively delivered via the internet. An increasing number of Digital Mental Health Services (DMHS) are now successfully delivering such interventions in routine care to large numbers of consumers.

This talk extends this evidence base by describing key lessons learned by Titov and colleagues when delivering DMHS in Australia. The lessons include learnings at four levels of analysis: Lesson about working with 1) consumers, working with 2) therapists, 3) operating DMHS, and 4) working within healthcare systems. In hindsight, some of the lessons are obvious, but none were apparent when we first launched our DMHS. Key themes include that successful delivery of DMHS requires commercial expertise in management, IT, finance and related business processes, skills which are considerably different to those required for conducting clinical trials. Other themes include the complexity of navigating health systems, the need to effectively work with funders and decision makers, the importance of robust systems for training and supervising therapists, and the importance of avoiding hype.

We conclude that the benefits of such services for the broader community significantly outweigh the challenges of developing and delivering DMHS.

## 2021 National Award Winners

### AACBT Early Career Award

*Dr Cele Richardson*

### AACBT Mid-career Award Interview

*Associate Professor Genevieve Dingle*

### AACBT Distinguished Career Award Interview

*Professor Peter McEvoy*

## Workshops

Scientia Professor Richard Bryant

University of New South Wales

*Treating trauma in high-risk populations*

This workshop provides an overview of assessing and treating PTSD in first responders, such as police, firefighters, and ambulance personnel. This material is also relevant to anyone managing military/veteran personnel with PTSD. The workshop will commence with an overview of current knowledge of PTSD in first responder populations, the nature of their PTSD, and common comorbidities. The workshop will then review key assessment strategies that need to be considered in assessing PTSD in first responders. Treatment strategies will then be outlined, with practical discussion of how to adapt trauma-focused cognitive behaviour therapy with this population. Special consideration will be on obstacles to treatment, which are common when treating PTSD in first responders. These include emotional numbing, dissociation, comorbidities, moral injury, substance abuse, ongoing trauma, and organisational stressors. Special attention will be giving to treating PTSD in the context of compensation-seeking and medical retirement, and working with first responders' employers in the context of treating their PTSD.

Dr Melissa Ree

J&R Psychology, Sleep Matters & UWA

*CBT-Insomnia: why is it important? What is it? How do I do it?*

Over half the adult population who have a psychological disorder also have a sleep disorder. Provision of sleep disorder treatments has the capacity to optimise treatment outcomes, with robust research evidence demonstrating that treating the sleep disorder can enhance quality of life, treatment response, recovery and relapse rates. The recommended first line treatment for the most common sleep disorder, Insomnia, is CBT-I, with 70-80% of clients responding well. However, most health professionals are not confident in offering this treatment.

This workshop will introduce participants to the field of Behavioural Sleep Medicine which uses evidence-based non-pharmacological therapies (with a focus on CBT-Insomnia) to treat sleep disorders such as insomnia and circadian rhythm disorders. We go beyond sleep hygiene (which by itself is not an evidence-based treatment).

Dr Georgie Paulik-White

Perth Voices Clinic; University of Western Australia; Murdoch University

*Treating trauma using Imagery-rescripting in individuals who hear voices or have psychosis*

Despite a strong link between trauma and voices ('auditory hallucinations'), there have been no trials of psychological trauma interventions in this transdiagnostic population. High dropout rates in trials of prolonged exposure in psychosis have been linked to anxiety around reliving the hot parts of trauma. Imagery Rescripting potentially overcomes this potential barrier as it does not require the prolonged reliving of the most intense part of the memory, and previous studies have shown preliminary evidence in its effectiveness in reducing trauma intrusions, voice distress and voice frequency in trauma affected voice hearers (Paulik, Steel & Arntz, 2019).

This advanced workshop will refine your clinical skills in the delivery of Imagery Rescripting when treating trauma in individuals who hear voices and/or have psychosis. This workshop includes education modules, videos, case illustrations, demonstrations of therapy techniques, group discussions, and experiential role plays.

Dr Clair Lawson & Mr Paul Jeffery

Lawson Clinical Psychology & Clinic Mastery; Jeffery & Ree Clinical Psychology

*Operating effectively as a psychologist in a private practice setting*

As psychologists working across sectors (including the private sector), a key desire is usually to be able to help people as effectively as possible with the skills we have. This workshop will highlight the benefits and the challenges of trying to marry together the desire to provide evidence-based therapy while also working effectively within a commercial environment. The presenters will share lessons learned from a combined 31 years of working in private practice while during the interactive sections of the workshop participants will be encouraged to share their own experiences, reflections and aspirations. Attendees will gain insights into what is needed to flourish and succeed in the sector at different stages of private practice development. There will be opportunities to discuss concerns with peers, to obtain resources and practical advice to help you work efficiently and effectively in private practice.

## Symposiums

### Symposium 01: Transdiagnostic treatment for depression & anxiety

#### Symposium Description:

Transdiagnostic CBT interventions aim to target the shared symptoms, features, and cognitive, emotional and behavioural mechanisms that underlie emotional disorders. Over the last two decades, a large body of evidence from randomized controlled trials has supported the efficacy and cost-effectiveness of transdiagnostic CBT for anxiety and depressive disorders, in face-to-face and digital formats. Yet, important questions still remain about their effectiveness outside of tightly controlled clinical trial settings, which interventions have the strongest evidence, how to implement these interventions more broadly, and whether they are more effective at targeting comorbid disorders. This symposium brings together leading experts in the development, evaluation and dissemination of transdiagnostic interventions for anxiety and depression. It will describe several different transdiagnostic treatment protocols, including online, blended care, and group-based treatment protocols. It will deliver the latest research into the impact of transdiagnostic interventions in real-world digital and face-to-face clinics, the role of these treatments in responding to the negative impact of the COVID-19 pandemic on mental health, the impact of transdiagnostic CBT on shared mechanisms and comorbidities, and new strategies to increase the uptake and engagement with transdiagnostic CBT in routine mental health care settings.

**Chair:** Associate Professor Jill Newby, Black Dog Institute & UNSW Sydney

**Discussant:** Professor Peter McEvoy, Curtin University

#### Paper 1

##### **Transdiagnostic interventions for emotional disorders: impacts on positive and negative affect**

**Authors:** Kenyon, A<sup>1</sup>, Erceg-Hurn, DM<sup>1,2</sup>, Mazzucchelli, TG<sup>1</sup>, Campbell, BNC<sup>2</sup>, McEvoy, PM<sup>1,2</sup>

<sup>1</sup> School of Population Health, Curtin University, Perth; <sup>2</sup> Centre for Clinical Interventions, Perth

**Speaker:** Bruce Campbell

## **Background:**

Several transdiagnostic cognitive behavioural therapies (TD-CBTs) have been developed to treat emotional disorders. However, the relative effectiveness of these different approaches has not yet been established. This study evaluated the effectiveness of TD-CBT, which aims to target depression and anxiety disorder symptoms, on broad dimensions of positive and negative affect, and benchmarked these outcomes against other transdiagnostic treatments specifically designed to target the broad dimensions of positive and negative affect.

## **Methods:**

Patients ( $N = 621$ ) attended ten two-hour weekly group sessions at a community mental health clinic, and a booster session one month later. Positive and negative affect was measured at the start of treatment, end of weekly therapy, and at the booster session. Participants were split into two groups for analyses, based on whether they were diagnosed using DSM-IV ( $n = 465$ ) or DSM-5 ( $n = 156$ ) criteria.

## **Results:**

There was variability in outcomes on positive (range  $ds = .31\text{-.99}$ ) and negative (range  $ds = .45\text{-.1.15}$ ) affect across transdiagnostic approaches. TD-CBT had some of the largest effect sizes for both positive ( $d = 0.90$  and  $0.99$ ) and negative affect ( $d = 0.76$  and  $0.95$ ) compared to transdiagnostic interventions specifically targeting these dimensions.

## **Conclusions:**

The results from this study suggest that while there are differences in outcomes between some transdiagnostic approaches, there may also be commonalities in targeted mechanisms and outcomes. There needs to be caution that new transdiagnostic treatments do not reinvent the wheel or some of the efficiencies of the approach may be lost (e.g., reduced training/dissemination costs).

## **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 2**

### **Transdiagnostic CBT: extension and preliminary evaluation for mixed anxiety and depressive disorder**

**Authors:** Harris, KR<sup>1</sup>, Norton, PJ<sup>2</sup>

<sup>1</sup>Private Practice; <sup>2</sup>Cairnmillar Institute

**Speaker:** Norton, PJ

### **Introduction/Background:**

To assess the efficacy of a transdiagnostic cognitive behavioural therapy (tCBT) protocol for the treatment of emotional disorders groups with individuals that have mixed anxiety and/or depressive disorder diagnoses.

### **Methods:**

Treatment-seeking adults meeting diagnostic criteria for a depressive disorder were enrolled in a 12-week tCBT open trial aimed at addressing the underlying core pathology of emotional disorders. Clinician severity ratings (CSRs) regarding principal and comorbid diagnoses, and overall severity (CGI) were assessed at pre- and post-treatment and 4-month follow-up. Depressive and anxiety symptoms were measured at pre-treatment and session-by-session using self-report measures (BDI-II and ADDQ).

### **Results:**

Repeated measure ANOVAs indicated a reduction in principal diagnosis severity, overall severity, and CGI-S with large effects observed post-treatment (Cohen's  $ds=1.29-1.92$ ) and at 4-month follow-up (Cohen's  $ds=0.77-1.04$ ). Mixed-effect regression demonstrated a decrease in depressive and anxiety symptoms over the course of treatment. CGI-I ratings identified 63.64% participants as treatment responders post-treatment and 4-month follow-up.

### **Conclusions:**

The findings provide additional evidence for the utilization of tCBT in the effective treatment of emotional disorders. Further research into the implementation of the tCBT for emotional disorders protocol through a randomized controlled trial involving groups of participants with a range of emotional disorder diagnoses is warranted.

### **Disclosure or Interest Statement:**

PJN received royalties from the sale of the treatment manual used in this study.

## **Paper 3**

## **The uptake and effectiveness of online cognitive behaviour therapy for symptoms of anxiety and depression during COVID-19**

**Authors:** Dobinson, K<sup>1</sup>, Mahoney, A<sup>1,2</sup>, Li, I<sup>1</sup>, Haskelberg, H<sup>1</sup>, Millard, M<sup>1,2</sup>, Newby, JM<sup>3,4</sup>

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NSW; <sup>4</sup>Black Dog Institute, Hospital Road, Randwick, NSW

**Speaker:** Katie Dobinson

### **Introduction/Background:**

The psychological impacts of COVID-19 have been considerable with many individuals experiencing significant anxiety and depression. Internet-based cognitive behavioural therapy (iCBT) programs provide scalable access to psychological interventions; however the effectiveness of these programs during COVID-19 has not been investigated. This study examined the uptake and effectiveness of iCBT for symptoms of anxiety and depression during the first eight months of the pandemic in Australia and compared outcomes to the 12 months prior to COVID-19.

### **Methods:**

A total of 6,132 adults commenced iCBT (5,074 during the pandemic and 1,058 in the year before) and completed measures of anxiety and depression symptom severity, and psychological distress pre- and post-treatment. Intention-to-treat linear mixed models were used to investigate reductions in outcome measures pre- and post-iCBT.

### **Results:**

During the COVID-19 period, we observed a 504% increase in the number of monthly course registrations compared to the year prior. Baseline anxiety and depression symptom severity were similar for the COVID and pre-COVID groups. Prior to and during the pandemic, the iCBT course was associated with large effect size reductions in anxiety ( $g= 0.94-1.18$ ) and depression ( $g= 0.92-1.12$ ) symptom severity, as well as psychological distress ( $g= 1.08-1.35$ ).

### **Conclusion:**

The study demonstrates the considerable increase in demand for psychological support during the COVID-19 pandemic in Australia, in particular the demand for

immediate access to self-help resources. Results also demonstrate the effectiveness and scalability of iCBT during the pandemic.

#### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

### **Paper 4**

#### **Transdiagnostic blended care intervention for depression and anxiety**

**Authors:** O'Moore, K<sup>1</sup>, Varghese, K<sup>1</sup>, Kikas, K<sup>1</sup>, Pires, J<sup>1</sup>, Cockayne, N<sup>1</sup>, Tuttlebee, F<sup>1</sup>, Joubert-Villiers,<sup>1</sup> & Newby, JM<sup>1,2</sup>

<sup>1</sup>Black Dog Institute, Hospital Road, Randwick, NSW; <sup>2</sup>School of Psychology, Faculty of Science, University of New South Wales, NSW

**Speaker:** Jill Newby

#### **Introduction/Background:**

Strong evidence supports the efficacy of transdiagnostic internet CBT for depression and anxiety, but uptake and adherence are poor in routine care settings. To address this, we developed a new transdiagnostic blended care intervention which integrates digital components into face-to-face therapy sessions. This paper describes the results of end-user consultation and co-design process to develop this new model of CBT care.

#### **Methods:**

Online surveys, qualitative interviews, and co-design workshops were conducted with people with lived experience of depression and/or anxiety, and health practitioners (GPs, psychologists, psychiatrists and allied health) to develop a new blended care intervention.

#### **Results:**

A total of 475 people with lived experience of depression and/or anxiety (450 surveys; 25 interviews, 64% female, mean age: 46,SD=16), and 280 health professionals (260 surveys, 20 interviews, 77% female, mean age:47,SD=14) participated. Overall, 76% perceived a need for a blended care intervention, with key identified needs being ease of use, on-demand access, ability to pick-and choose

modules, control over extent and timing of client-practitioner contact, real-time tracking, and persuasive design to facilitate engagement with CBT homework.

**Conclusion:**

This new blended transdiagnostic care intervention, which fully integrates digital components into in-person psychological therapy represents a promising new treatment approach for depression and anxiety with great potential to increase the standardisation and quality of CBT provided in routine care. Implementation evaluations and randomised trials comparing blended with usual care are needed to explore their efficacy and cost-effectiveness in the Australian health care context.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 02: The good, the bad and the ugly: The psychosocial impacts of COVID-19 on children, adolescents, and families in Australia

### Symposium Description:

There has been significant disruption to the lives and mental health of children, adolescents and families during the COVID-19 pandemic. The aim of the symposium is to document both the positive and negative psychosocial impacts of the COVID-19 pandemic on children, adolescents and families in Australia. Paper 1 provides an initial report on the parent-report mental health symptoms in Australian children and adolescents and examines its association with individual and family characteristics and the broad COVID-19 environment. Paper 2 extends this research by examining the psychological and lifestyle impact of the pandemic on Australian adolescents using self-report data. Paper 3 turns to the positive psychological impacts of COVID-19 on Australian adolescents by examining their resilience and positive experiences. Paper 4 investigates the psychosocial impacts of home-schooling on parents/caregivers, identifies the highs and lows and lessons learnt from the experience.

**Chair:** Professor Jennie Hudson, Black Dog Institute, University of NSW, Sydney, NSW

### Paper 1

#### **Mental health symptoms in a sample of Australian children and adolescents during the initial stages of COVID-19**

**Authors:** Sicouri, G<sup>1</sup>, March, S<sup>2</sup>, Pellicano, E<sup>3</sup>, De Young, AC<sup>4</sup>, Donovan, CL<sup>5</sup>, Cobham, VE<sup>6,7</sup>, Rowe, A<sup>2</sup>, Brett, S<sup>3</sup>, Russell, JK<sup>9</sup>, Uhlman, L<sup>7</sup>, Hudson, JL<sup>1</sup>

<sup>1</sup>Black Dog Institute, University of NSW, Sydney, NSW; <sup>2</sup>School of Psychology and Counselling and Centre for Health Research, University of Southern Queensland, Springfield, QLD; <sup>3</sup>Macquarie School of Education, Macquarie University, Sydney, NSW; <sup>4</sup>Children's Health Research Centre, The University of Queensland, Brisbane, QLD; <sup>5</sup>School of Applied Psychology, Griffith University, QLD; <sup>6</sup>School of Psychology, The University of Queensland, Saint Lucia, QLD; <sup>7</sup>Children's Health Queensland, Child and Youth Mental Health Service, Brisbane, QLD; <sup>8</sup>Queensland University of Technology, QLD

**Speaker:** Gemma Sicouri

**Background:**

COVID-19 has led to major disruptions to the lives of Australian families through social distancing, school closures, and effective lockdown. Understanding the effects on youth mental health is crucial to inform policies to support communities as they face the pandemic and future crises. The current study sought to describe parent-report mental health symptoms in children and adolescent in the initial stages of the pandemic in Australia. We also sought to examine its association with child and family characteristics and exposure to the broad COVID-19 environment.

**Methods:**

An online longitudinal survey was completed by 1324 parents/carers of Australian children aged 4 to 17 years old. Parents/carers reported on their child's emotional symptoms, conduct disorder problems, hyperactivity/inattention, anxiety symptoms and depressive symptoms using validated measures (SDQ, RCADS25-P). Descriptive statistics and linear regression models were used.

**Results:**

30.5%, 26.3% and 9.5% of the sample scored in the very high to high range for emotional problems, conduct problems and hyperactivity/inattention, respectively. 1 in 5 of the sample scored in the clinical range for anxiety symptoms and depressive symptoms. A child's pre-existing mental health diagnosis and neurodevelopmental condition significantly predicted parent-report youth mental health symptoms. Parent mental health, having a close contact with COVID-19 and applying for financial assistance during COVID-19 were also significant predictors of parent-report youth mental health symptoms.

**Conclusions:**

The findings show that Australian youth experienced considerable levels of mental health difficulties during COVID-19. The findings highlight the need for targeted support for affected youth, particularly those with pre-existing vulnerabilities.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 2****The impact of COVID-19 on the lives and mental health of Australian adolescents**

**Authors:** Li, SH<sup>1</sup>, Beames, JR<sup>1</sup>, Newby, JM<sup>1,2</sup>, Maston, K<sup>1</sup>, Christensen, H<sup>1</sup>, Werner-Seidler, A<sup>1</sup>

<sup>1</sup>Black Dog Institute, University of NSW, Sydney, NSW; <sup>2</sup> School of Psychology, University of NSW, Sydney, NSW

**Speaker:** Sophie H Li

### **Introduction/Background:**

There has been significant disruption to the lives and mental health of adolescents during the COVID-19 pandemic. The purpose of this study was to assess the psychological and lifestyle impact of the pandemic on Australian adolescents, using an online survey, administered during the outbreak.

### **Methods:**

Self-report surveys were administered online to a sample of 760 Australian adolescents, aged 12-18 years old, assessing impact on a range of domains including behaviour, education, relationships, lifestyle factors (exercise, technology use, sleep), and mental health outcomes (psychological distress, loneliness, health anxiety and wellbeing).

### **Results:**

Results showed that three quarters of the sample experienced a worsening in mental health since the pandemic began, with negative impacts reported on learning, friendships and family relationships. There were also high higher levels of sleep disturbance, psychological distress and health anxiety, relative to normative samples. Effects on mental health were worse among those who reported a previous diagnosis of depression and/or anxiety relative to those without no such history.

### **Conclusion:**

Adolescents experienced worsened mental health and significant disruption to their lives during the COVID-19 pandemic. These results underscore the need for rapid and accessible ways to support adolescent mental health during times of crisis. Potential solutions are discussed.

### **Disclosure of Interest Statement:**

This study was supported by the Black Dog Institute, a NSW Health Fellowship awarded to AW-S and a MRFF Career Development Fellowship awarded to JN.

## Paper 3

### Seeing the brighter side: coping and psychological resilience in Australian adolescents during the COVID-19 pandemic

**Authors:** Beames JR,<sup>1</sup> Li SH,<sup>1</sup> Newby JM<sup>1,2</sup>, Maston K,<sup>1</sup> Christensen H,<sup>1</sup> Werner-Seidler A<sup>1</sup>

<sup>1</sup>Black Dog Institute, Sydney, University of NSW; <sup>2</sup> School of Psychology, Sydney, University of NSW

**Speaker:** Joanne Beames

#### Introduction/Background:

Since the COVID-19 outbreak, few studies have addressed the positive psychological consequences on young people. This study examined resilience, positive experiences, and coping strategies reported by Australian adolescents during COVID-19.

#### Methods:

Self-report surveys were administered online to a sample of 760 Australian adolescents aged 12-18 years. Quantitative and qualitative methods were used to assess resilience, positive experiences, and coping strategies. Predictors of resilience included age, gender, psychological distress, and positive experiences. Mental illness history (of depression and/or anxiety) was analysed as a moderator of the relationship between psychological distress and resilience.

#### Results:

Adolescents reported high resilience overall ( $M = 20.92$ ,  $SD = 8.29$ ). They reported positive experiences during COVID-19, including increased empathy, compassion, gratitude, and connection with others, and reported using a range of active coping strategies. Positive experiences were associated with increased resilience ( $\beta$ s = 2.21-4.46,  $p$ s < .001), whereas psychological distress was associated with decreased resilience ( $\beta$  = -.57,  $p$  < .001). The negative relationship between distress and resilience was amplified for young people with a mental illness history ( $\beta$  = -.57,  $p$  < .001) compared to those without a mental illness history ( $\beta$  = -.34,  $p$  < .001).

#### Conclusion:

Australian adolescents commonly reported positive experiences and using active coping strategies during COVID-19. Some young people demonstrated higher levels of resilience and were able to make the most out of an unpredictable situation that

severely disrupted their daily routine. Resilience-building programs for adolescents may be particularly effective in increasing adaptability after adversity (e.g., climate change, bushfires, pandemics).

#### **Disclosure of Interest Statement:**

This study was supported by the Black Dog Institute, a NSW Health Fellowship awarded to AW-S and a MRFF Career Development Fellowship awarded to JN.

#### **Paper 4**

#### **The psychosocial impacts of home-schooling on parents and caregivers during the COVID-19 pandemic**

**Authors:** Calear, AL<sup>1</sup>

<sup>1</sup>The Australian National COVID-19 Mental Health, Behaviour and Risk Communication Survey team, The Australian National University, Canberra, ACT

**Speaker:** Alison Calear

#### **Introduction/Background:**

By the end of March 2020, many countries had implemented strict physical distancing policies that included large-scale or national closure of schools. The aim of the current study was to comprehensively quantify the psychosocial impacts of home-schooling on parents/caregivers and identify the highs and lows of home-schooling and the lessons learnt from the experience.

#### **Methods:**

The Australian National COVID-19 Mental Health, Behaviour and Risk Communication survey was designed to longitudinally assess the impact of the COVID-19 pandemic on a representative sample of 1,296 Australian adults. The study consisted of seven waves, with data for the current study drawn from waves two and three. Participants completed measures of psychological distress, work and social impairment, wellbeing, and home-schooling factors and experiences.

#### **Results:**

Participants who were home-schooling reported significantly higher levels of psychological distress and work and social impairment, than participants with no children or not home-schooling their children. The positives of home-schooling

included spending more time with children and observing their learning, while negatives included maintaining child engagement and balancing home-schooling with work.

**Conclusion:**

The mental health impacts of home-schooling on parents and caregivers were high. Recognising the challenges of home-schooling is important and should be included in psychosocial assessments of wellbeing during periods of school closure.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 03: The role of interpretation bias in chronic health conditions

### Symposium Description:

It is well known that chronic health conditions are associated with higher levels of anxiety and depression, which is perhaps unsurprising given the burden associated with most common health conditions. It has been proposed that individuals who interpret their symptoms as threatening are at greater risk for illness-specific anxieties, such as fear of cancer recurrence, fear of movement and (re)injury, fear of hypoglycemia and COVID-related fears. In this symposium, we will report on the role of interpretation biases across a range of illnesses, including cancer, diabetes, chronic pain and COVID.

The papers in this symposium aim to determine whether the tendency to interpret information in a health related manner is associated with illness-specific anxiety, and other health-relevant outcomes. Specifically, paper 1 aims to test whether threatening information about COVID19 results in a greater tendency to interpret ambiguous stimuli as health-related; and whether interpretation is associated with health anxiety. Paper 2 aims to test the Threat Interpretation Model of Cancer Recurrence, which predicts that interpretation biases moderate the relationship between pain and fear of cancer recurrence. Paper 3 investigates the role of interpretation biases in fear of hypoglycemia and adherence to a diabetes management plan. Finally, paper 4 investigates whether interpretation biases can be harnessed to improve outcomes for people with chronic pain.

Investigating interpretation biases across a range of chronic health conditions will allow us to explore whether interpretation biases play a similar role across health conditions. Importantly, if the way in which people interpret ambiguous information is reliably associated with greater illness-specific anxiety, then Cognitive Bias Modification for interpretation bias may be a promising approach to ameliorating illness-related anxiety.

**Chair:** Poorva Pradhan, School of Psychology, Faculty of Science, The University of Sydney

**Discussant:** Colin MacLeod, The University of Western Australia

### Paper 1

**Are fear campaigns effective for increasing adherence to COVID-related mitigation measures?**

**Authors:** Richmond, B<sup>1</sup>, Sharpe, L<sup>1</sup>, & Menzies, RE<sup>1</sup>

<sup>1</sup>School of Psychology, Faculty of Science, The University of Sydney, NSW, 2006  
AUSTRALIA

**Speaker:** Bethany Richmond

### **Introduction/Background:**

COVID-19 has had enormous impacts, but early on little was known about COVID-19 which created an environment of uncertainty. This research evaluated the effects of threat on the tendency to interpret ambiguous stimuli in a health-relevant manner.

### **Methods:**

This research consisted of three studies. Participants were recruited from the first- and second-year research participation pool and social media. In each study, participants read COVID-related articles which were manipulated on their level of threat (Studies 1-3) and efficacy (Study 3). Participants then completed measures of cognitive biases and intentions to adhere to mitigation measures.

### **Results:**

Reading a threatening article consistently produced greater COVID-related threat, but did not increase intentions to perform mitigation measures. In Study 1 we found that reading a more threatening article about COVID-19 elicited a greater health-threat interpretation bias than a matched reassuring article. However, we were unable to replicate this finding.

### **Conclusion:**

We found evidence in a single study that threatening information about COVID-19 increased interpretation bias, which was, in turn, associated with a range of negative outcomes. However, this effect was not found in subsequent studies. It is unclear why we found an effect in a single study. The context of uncertainty was greater in study 1 as the risk of COVID-19 in Australia became better contained, when studies 2 and 3 were conducted. Alternatively, it could simply be that participants had become saturated by information about COVID-19 as the months progressed.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Paper 2

### Testing the threat interpretation model of fear of cancer recurrence in women with breast cancer

**Authors:** Pradhan, P<sup>1</sup>, Sharpe, L<sup>1</sup>, Butow, P<sup>1</sup>, Coutts-Bain, D<sup>1</sup>, Heathcote, LC<sup>2</sup>

<sup>1</sup> School of Psychology, Faculty of Science, The University of Sydney, NSW;

<sup>2</sup>Department of Anesthesiology, Perioperative, and Pain Medicine, Stanford University School of Medicine, Palo Alto, California, USA

**Speaker:** Poorva Pradhan

#### Introduction/Background:

The Cancer Threat Interpretation model proposes that severe levels of fear of cancer recurrence/progression (FCR/P) occur when people misinterpret ambiguous physical symptoms as a sign of recurrence. However, this assertion has not been investigated. The primary aim of this research was to test this model.

#### Methods:

147 women with breast cancer completed measures on fear of cancer recurrence (FCR), fear of progression (FOP), interpretation bias, symptom checklist. Other known predictors of FCR/P were also assessed, including metacognitions, bodily threat monitoring and threat appraisal.

#### Results:

Women with clinical FCR/P were more likely to interpret ambiguous words as health-related and carried a higher symptom burden than women in the normal range. Women with clinical levels of FCR/P also reported more unhelpful metacognitions, symptom monitoring and threat appraisal as compared to women with lower levels. FCR was associated with both symptom burden ( $r = .39, p < .001$ ) and interpretation bias ( $r = .45, p < .001$ ). Interpretation bias and symptom burden ( $r = .31, p < .001$ ) were also associated. Importantly, interpretation bias moderated the relationship between symptom burden and FCR. However, this was not the case with FOP ( $F(1, 143) = 0.21; p = .65$ ).

#### Conclusion:

We found that women with clinical levels of FCR/P interpreted ambiguous words as health-related and experienced more symptoms than those with lower levels of

FCR/P. Moreover, we found that interpretation bias moderated the relationship between symptom burden and FCR/P. That is, symptom burden predicted FCR/P more amongst those with higher levels of interpretation bias, as the threat interpretation model predicts.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 3**

**Interpretation bias in Type 2 diabetes and chronic pain: a double-edged sword**

**Authors:** Todd, J<sup>1,2</sup>, Rudaizky, D<sup>2</sup>, Clarke, P<sup>3</sup>, Sharpe, L<sup>1</sup>

<sup>1</sup>School of Psychology, University of Sydney, Sydney, Australia; <sup>2</sup>School of Psychological Science, University of Western Australia, Perth, Australia; <sup>3</sup>School of Psychology, Curtin University, Perth, Australia

**Speaker:** Jemma Todd

**Introduction/Background:**

Pain and diabetes are highly comorbid, and individuals with diabetes who also experience persistent pain tend to have worse physical functioning and mental health than individuals without pain. It is therefore important to identify whether cognitive processing biases contribute to worse outcomes in individuals with Type 2 diabetes (T2D) and chronic pain.

**Methods:**

A cross-sectional, online study design was used. Participants with and without T2D and chronic pain were recruited via Prolific Academic. Participants completed questionnaires assessing pain and diabetes-related outcomes, as well as a word association measure of interpretation bias.

**Results:**

A final sample of 333 individuals participated in the study: 86 with T2D and chronic pain, 65 with chronic pain, 76 with T2D, and 106 without any form of diabetes or pain. In a 2 (pain status) x 2 (T2D status) ANOVA design, interpretation biases were found to be stronger in individuals with chronic pain than individuals without pain. Further, among individuals with T2D, greater interpretation bias was associated with

better blood glucose control, but also greater fear of hypoglycaemia. For individuals with chronic pain, greater interpretation bias was associated with worse pain outcomes.

### **Conclusion:**

Interpretation bias appears relevant to both T2D and chronic pain. These findings suggest a more dynamic approach to understanding cognitive bias is needed, to consider when these biases are more or less adaptive, so that they can be better harnessed to improve outcomes for individuals with T2D who experience chronic pain.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Home-based cognitive bias modification (CBM-I) and expectancy in chronic pain patients**

**Authors:** Sharpe, L<sup>1</sup>, Jones, EB<sup>1</sup>, Pradhan, P<sup>1</sup>, Todd, J<sup>1</sup>, Colagiuri, B<sup>1</sup>

<sup>1</sup>School of Psychology, Faculty of Science, The University of Sydney, NSW

**Speaker:** Louise Sharpe

### **Introduction/Background:**

Cognitive Bias Modification for interpretation bias (CBM-I) improves anxiety, but yet to be applied to people with health problems. In this double-blinded, randomized controlled trial, we assessed the efficacy of CBM-I for people with chronic pain compared to a placebo.

### **Methods:**

Two-hundred and eighty-eight people with chronic pain were randomized in a 2 (treatment: CBM-I vs placebo) x 2 (rationale vs no rationale) design. Participants completed assessments before and after the intervention, and after 1 month. The co-primary outcomes were pain interference and pain intensity. Secondary outcomes included fear of movement, catastrophizing, depression, anxiety and stress. Participants completed four CBM-I training sessions over a week.

### **Results:**

Strong training effects of CBM-I were found on interpretation bias. There was a significant effect of CBM-I on pain intensity at post-treatment, but not follow-up. There was no overall effect of CBM-I on pain interference but a three-way interaction favouring CBM-I for those that received no rationale, but these effects were not maintained at follow-up. There were no significant group differences post-treatment. At follow-up, the CBM-I group improved significantly more than placebo for fear of movement, catastrophizing, depression and stress but not anxiety.

**Conclusion:**

CBM-I successfully modified interpretations and had an immediate, positive effect on pain intensity, and (for those who did not receive a rationale) pain interference, the two co-primary outcomes. In contrast, benefits in secondary outcomes amongst those who received CBM-I emerged during follow-up, even though the initial benefits to pain outcomes were not maintained.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 04: Biased expectancies in anxiety and depression

### **Symposium Description:**

Expectancies are a core feature of many disorders, and anxiety and depression provide clear examples of how specific expectancies characterise a disorder. For example, amongst individuals who experience depression, negative expectancies about social and environmental influences and future events are typical and serve to maintain depressed mood and impede behaviour engagement. Amongst individuals with heightened anxiety vulnerability, negative expectancies about the potential outcomes of upcoming events are a major contributor to elevated anxiety states.

Given the characterise presence of negative expectancies in anxiety and depression disorders, clinical and cognitive researchers have sought to understand the role that negative expectancies hold in elevated anxiety and depression, and the mechanisms that contribute to their formation and maintain their presence. The present symposium assembles recent and novel research that meets this aim.

Initial presentations in this symposium will describe cognitive-experimental research that has served to illuminate the role of specific cognitive mechanisms in attention, choice, and belief updating, in contributing to the formation and maintenance of negative expectancies. Concluding presentations will describe research that reveals the relationship between negative expectancies and subsequent symptoms of anxiety (negative post-event processing) and depression (diminished engagement in emotionally rewarding activities). Finally, the findings presented in the symposium will be synergised and integrated into the existing research landscape via Discussant Dr. Ben Grafton.

**Chair:** (Julian, Basanovic), University of Western Australia, Crawley, WA

**Discussant:** (Ben, Grafton), University of Western Australia, Crawley, WA

**Paper 1 Abstract (250 Word Limit)****Depression-linked deficits in reward-seeking behaviour: the role of reward expectancy and state emotion****Authors:**

Sim KJJ<sup>1</sup>, MacLeod C<sup>1</sup>, Notebaert L<sup>1</sup>, Ji, JL<sup>1</sup>

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

**Speaker:**

Kenneth Sim

**Introduction/Background:**

Depression is characterised by a loss of interest in previously rewarding activities, resulting in the diminished engagement of emotionally rewarding activities that are beneficial to a person's well-being. It is hypothesised that this occurs because people with depression expect future activities to be less enjoyable and/or more effortful than healthy individuals. Furthermore, these biases in expectancies can arise either as the result of trait-like vulnerabilities that make certain individuals more prone to experiencing depression, or from the frequent experience of sad emotions observed in people with depression.

**Methods:**

After assessing depression vulnerability, a novel paradigm measured participants' expectations of future enjoyment and future effort in relation to a rewarding gameplay activity when participants were induced into either a sad or happy emotional state. Participant's decision to engage in the rewarding gameplay activity, or do nothing, was also assessed in the same experimental session.

**Results:**

Individuals with elevated depression vulnerability were less likely to choose to engage in the rewarding gameplay activity as compared to those with low depression vulnerability, irrespective of state emotion. Elevated depression vulnerability was also associated with reduced enjoyment expectancy, as predicted, but not effort expectancy. Mediational analysis indicated that depression-linked deficits in reward engagement behaviour were mediated by reduced enjoyment expectancy.

**Conclusion:**

These findings indicate that dampened enjoyment expectancy for rewarding future activities contributed to deficient reward-seeking behaviour in depression.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 2 Abstract (250 Word Limit)****The association between pre-event expectancies, peri-event experience, and post-event processing in social anxiety****Authors:**

Basanovic J<sup>1</sup>, Kowal L<sup>1</sup>, MacLeod, C<sup>1</sup>

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

**Speaker:**

Julian Basanovic

**Introduction/Background:**

A maintaining factor of heightened social anxiety vulnerability is the experience of negative thoughts about past social events (post-event negative thinking). Heightened social anxiety vulnerability is also characterised by a biased tendency to hold negative expectancies about future social events, and negative emotion experienced during social events. Critically, research has not determined the relationship between pre-event negative expectancies, peri-event negative emotional experience, and post-event negative thinking, in elevated social anxiety.

**Methods:**

Eighty participants who vary in social anxiety vulnerability were exposed to a social evaluation event via a simulated interview. Participants reported on their negative expectancies of the interview prior to its commencement, their level of negative emotion experienced during the interview, and their frequency of negative post-event thinking immediately after the interview and for one week following the assessment session.

**Results:**

Analyses reveal the nature of direct associations between social anxiety, pre-interview negative expectancies, negative emotion experienced during the interview, and negative post-event thinking. Further analyses reveal the degree to which pre-interview expectancies predicted post-event thinking outcomes via a mediated pathway involving negative emotional experience.

**Conclusion:**

The results of this study reveal the degree to which pre-event negative expectancies predict post-event thinking and illuminate the pathways through which this relationship exists in individuals who vary in social anxiety. The findings inform the degree to which the modification of pre-event expectancies may impact post-event processing in social anxiety.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 3 Abstract (250 Word Limit)****Negative expectancies mediate the relationship between attentional bias and trait anxiety****Authors:**

Ventris C<sup>1</sup>, Rudaizky D<sup>1</sup>, MacLeod C<sup>1</sup>, Grafton B<sup>1</sup>

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

**Speaker:**

Chiara Ventris

**Introduction/Background:**

It is well established that heightened trait anxiety is characterised by an attentional bias toward negative information, and an increased tendency to hold negative expectancies for upcoming events. It is yet to be determined whether such biases operate interdependently. The current study assessed the novel hypothesis that attentional bias toward negative information relevant to an upcoming event drives the formation of negative expectancies.

**Methods:**

The present study assessed attentional bias toward negative information, expectancies, and trait anxiety. Participants were informed of an upcoming event they would later be required to partake in. Before the event, participants were exposed to differentially valenced information relevant to the event while their attention allocation was assessed. This allowed formation of expectancies about the event and provided a measure of attentional bias for negative information pertaining to this event. Lastly, participant's expectancies were assessed.

**Results:**

Analyses examined the associations between levels of trait anxiety, attentional bias for negative information relating to the upcoming event, and negative expectancies for the upcoming event. The relationship between attentional bias and trait anxiety was found to be mediated by negative expectancies for the upcoming event.

**Conclusion:**

The findings of the current study indicate that biases in attention drive the formation of negative expectancies. The current study enhances understanding of the mechanisms driving the formation of negative expectancies and trait anxiety and provides a new methodological framework for future research.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 4 Abstract (250 Word Limit)****Anxiety-linked differences in expectancy updating****Authors:**

Reynolds A<sup>1</sup>, MacLeod C<sup>1</sup>, Grafton B<sup>1</sup>

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

**Speaker:**

Amelia Reynolds

**Background:**

Research on anxiety-linked negative expectancies has focused exclusively on initial expectancy formation, neglecting that individuals typically update expectancies in light of new information. The current study assessed whether anxiety-linked heightened negative expectancies are maintained by differences in expectancy updating, by testing the hypothesis that heightened anxiety vulnerability is characterised by a reduced tendency to update initially negative expectancies in a more positive manner, and a greater tendency to update initially positive expectancies in a more negative manner.

**Methods:**

Participants varying in anxiety vulnerability were informed of an emotionally ambiguous event at the end of the testing session. Participants were then presented with initially positive or negative information about this event. Subsequently, they were presented with information inconsistent in emotional tone from that initially presented. Expectancies were assessed after the initial, and subsequent, presentation of information.

**Results:**

Analyses reveal the association between individual differences in anxiety vulnerability, and the degree to which participants demonstrated a reduced tendency to update an initial negative expectancy in a more positive manner, and a greater tendency to update an initial positive expectancy in a more negative manner.

**Conclusion:**

The current study reveals the manner in which anxiety vulnerability is characterised by specific tendencies in expectancy updating. The present findings inform the basis of negative expectancy formation in anxiety and are of relevance to therapeutic techniques targeting the modification of negative expectancies in individuals with heightened anxiety vulnerability.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 5 Abstract (250 Word Limit)****The role of information-seeking choice bias in understanding anxiety-linked negative expectancy bias****Authors:**

Tough J<sup>1</sup>, Grafton B<sup>1</sup>, MacLeod C<sup>1</sup>

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

**Speaker:**

James Tough

**Introduction:**

Previous research suggests that biased attention favouring negative information drives the relationship between heightened negative expectancies and elevated anxiety vulnerability. However, it is possible that measures of attentional bias simply reflect variation in information people choose to expose themselves to, rather than information that involuntarily captures attention. Thus, the aim of this study was to determine whether biased choice favouring negative information drives the relationship between heightened negative expectancies and elevated anxiety vulnerability.

**Methods:**

Participants who varied in anxiety vulnerability were told that they would be exposed to an emotionally ambiguous event towards the end of the test session. Participants were then given the opportunity to choose to read short passages that either conveyed positive or negative information about this upcoming event. A measure of choice bias was obtained by computing the proportion of passages the participant chose that conveyed negative information about the event. Negative expectancies about the event were assessed.

**Results:**

As anticipated, more negative expectancies were associated with higher levels of anxiety vulnerability. Also, greater negative choice bias was associated with more negative expectancies. Of most relevance, path analysis revealed that this choice bias drove the association between heightened negative expectancies and elevated anxiety vulnerability.

**Conclusion:**

This study provides support for the hypothesis that information-seeking choice bias underpins the relationship between negative expectancies and elevated anxiety vulnerability and highlights the importance of distinguishing choice from attentional bias in future research.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 05: Perinatal OCD: Prevention, treatment, and management

### Symposium Description:

The perinatal period has been identified as a period of increased risk for obsessive compulsive disorder (OCD) onset and exacerbation. There has, however, been limited research to date to guide clinicians in the assessment and management of parents with this presentation. This symposium will present a series of studies aimed at understanding, preventing, and managing perinatal OCD presentations. Melissa Mulcahy and Rebecca Anderson will first present three papers exploring the role of metacognition in the onset, prevention and treatment of OCD. Collectively, these papers will demonstrate the importance of metacognitive approaches to understanding the disorder. Next, Rebecca Anderson and Melissa Mulcahy will present two papers exploring the clinical management of perinatal OCD. This will include a study exploring health practitioners identification and subsequent management of infant harm related intrusions, and a survey study collating the consensus opinions of clinician and consumer experts on the best practice of perinatal OCD recognition and management. Collectively, these papers will provide clinical guidance and future research directions for perinatal OCD.

**Chair:** Dr Rebecca Anderson, Curtin University

### Paper 1

#### **Do prenatal metacognitive beliefs predict postpartum obsessive compulsive symptoms in new mothers?**

**Authors:** Mulcahy, M<sup>1</sup>, Rees, C<sup>1</sup>, Galbally, M<sup>1,2,3,4</sup>, Anderson, R<sup>1</sup>

<sup>1</sup> School of Population Health, Curtin University, WA; <sup>2</sup> School of Psychology & Exercise Science, Murdoch University, WA; <sup>3</sup> King Edward Memorial Hospital for Women, WA, <sup>4</sup> School of Medicine, Notre Dame University, WA

**Speaker:** Melissa Mulcahy

### Introduction/Background:

In this study, we investigate whether prenatal OCD-specific metacognitive (MC) beliefs (specifically, thought fusion beliefs) prospectively explain OCS in the postpartum period in a community sample of first-time mothers, when prenatal worry symptoms are accounted for. The core assumption of the metacognitive model of

OCD, that metacognitive beliefs drive obsessive beliefs and contribute more directly to OCS, is also explored.

### **Methods:**

Fifty-two participants who were pregnant with their first child completed pre (>20 and <33 weeks pregnant) and post-partum (2-6 months after expected delivery date) online surveys. The surveys comprised of measures of OCD-related beliefs, metacognitive beliefs, OCS severity, and general worry symptoms.

### **Results:**

Prenatal cognitive and metacognitive beliefs (i.e., thought fusion beliefs) significantly predicted ppOCS in a community sample of first-time mothers after controlling for prenatal worry symptoms. Thought-likelihood, but not thought-moral, fusion beliefs contributed to ppOCS in a series of mediational analyses that evaluated the relationship between prenatal cognitive belief domains, thought fusion, and ppOCS.

### **Conclusion:**

This study indicates that prenatal metacognitions play a key role in the aetiology of ppOCS, a finding that has important implications for preventing, screening and early intervention for, OCD among new/expecting parents.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 2**

### **Does prenatal metacognitive psychoeducation about intrusive thoughts prevent postpartum obsessive compulsive symptoms? A prospective randomised controlled trial**

**Authors:** Mulcahy, M<sup>1</sup>, Rees, C<sup>1</sup>, Galbally, M<sup>1,2,3,4</sup>, Kane, R<sup>1</sup>, Anderson, R<sup>1</sup>

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**Speaker:** Melissa Mulcahy

### **Introduction/Background:**

Previous studies conducted with non-clinical community samples have demonstrated that maladaptive metacognitive beliefs, appraisals, and strategies, were reduced following brief corrective information on the nature of intrusive thoughts. These results suggest psychoeducation focused on correcting maladaptive metacognitive beliefs about intrusions may be an effective means of preventing postpartum OCS. We therefore aimed to establish whether providing brief psychoeducational information intended to correct maladaptive metacognitive beliefs about infant-related intrusions ('metacognitive education'), to expecting parents in pregnancy, prevents postpartum OCS when compared with a treatment-as-usual (TAU) control condition (i.e., routine monitoring of maternal health by a perinatal health practitioner/s).

### **Methods:**

One-hundred and thirty women pregnant with their first child provided data at three time points (> 20 and < 33 weeks pregnant, 2-3 months postpartum, 5-6 months postpartum). Data was collected via online surveys and telephone diagnostic interviews. Participants were randomly allocated to receive the prevention intervention or to a treatment-as-usual (TAU) control group. The prevention intervention condition consisted of a brief 7-minute online psychoeducational video intended to correct maladaptive metacognitive beliefs about infant-related intrusive thoughts.

### **Results:**

While psychoeducation was not associated with decreased ppOCS, a significant reduction in total thought fusion beliefs from pregnancy to 2-3 months' postpartum was observed. This effect was maintained through to 5-6 months' postpartum.

### **Conclusion:**

The results of this study provide preliminary proof of concept for the use of psychoeducation in modifying an established risk factor for postpartum OCD, specifically, metacognitive beliefs about intrusive thoughts.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 3**

### **The effectiveness of brief metacognitive intervention for postpartum obsessive-compulsive disorder: a pilot study**

**Authors:** Ramunno, S<sup>1</sup>, Anderson, R<sup>1</sup>

<sup>1</sup> School of Population Health, Curtin University, WA

**Speaker:** Sarah Ramunno

### **Introduction/Background:**

Exposure and response prevention (ERP) has been found to be the most effective psychological treatment for OCD to date. However, smaller treatment gains and residual symptoms have been found for individuals with primary obsessions and mental compulsions, and with comorbid depression. Given that postpartum OCD often presents as primary harm-related obsessions and is highly comorbid with depression, ERP may not be optimal for the postpartum population. The aim of this research was to examine the effectiveness of a brief metacognitive therapy (MCT) intervention, delivered in a group format for postpartum OCD.

### **Methods:**

Seven participants with OCD with substantial comorbidity were recruited. A three week baseline monitoring period was conducted to determine symptom stability prior to participants engaging in the intervention. The intervention was delivered via eight weekly, 2-hour sessions of manualized treatment. A three month follow-up was conducted to determine longer term outcomes.

### **Results:**

Following MCT, 67% of treatment completers no longer met the diagnostic criteria for OCD at post-treatment and 3-month follow-up. Recovery was achieved on the YBOCS for 50% of completers post-treatment and for 67% of participants at 3-month follow-up. There were also significant reductions in comorbid depression scores, and metacognitive beliefs and thoughts fusion beliefs following MCT. Furthermore, only one of the 11 additional comorbid diagnoses met by participants at baseline remained at post-treatment and this was maintained at 3-month follow-up.

### **Conclusion:**

These results support MCT as a potential treatment for postpartum OCD and associated comorbid disorders.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

## **Health practitioners' recognition and management of postpartum obsessive-compulsive thoughts about infant harm**

**Authors:** Mulcahy, M<sup>1</sup>, Rees, C<sup>1</sup>, Galbally, M<sup>1,2,3,4</sup>, Anderson, R<sup>1</sup>

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**Speaker:** Rebecca Anderson

### **Introduction/Background:**

The postpartum period has been associated with elevated rates of onset of obsessive-compulsive disorder (OCD) among women, with a prevalence of 2–9%. Postpartum OCD is often characterized by recurrent, unwanted, and highly distressing thoughts, images, or impulses of deliberate infant harm. This study investigated health practitioners' recognition of, and clinical management strategies for, postpartum obsessive-compulsive symptoms (OCS).

### **Methods:**

Ninety-four perinatal health practitioners from a range of disciplines and professional backgrounds completed a survey comprised of a hypothetical case vignette and questions eliciting their responses to a clinical presentation of postpartum infant harming obsessions.

### **Results:**

Almost 70% of participants did not accurately identify OCS within the case. Furthermore, the majority of practitioners endorsed at least one contraindicated clinical management strategy likely to aggravate postpartum OCS. Accurate recognition of OCS was associated with the selection of fewer contraindicated strategies. Some aspects of practitioner training and experience were associated with correct OCS identification.

### **Conclusion:**

These findings underscore the need for targeted, interdisciplinary education to improve the detection and management of women experiencing postpartum OCS.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Paper 5

### **Consensus guidelines for the assessment and treatment of perinatal obsessive compulsive disorder: a Delphi study**

**Authors:** Mulcahy, M<sup>1</sup>, Long, C<sup>1,2</sup>, Morrow, T<sup>1,2</sup>, Galbally, M<sup>1,3,4,5</sup>, Rees, C<sup>1</sup>, Anderson, R<sup>1</sup>

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<sup>3</sup>School of Psychology & Exercise Science, Murdoch University, WA; <sup>4</sup>King Edward Memorial Hospital for Women, WA; <sup>5</sup>School of Medicine, Notre Dame University, WA

**Speaker:** Melissa Mulcahy

#### **Introduction/Background:**

There is growing recognition that OCD has distinctive etiological features, is unique from diagnostic and treatment perspectives, and warrants specific clinical guidance. Several guidelines exist for psychological considerations and/or mental health treatment during the perinatal period, but generally perinatal OCD (pnOCD) is only included under broader anxiety disorder guidelines, rather than recognized as having unique features. The current study aimed to address this gap in the clinical literature on perinatal OCD, by systematically developing clinical practice recommendations for assessing, managing, and treating pnOCD, and supporting individuals with this disorder and their families.

#### **Methods:**

We used a Delphi survey methodology to collate the views of 15 professionals with pnOCD clinical and/or research expertise, as well as 14 consumers with lived pnOCD experience. The Delphi design involved each member of the two expert panels individually rating the extent to which they consider recommendation statements to be important over three successive survey rounds. Statements were rejected, re-rated or accepted based on minimum levels of consensus.

#### **Results:**

From a total of 121 statements, 102 were endorsed; 69 from Round 1, 23 from Round 2, and 10 from Round 3. Six of the 18 participant-generated recommendations received endorsement. Statements spanned topics of provision of psychoeducation, screening, assessment, differential diagnosis, case care considerations, treatment, partners and families, and culture and diversity.

**Conclusion:**

We intend that the recommendations resulting from this study may be used to inform best-practice clinical care for individuals with pnOCD, and to increase health practitioners' understanding of this disorder and its treatment.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 06: Group CBT for social anxiety disorder: outcomes and mechanisms of change

### Symposium Description:

This symposium reports on primary and secondary outcomes from a randomized controlled trial comparing two group treatments for social anxiety disorder (SAD). The symposium will outline the key differences between the alternative treatments, one that was 'enhanced' by a higher dose of mental imagery-based techniques and one that used more verbal-linguistic techniques. The first paper will present the primary outcomes from the trial. The second paper investigates fears of negative and positive evaluation as prospective mechanisms of change during treatment. The second paper examines a broader range of cognitive and behavioural mechanisms of change both during and following treatment, and highlights that there are key differences between processes of change and maintenance. The final paper focuses on cognitive and affective shifts during group-based imagery rescripting, which is a novel application of an evidence-based technique. The symposium aims to inform clinicians about the magnitude and mechanisms of change when delivering group-based CBT for social anxiety.

**Chair:** Peter McEvoy, Centre for Clinical Interventions, enAble Institute and School of Population Health, Curtin University.

### Paper 1

#### Imagery-enhanced versus verbally-based group CBT for social anxiety disorder: a randomised controlled trial

**Authors:** McEvoy, PM<sup>1,2</sup>, Hyett, MP<sup>1</sup>, Bank, SR<sup>1,2</sup>, Erceg-Hurn, DM<sup>1,2</sup>, Johnson, AR<sup>1</sup>, Kyron, MJ<sup>1</sup>, Saulsman, LM<sup>3</sup>, Moulds, ML<sup>4</sup>, Grisham, JR<sup>4</sup>, Holmes, EA<sup>5</sup>, Moscovitch, DA<sup>6</sup>, Lipp, OV<sup>1</sup>, Campbell, BNC<sup>2</sup>, Rapee RM<sup>7</sup>

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**Speaker:** Peter McEvoy

**Background:**

Cognitive behavior therapy (CBT) is effective for most patients with social anxiety disorder (SAD) but a substantial proportion fails to remit. Experimental and clinical research suggests that enhancing CBT using imagery-based techniques could improve outcomes. It was hypothesised that imagery-enhanced CBT (IE-CBT) would be superior to verbally-based CBT (VB-CBT) on pre-registered outcomes.

**Methods:**

A randomised controlled trial of IE-CBT versus VB-CBT for social anxiety was completed in a community mental health clinic setting. Participants were randomised to IE ( $n = 53$ ) or VB ( $n = 54$ ) CBT, with 1-month (primary end point) and 6-month follow-up assessments. Participants completed 12, 2-hour, weekly sessions of IE-CBT or VB-CBT plus 1-month follow-up.

**Results:**

Intention to treat analyses showed very large within-treatment effect sizes on the social interaction anxiety at all time points ( $ds = 2.09-2.62$ ), with no between-treatment differences on this outcome or clinician-rated severity (1-month OR = 1.45 [0.45, 4.62],  $p = .53$ ; 6-month OR = 1.31 [0.42, 4.08],  $p = .65$ ), SAD remission (1-month: IE = 61.04%, VB = 55.09%,  $p = .59$ ); 6-month: IE = 58.73%, VB = 61.89%,  $p = .77$ ), or secondary outcomes.

**Conclusions:**

Group IE-CBT and VB-CBT were safe and there were no significant differences in outcomes. Both treatments were associated with very large within-group effect sizes and the majority of patients remitted following treatment.

**Paper 2****A longitudinal assessment of the bivalent fear of evaluation model in social anxiety disorder**

**Authors:** Johnson, AR<sup>1</sup>, Bank, SR<sup>1,2</sup>, Summers, M<sup>2</sup>, Hyett, MP<sup>1</sup>, Erceg-Hurn, DM<sup>1,2</sup>, Kyron, MJ<sup>1</sup>, McEvoy, PM<sup>1,2</sup>

<sup>1</sup>School of Population Health, Curtin University, Perth; <sup>2</sup>Centre for Clinical Interventions, Perth

**Speaker:** Andrew Johnson

**Background:**

The Bivalent Fear of Evaluation Model proposes that the fears of positive and negative evaluation each uniquely contribute to social anxiety severity. However, debate continues as to whether these are distinct constructs, and, if so, the degree of influence each has on social anxiety severity. This study used a longitudinal evaluation of these relationships in a clinical sample to identify whether the two fears differentially change over time and differentially relate to social anxiety severity.

### **Methods:**

Individuals with social anxiety disorder ( $N = 105$ ) completed measures of fears of negative and positive evaluation weekly, and social interaction anxiety monthly, for 12 weeks. Temporal relationships were assessed using residual dynamic structural equation modelling.

### **Results:**

Fears of positive and negative evaluation both predicted the future status of the other ( $\phi = 0.18$ , 95% Credibility Interval [0.10, 0.28] and  $\phi = 0.22$  [0.12, 0.35], respectively). Fear of negative evaluation ( $\phi = 0.16$  [0.05, 0.28]) but not positive evaluation ( $\phi < 0.01$  [-0.09, 0.10]) directly predicted future social anxiety severity. Fear of positive evaluation only indirectly predicted anxiety severity via fear of negative evaluation.

### **Conclusions:**

Previous fears of negative evaluation could not fully explain future fears of positive evaluation (or vice-versa), which is consistent with the two constructs being likely distinct in social anxiety disorder. Given its more direct relationship with social anxiety severity, fear of negative evaluation should be targeted in treatment, as this could both directly reduce social anxiety severity and minimise the indirect impact of fear of positive evaluation.

## **Paper 3**

### **Concurrent and prospective associations between negative social-evaluative beliefs, safety behaviours, and symptoms during and following group CBT for social anxiety disorder**

**Authors:** Kyron, MJ<sup>1</sup>, Johnson, AR<sup>1</sup>, Hyett, MP<sup>1</sup>, Moscovitch, DA<sup>2</sup>, Wong, QJJ<sup>3</sup>, Bank, SR<sup>1,4</sup>, Erceg-Hurn, DM<sup>1,4</sup>, Burgess, M<sup>2</sup>, McEvoy, PM<sup>1,4</sup>

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**Speaker:** Melissa Burgess

**Background:**

Improving the delivery of cognitive-behavioural therapy (CBT) for social anxiety disorder (SAD) requires an in-depth understanding of which social-evaluative beliefs drive change in social anxiety and avoidance during and after treatment. The current study explores the dynamic temporal associations between theory-driven cognitive and behavioural mechanisms of change both during and following group CBT.

**Methods:**

A randomised controlled trial of imagery-enhanced CBT ( $n = 51$ ) versus traditional verbal CBT ( $n = 54$ ) for social anxiety was completed in a community mental health clinic setting. The trial consisted of 12-weekly sessions and a 1-month follow-up session. Linear mixed models were used to assess magnitude of change every four weeks over the course of treatment. Cross-lagged panel models were used to examine temporal relationships between social-evaluative beliefs, safety behaviours, and social interaction anxiety.

**Results:**

Participants experienced significant improvements across all cognitive, behavioural, and symptom measures, with no significant differences between treatments. During treatment, greater fear of negative evaluation and negative self-portrayals at one time point (T) were predictive of more severe SAD symptoms and safety behaviours at T+1. Post-treatment fear of negative evaluation, perceived probability and cost of social failure, and safety behaviours were positively associated with SAD symptoms at the 1-month follow-up.

**Conclusions:**

Social-evaluative beliefs may be important targets for symptom and avoidance reduction during and following CBT. Assessment of these social-evaluative beliefs throughout treatment may be useful for predicting future SAD symptoms and avoidance, and for adapting treatment to promote optimal change for patients.

**Paper 4****An investigation of cognitive and affective changes during group imagery rescripting**

**Authors:** McCarthy, A<sup>1</sup>, Bank, SR<sup>1,2</sup>, Campbell, BNC<sup>2</sup>, Burgess, M<sup>2</sup>, Summers, M<sup>2</sup>, McEvoy, PM<sup>1,2</sup>

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**Speaker:** Samantha Bank

### **Background:**

Recurrent, negative self-imagery is common in social anxiety disorder (SAD). Imagery rescripting (ImRs) is an effective therapeutic technique that aims to target past traumatic memories to modify their associated meanings, and update the encapsulated negative schematic beliefs. The current study aimed to extend previous research by investigating the cognitive and affective shifts during each phase of ImRs delivered within a group cognitive behavioural therapy protocol.

### **Methods:**

Participants ( $N = 32$ ) retrieved an aversive memory associated with social anxiety and were guided through brief cognitive restructuring, prior to completing ImRs. Core beliefs related to the memory were assessed before and after ImRs, whereas affect was assessed following each phase. Fear of negative evaluation was assessed before ImRs and again after one week, and social interaction anxiety was assessed before ImRs and again after three weeks.

### **Results:**

Strength and affective valence of encapsulated core beliefs about the self, others, the world, and the image itself significantly reduced following ImRs, and core beliefs were updated to become more positive. Participants reported large affective shifts between phases 1 and 2 of ImRs, and smaller shifts between phases 2 and 3. Social interaction anxiety significantly reduced following ImRs and was significantly associated with changes in core beliefs of the image. Fear of negative evaluation did not significantly reduce.

### **Conclusions:**

Outcomes provide support for the effectiveness of group ImRs in the treatment of SAD and suggest future research directions to better understand the underlying mechanisms of the technique.

### **Disclosure of Interest Statement:**

The papers in this symposium were supported by an NHMRC project grant (APP1104007). Peter McEvoy, Lisa Saulsman, and Ron Rapee receive royalties from Guildford Press for the book *Imagery-Enhanced CBT for Social Anxiety Disorder*. The authors have no other conflicts of interest to disclose.

## Symposium 07: Understanding loneliness and improving social connectedness

### Symposium Description:

In line with this year's conference theme of recovery and reconnection, this symposium will bring together presentations on both empirical investigation of loneliness and interventions to improve social connectedness. The first presentation will report the outcomes of a systematic review and meta-analysis on psychological interventions for social isolation, loneliness, social participation and social connectedness in adults. To address the research gaps in the literature on loneliness, the second presentation will describe an experimental investigation of the maladaptive cognitions associated with feelings of loneliness, as well as showing how maladaptive cognitions associated with loneliness could be addressed through cognitive restructuring. Moving from laboratory investigations to interventions, the third presentation will describe a randomised controlled trial that evaluates the clinical efficacy and cost-effectiveness of an augmented cognitive behavioural therapy program aimed at enhancing both the frequency and quality of social interactions in older adults with anxiety and depressive disorders. In light of the disruptions to social participation due to the COVID-19 pandemic, the fourth presentation will report the outcomes of a study that examined the impact of COVID-19 related public health restrictions on older adults' social participation, feelings of connectedness, quality of life, changes in social relationships, and uptake of new technology. The final presentation will describe a multi-site clinical trial that evaluates the effectiveness of stepped care delivery of psychological services for anxiety and depression through older adult mental health services, including the potential of using remote delivery options (internet, telehealth, self-help) to increase access to psychological interventions in isolated people.

**Chair:** Dr Jessamine Chen, Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney, NSW; Centre for Ageing, Cognition and Wellbeing, Faculty of Medicine, Human and Health Sciences, Macquarie University, Sydney, NSW.

### Paper 1

#### Interventions to improve social connections: a systematic review and meta-analysis

**Authors:** Zagic, D<sup>1,2</sup>, Wuthrich, VM<sup>1,2</sup>, Rapee, RM<sup>1</sup>, Wolters, N<sup>1,3</sup>

<sup>1</sup>Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney, NSW; <sup>2</sup>Centre for Ageing, Cognition and Wellbeing, Faculty of Medicine,

Human and Health Sciences, Macquarie University, Sydney, NSW; <sup>3</sup>Faculty of Psychology, University of Amsterdam, Amsterdam, the Netherlands

**Speaker:** Dino Zagic

### **Introduction/Background:**

The importance of both frequent and high-quality social connections for psychological wellbeing is widely recognised. Previous reviews examining the efficacy of interventions for promoting social connections have included uncontrolled studies and merged objective and subjective dimensions of social connections, leading to mixed results. We conducted a systematic review and meta-analysis of controlled trials to tease apart the effectiveness of interventions designed to promote '*objective social contact*' and the '*quality of social connections*'; we also compared the effectiveness of interventions from different theoretical orientations on these social dimensions.

### **Methods:**

A systematic search of the electronic databases Medline, Embase, PsycINFO and PubMed was conducted to identify randomised controlled trials of interventions for social isolation, loneliness, social participation and/or social connectedness in adults. Data were analysed using Stata V.16.0.

### **Results:**

Interventions led to significant improvements in objective social contact (Hedges'  $g = 0.43$ ) and the perceived quality of social connections (Hedges'  $g = -0.33$ ). Increasing access to other people was the most effective strategy for promoting objective social contact (Hedges'  $g = 0.67$ ). Providing adults with skills to manage maladaptive attributional biases, fear-related avoidance behaviour, and barriers to social contact, was the most effective strategy for addressing deficits in the perceived quality of social connections (Hedges'  $g = -0.53$ ).

### **Conclusion:**

In summary, different interventions had differential effects on the frequency and quality of social relationships and associated emotional distress. Psychological interventions focused on reducing maladaptive cognitions and avoidance hold the most promise for increasing meaningful social connections and reducing psychological distress.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Paper 2

### **Targeting maladaptive cognitions related to loneliness using focused cognitive restructuring alleviates feelings of loneliness and promotes social connectedness**

**Authors:** Zagic, D<sup>1,2</sup>, Wuthrich, VM<sup>1,2</sup>, Rapee, RM<sup>1</sup>

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**Speaker:** Dino Zagic

#### **Introduction/Background:**

The mechanisms underlying loneliness remain unclear. Although models of loneliness have emphasised the importance of maladaptive cognitions, empirical support is limited. The current study aimed to experimentally manipulate maladaptive cognitions hypothesised to underlie loneliness using an experimental intervention and measure changes in severity of lonely mood, and belief ratings of lonely thoughts. Participants in the experimental condition are hypothesised to report significantly greater reductions in belief rating of maladaptive cognitions, and greater reductions in loneliness/anxiety/depression, compared to participants in the control condition.

#### **Methods:**

Participants were undergraduate Psychology students at Macquarie University (N = 40). After providing consent, participants completed measures of emotional state (PANAS), loneliness (UCLA-LS-3), depression (PHQ-9), social anxiety (MINI-SPIN), social network (LSNS-6), and frequency of maladaptive cognitions related to loneliness. Participants were then randomly allocated to the experimental (N = 20) or control (N = 20) condition. Participants in the experimental condition received focused cognitive restructuring to address maladaptive cognitions associated with loneliness, whereas participants in the control condition completed a series of mindfulness-based puzzles designed to distract from feelings of loneliness. Measures of emotional state and maladaptive cognitions were completed post-manipulation.

#### **Results & Conclusion:**

Data collection is underway, with preliminary findings indicating the experimental condition is associated with reductions in lonely mood and belief ratings of lonely thoughts. Final results will be presented. The findings suggest maladaptive

cognitions play a significant role in maintaining feelings of loneliness, and they can be modified with cognitive restructuring. Longer term follow-up is needed in future clinical trials.

#### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

### **Paper 3**

#### **Improving mental health and social participation outcomes in older adults with depression and anxiety – a randomised controlled trial**

**Authors:** Chen, JTH<sup>1,2</sup>, Wuthrich, VM<sup>1,2</sup>, Rapee, RM<sup>1,2</sup>, Draper, B<sup>3,4</sup>, Brodaty, H<sup>3,4</sup>, Cutler, H<sup>5</sup>, Low, L-F<sup>6</sup>, Georgiou, A<sup>7</sup>, Johnco, C<sup>1,2</sup>, Jones, M<sup>1</sup>, Meuldijk, D<sup>1,2</sup>, Partington, A<sup>5,8</sup>

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**Speaker:** Dr Jessamine Chen

#### **Introduction/Background:**

Older adults with anxiety and depression have reduced social participation, poorer levels of perceived social support, and increased feelings of loneliness and isolation. Increasing both the frequency and quality of social interactions within treatments for anxiety and depression in older adults may improve their mental health outcomes and quality of life. This NHMRC-Beyond Blue cofunded clinical trial will evaluate the clinical efficacy and cost-effectiveness of an augmented cognitive behavioural therapy plus social participation program in older adults with depression and/or anxiety.

#### **Methods:**

172 community-dwelling adults aged 65 years or older with an anxiety and/or depressive disorder will be randomly allocated to either an enhanced CBT plus social participation program ( $n = 86$ ) or standard CBT program ( $n = 86$ ). Both treatments will be delivered during 12 weekly individual sessions utilising structured manuals and workbooks. Participants will be assessed at pre-treatment, post-treatment, and 12-month follow-up. The primary outcome will evaluate mean change in clinician-rated diagnostic severity of anxiety and depressive disorders based on a semi-structured diagnostic interview. Secondary outcomes will evaluate changes in symptomatology on self-report anxiety and depression measures, as well as changes in social/community participation, social network, and perceived social support, loneliness, quality of life, and use of health services. Economic benefits will be evaluated using a cost-utility analysis to derive the incremental cost-effectiveness ratio for the enhanced CBT program.

### **Results & Conclusion:**

This study is still in the recruitment phase. Data will be presented on initial case studies and study challenges relating to adapting social participation to COVID-19-related health guidelines.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Adapting social activities to COVID-19 health restrictions**

**Authors:** Chen, JTH<sup>1,2</sup>, Wuthrich, VM<sup>1,2</sup>, Matovic, D<sup>1,2</sup> Rapee, RM<sup>1,2</sup>

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**Speaker:** Dr Jessamine Chen

### **Introduction/Background:**

Government enforced lockdowns and physical distancing guidelines related to the COVID-19 pandemic have resulted in temporary closure of local community groups and suspension of social activities. Many community groups have subsequently looked to online technologies and digital resources to provide virtual-digital social support network. This study examined how older adults adapted social activities to

the COVID-19 public health restrictions, and the impact of these changes on their wellbeing, including feelings of being connected to social groups.

### **Methods:**

126 community-dwelling older adults ( $\geq 60$  years) completed self-report questionnaires assessing participation in social groups (sporting, hobby, community, volunteering, religious, culture) in terms of participation frequency, format of participation, satisfaction and feelings of connectedness with the groups, quality of life, changes in social network, changes in social relationships, and uptake of new technology.

### **Results & Conclusion:**

Up to 65.7% of older adults reported changing format of participation in social groups (from face-to-face to either videoconference only or a combination of videoconference plus telephone). Of these, there was no significant change in feelings of connectedness and satisfaction in relation to their sporting, hobby, community, or religious groups. Overall, older adults showed high uptake of new technologies to remain connected to others. Older adults who changed their format of participation in volunteering and group dining reported a significant decrease in both satisfaction and feelings of connectedness with their social groups. The decreased satisfaction and feelings of connectedness were also associated with decreased quality of life with respect to psychological health and social relationships.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 5**

### **Utilising stepped care to treat depression, anxiety, and social isolation in older adults: a multi-site clinical trial**

**Authors:** Wuthrich, V<sup>1</sup>, Rapee, R<sup>1</sup>, Draper, B<sup>2</sup>, Brodaty, H<sup>2</sup>, Cuijpers, P<sup>3</sup>, Hobbs, M<sup>2</sup>, Johnco, C<sup>1</sup>, Cutler, H<sup>4</sup>, Jones, M<sup>1</sup>, Chen, J<sup>1</sup>, Meuldijk, D<sup>1</sup>, Partington, A<sup>4</sup>, Wijeratne, C<sup>5</sup>

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**Speaker:** Professor Viviana Wuthrich

**Introduction/Background:**

Stepped care delivery of psychological services can potentially balance clinical outcomes and service costs. Stepped care relies on provision of low intensity (lower cost) services first, followed by higher intensity (higher cost) services only if needed. The use of remote delivery options (internet, telehealth, self-help) in the early steps offers the potential to increase access to psychological interventions in isolated participants, especially those living in rural and remote areas. There are no rigorous evaluations of clinical effectiveness, cost savings, feasibility or acceptability of stepped care in older adult mental health services. This cofunded NHMRC-Beyond Blue multi-site clinical trial will evaluate whether stepped care delivery of psychological services for anxiety and depression can be delivered through older adult mental health services. Stepped care is hypothesised to improve clinical effectiveness and reduce costs over existing treatments.

**Methods:**

667 older adults (>65 years) with clinically interfering symptoms of depression and/or anxiety will be randomised to stepped care or usual care at one of six older adult mental health services including public, private, urban and rural services. Participants will complete demographic, self-report symptom measures, semi-structured clinical interviews conducted by reviewers blind to treatment allocation, quality of life and economic measures, pre-treatment, 13-week post baseline, 26-week post baseline and at 12-month post baseline. Acceptability to clinicians and consumers will be evaluated.

**Results & Conclusion:**

This study is still in the recruitment phase. Data will be presented on initial case studies, study challenges related to identifying eligible cases, attitudes by clinicians, and acceptability by participants and clinicians.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 08: Predictors of individual differences in recovery from adversity

### Symposium Description:

Most people will be confronted with some type of adversity in their lifetime. This can include experiencing health issues, undergoing an acute traumatic event, or being exposed to a chronic stressor such as the COVID-19 pandemic. There are large individual differences in the extent to which people recover from such adversities, both mentally and physically. Researchers have emphasized that in order to enhance understanding of the factors contributing to such individual differences in recovery from adversity, it is necessary to examine a variety of personal and environmental factors. The aim of this symposium is to bring together researchers who have examined predictors of individual differences in recovery from adversity at different levels of analysis.

Firstly, Dr Georgina Mann examines clinical predictors of individual differences in quality of life in the recovery from acquired brain injury. Next, Hannah Abdul Razak examines the predictive role of emotional regulation strategies in individual differences in recovery from negative life events. Bree Mitchelson examines cognitive predictors of individual differences in stress reactivity and intrusion vulnerability following exposure to an acute negative event. Dr Julie Ji examines lifestyle predictors of individual differences in the response to social isolation during the pandemic. Finally, Prof Richard Bryant examines trauma-focused psychotherapy (T-F psychotherapy) and PTSD.

By combining research contributions across a range of individual and environmental factors, this symposium offers a multidimensional approach to enhancing our understanding of individual differences in recovery from adversity.

**Chair:** Lies Notebaert, University of Western Australia, School of Psychological Science, Centre for the Advancement of Research on Emotion

### Paper 1

**Recovery following acquired brain injury: correlates and predictors of quality of life in individuals with acquired brain injury during post-acute rehabilitation**

**Authors:** Mann, G<sup>1</sup>, Seneviratne, H<sup>1,2</sup>, Troeung, L<sup>1</sup>, Martini, A<sup>1</sup>

<sup>1</sup>Brightwater Research Centre, Brightwater Care Group; <sup>2</sup>University of Western Australia

**Speaker:** Georgina Mann

### **Introduction/Background:**

Following acquired brain injury (ABI), cognitive and physical barriers can impact recovery and result in reduced quality of life. This study aimed to examine predictors of health-related quality of life (HRQoL) in adults with ABI receiving post-acute community-based rehabilitation and disability support services, using tools developed for the ABI population.

### **Methods:**

A retrospective cross-sectional study using routinely collected demographic, clinical and rehabilitation data. The main outcome measures were the Quality of Life after Brain Injury Inventory (QoLIBRI) and Functional Independence and Assessment Measure (FIM+FAM) for adults with ABI (n=67) undergoing post-acute rehabilitation or disability support programs in Perth, Western Australia, from 2015–2021.

### **Results:**

Mean total QoLIBRI score ( $\pm$ standard deviation) was  $57.2 \pm 17.4$ , indicating moderate HRQoL, with mood disorders likely prevalent in this sample. Shorter time since injury ( $p=0.004$ ) and lower total FIM+FAM score ( $p=0.008$ ) significantly predicted poor HRQoL, indicating that people with ABI who are earlier in their recovery journey, and those with more severe physical and cognitive impairments, reported poorer quality of life. Physical and Daily Life and Autonomy domains of HRQoL correlated significantly with Physical and Cognitive functional independence.

### **Conclusion:**

Poor HRQoL makes this population vulnerable to psychological illness during recovery from ABI. Only 19% of clients underwent QoLIBRI assessment, suggesting psychosocial outcomes are poorly examined. Time since injury and functional independence were related to HRQoL in meaningful ways. As improvement of quality of life is the fundamental goal of rehabilitation following ABI, understanding the relationship between these potentially modifiable factors is critical to improving outcomes of rehabilitation services and providing the best chance at a meaningful life.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Paper 2

### Emotional regulation strategies in recovering from adversity

**Authors:** Abdul Razak, H<sup>1</sup>, Notebaert, L<sup>1</sup>, Rudaizky, D<sup>1</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Speaker:** Hannah Abdul Razak

#### Introduction/Background:

Emotional resilience refers to one's ability to demonstrate more positive emotional outcomes than expected given the adversity experienced. Previous research suggests that the use of certain emotional regulation strategies helps with recovery from adversity. Historically, reappraisal was seen as more beneficial than distraction. However, it is increasingly recognised that the optimal emotion regulation strategy depends on the nature of the stressor encountered. Such strategies include utilising distraction or reappraisal methods. This study tested the hypothesis that emotionally resilient individuals are characterised by adaptively implementing distraction strategies following exposure to high intensity stressors, and reappraisal strategies following low intensity stressors.

#### Methods:

A measure of participants' emotional resilience was first obtained. All participants then completed an emotional regulation task where they were exposed to high and low intensity images. With each image, they could choose distraction or reappraisal as a strategy to down-regulate their emotions.

#### Results:

Consistent with previous research, participants were more likely to choose distraction on high intensity trials, and reappraisal on low intensity trials. If the hypothesis under test is supported, more emotionally resilient individuals will demonstrate a greater preference for choosing distraction for high intensity trials and reappraisal for low intensity trials, compared to less emotionally resilient individuals.

#### Conclusion:

The ability to implement appropriate emotional regulation strategies based on context can greatly assist individual's recovery from adversity. Hence, the current study examines the strategies utilised by individuals with varying levels of emotional resilience.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 3****The contribution of attentional bias and its variability to emotional recovery from adverse experiences**

**Authors:** Mitchelson, B<sup>1</sup>, MacLeod, C<sup>1</sup>, Clarke, P<sup>2</sup>, Notebaert, L<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA; <sup>2</sup>Curtin University

**Speaker:** Bree Mitchelson

**Introduction/Background:**

People vary widely in their emotional recovery from adverse experiences. Identification of cognitive mechanisms that explain these individual differences may lead to targeted early indication following exposure to aversive experiences. A range of indices reflecting static or variable patterns of attention bias have been shown to be associated with individual differences in stress reactivity and intrusion frequency following adverse experiences. However there remains questions regarding what cognitive mechanisms underpin these indices. This study investigates the contribution of attention bias and its variability in predicting distress responses following an analogue film based adverse experience.

**Methods:**

A community sample viewed first person perspective negative film clips as an analogue adverse experience. This was followed by assessment of stress response to the film, a dot probe tasks from which a range of attentional bias and variability indices were derived, and a seven-day intrusion frequency and distress diary. Participants then completed a second dot probe assessment one week following their film viewing.

**Results:**

Results indicate that attention bias, rather than response variability contributes to intrusions following an adverse event. An attention bias to threat reflected in traditional static AB index was positively associated with intrusions at follow-up.

### **Conclusion:**

This study has the potential to contribute to understanding of recovery from adversity through mechanisms that give rise to maladaptive attention bias emerging in response to adverse events. This has important implications for early identification and intervention in a range of mental health areas.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Loneliness during lockdown – role of social activity and depression**

**Authors:** Ji, LJ<sup>1</sup>, Basanovic, J<sup>1</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Speaker:** Julie L. Ji

### **Introduction/Background:**

Loneliness is a perceived state of social isolation that is associated with negative emotional, cognitive, and physical health outcomes. Physical distancing and shelter-in-place public health responses designed to curb COVID-19 transmission has led to concerns of elevated risks of loneliness. Given that physical isolation does not necessitate social isolation in the age of digital communication, this study investigated the relationship between the frequency of social interaction and loneliness over a two-week period, and whether this relationship was moderated by physical isolation level, mental health vulnerability, or background variables.

### **Methods:**

A self-selected sample of N = 469 individuals across Australia who were engaged in physically distanced living completed daily surveys for 14-days during April to June of 2020.

### **Results:**

Multilevel modelling showed that more frequent social interaction with close, but not intermediate, or distant contacts, was uniquely associated with lower loneliness.

Critically, more frequent social interaction with close contacts buffered against loneliness overtime for high depression individuals, with depression being the only significant moderator of the relationship between social interaction and loneliness overtime.

**Conclusion:**

Encouraging social activity with close contacts may promote resilience against loneliness in individuals with elevated depression symptoms.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 5****What predicts treatment response in PTSD?**

**Authors:** Bryant, RA<sup>1</sup>

<sup>1</sup>University of New South Wales

**Speaker:** Richard Bryant

**Abstract**

Although trauma-focused psychotherapy (T-F psychotherapy) is the treatment of choice for posttraumatic stress disorder (PTSD), up to one half of patients do not respond to this treatment. Attempts to improve response T-F psychotherapy have focussed on augmenting extinction-based factors. A systematic and meta-analytic review of predictors of T-F psychotherapy outcome was conducted with the goal of using an aggregate data-driven approach to elucidate baseline factors associated with treatment outcome. Two hundred and fifty-five effect sizes from 123 trials met inclusion criteria. Results showed that a range of fear/extinction-related factors predicted T-F psychotherapy outcome. In addition, a broad array of static and malleable patient and contextual factors that are not related to fear-based factors were associated with PTSD outcome. This review provides one potential explanation for the limited success of T-F psychotherapy augmentation strategies that have targeted fear circuitry mechanisms at the exclusion of other factors. Future research directions are considered in the context of strategies to improve treatment outcomes for TF-psychotherapy by considering the array of factors that are predictive of treatment response.

**Disclosure of Interest Statement:**

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## Symposium 09: Death anxiety in anxiety-related conditions

### Symposium Description:

Death anxiety has been proposed to be a transdiagnostic construct, underlying multiple mental illnesses and anxiety-related conditions. In this symposium, death anxiety will be explored in relation to various conditions, and the clinical implications will be explored. First, a novel online CBT treatment for death anxiety will be discussed. The results of a phase I clinical trial, examining the efficacy of this treatment among a clinical sample, will be presented. Second, the role of attachment style in moderating the relationship between death anxiety and OCD severity will be explored. The results highlight the problem that close relationships may pose in OCD symptomatology.

Third, the relevance of death anxiety to fear of cancer recurrence and progressive will be outlined. Results from a sample of women with a history of ovarian cancer demonstrate the importance of considering death anxiety in psycho-oncology. Lastly, data will be presented from an experimental priming study. Findings will demonstrate whether the proposed buffers of meaning in life and relationships will ameliorate the impact of death reminders on anxious behaviours and cognitions in cancer survivors. Taken together, the results of these four studies demonstrate the vital importance of death anxiety in anxiety-related conditions, and the relevance of treatments addressing this construct.

**Chair:** Rachel Menzies, University of Sydney

### Paper 1

#### **Overcome death anxiety: results from a novel online CBT treatment for fears of death**

**Authors:** Menzies, RE<sup>1</sup>, Sharpe, L<sup>1</sup>, Helgadottir, F<sup>3</sup>, Julien, A<sup>2</sup>, Menzies, RG<sup>2</sup>, Dar-Nimrod, I<sup>1</sup>

<sup>1</sup>University of Sydney, NSW; <sup>2</sup>University of Technology Sydney, NSW; <sup>3</sup>Vancouver, Canada

**Speaker:** Rachel Menzies

### Introduction/Background:

Emerging research suggests that death anxiety is a transdiagnostic construct, which may underpin a number of mental illnesses. Although CBT has been found to be the

most effective treatment for death anxiety, no self-guided treatments for this construct exist at present. Further, there is a growing need for accessible, scalable, and cost-effective psychological treatments.

### **Methods:**

To address these gaps, we created Overcome Death Anxiety (ODA), an online CBT-based program which specifically targets fears of death. ODA was designed to be a fully automated, standalone, yet individualised online treatment. We sought to recruit 20 treatment-seeking individuals with a mental health diagnosis, to undergo a Phase I clinical trial of ODA. Users completed measures of death anxiety and broad mental health pre and post-intervention, as well as ratings of treatment satisfaction.

### **Results:**

The results from users who completed the program revealed that the majority demonstrated a reliable change in their overall death anxiety. Differences in subscales of death anxiety will be discussed. The program's completion rates are comparable to those found for other standalone online treatments.

### **Conclusion:**

Preliminary evidence from the current trial suggest that ODA may be effective at reducing death anxiety. Future research using randomised controlled trials is needed to further examine the program's efficacy.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 2**

### **Death anxiety and OCD: what's love got to do with it?**

**Authors:** Verin, RE<sup>2</sup>, Menzies, RE<sup>1</sup>, Menzies, RG<sup>2</sup>

<sup>1</sup>University of Sydney, NSW; <sup>2</sup>University of Technology, Sydney, NSW

**Speaker:** Ross Menzies

### **Introduction/Background:**

Death anxiety has been empirically implicated in Obsessive Compulsive Disorder (OCD). Research has shown that secure attachments appear to protect against fear of death, and are also associated with reduced risk of mental illness. However, few studies have investigated the moderating effect of attachment style in the relationship between death anxiety and OCD.

### **Methods:**

The present study sought to explore whether attachment style moderates the relationship between death anxiety and OCD symptoms among a treatment-seeking sample of individuals diagnosed with OCD. Following a structured diagnostic interview, a number of measures were administered to 48 participants. These included the Multidimensional Fear of Death Scale, Vancouver Obsessive Compulsive Inventory, and *Experiences in Close Relationships-Revised*.

### **Results:**

As expected, death anxiety was a strong predictor of OCD severity, and other markers of psychopathology. However, contrary to hypotheses, neither anxious nor avoidant attachment style moderated the association between fear of death and OCD severity.

### **Conclusion:**

The current findings add further support to the role of death anxiety in OCD. The failure to find a moderating effect of attachment between death fears and OCD severity suggests that the proposed buffers against death anxiety (e.g., secure attachment) may be insufficient in the presence of mental illness.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 3**

### **Can death anxiety predict fear of cancer recurrence and progression in women with ovarian cancer over and above other cognitive factors?**

**Authors:** Coutts-Bain, D<sup>1</sup>, Sharpe, L<sup>1</sup>, Pradhan, P<sup>1</sup>, Russell, H<sup>2</sup>, Heathcote, L<sup>3</sup>, Costa, D<sup>1</sup>

<sup>1</sup>School of Psychology, The University of Sydney, Sydney, NSW, Australia; <sup>2</sup>Ovarian Cancer Australia, Melbourne, VIC, Australia; <sup>3</sup>Department of Anesthesiology, Perioperative, and Pain Medicine, Stanford University, Stanford, CA, United States

**Speaker:** Daelin Coutts-Bain

### **Introduction/Background:**

Numerous systematic reviews have found that fear of cancer recurrence (FCR) and progression (FOP) are highly prevalent and are some of the largest unmet needs of people with a history of cancer. Hence, over the last decade, there has been a substantial amount of research on how to predict and treat these fears, especially for FCR. However, very little quantitative research has explored the role of death anxiety in FCR and FOP. This is surprising given that cancer is well known to be a potentially life-threatening disease. The present study aimed to address this gap by determining if death anxiety could predict FCR and FOP, beyond other known psychological predictors, in people with active and non-active cancer diagnoses.

### **Methods:**

159 adult women with a history of ovarian cancer were recruited via Ovarian Cancer Australia for an online survey. Multiple regression analyses were conducted on participant responses to the survey.

### **Results:**

A hierarchical regression accounted for 68% of variance in FCR and 61% of variance in FOP. Interestingly, death anxiety accounted for a significant proportion of variance in both FCR and FOP over and above metacognitions, threat appraisal, intrusive thoughts, and propensity to monitor the body for signs of threat.

### **Conclusion:**

These findings draw attention to the importance of death anxiety in understanding FCR and FOP. Implications for augmenting existing treatments of FCR and FOP are discussed, as well as the need to adopt a psycho-oncological research agenda which includes death anxiety.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Do meaning and relationships buffer death anxiety in fear of cancer recurrence?**

**Authors:** Watt, ML<sup>1</sup>, Sharpe L<sup>1</sup>, Menzies, RE<sup>1</sup>

<sup>1</sup>School of Psychology, Faculty of Science, The University of Sydney, NSW

**Speaker:** Louise Sharpe

### **Introduction/Background:**

It seems self-evident that fear of cancer recurrence (FCR) and death anxiety are inextricably linked. However, we found in 2018 only a single study that had examined that relationship. Our previous research showed that 'found meaning' and 'secure relationships' both predicted death anxiety, and through death anxiety, indirectly predicted FCR. The aim of this study is to experimentally manipulate 'found meaning' and 'relationship security' to determine whether priming these buffers reduces FCR and FCR-related behaviours (e.g. reassurance seeking, bodily checking).

### **Methods:**

We recruited cancer survivors from patient organisations. All participants completed measures of death anxiety and FCR before completing a filler task. Participants were then randomized to one of three priming conditions. In the buffer conditions, participants were asked to write about either something meaningful in their life or an important secure relationship. The control group was instructed to write about their favourite TV show. The participants then completed a measure of positive and negative affect, before completing tasks relating to interpretation bias, reassurance seeking, bodily checking and the FCRI.

### **Results:**

We will present the results of this study, to test whether the control group demonstrated less FCR and FCR-related behaviours. We will also determine whether baseline FCR or death anxiety moderate the efficacy of the buffers.

### **Conclusion:**

If the buffer conditions are effective in reducing the impact of death anxiety on FCR and FCR-related experiences, this will lead the way to develop more efficacious treatments for FCR that focus on meaning-making and enhancing attachment relationships.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 10: The role of cognitive processes in unhealthy patterns of consumption

### Symposium Description:

Unhealthy patterns of consumption in the domains of eating and alcohol present tremendous personal and societal costs, making it imperative to identify the processes that contribute to such problematic consumption. Researchers have been particularly interested in the function of cognitive processes, such as biases in attention and approach-avoidance tendencies, and the ability to inhibit behavioural impulses (i.e., inhibitory control). The goal of this symposium is to advance understanding of the role of these cognitive processes in unhealthy consumption.

The first two speakers will present findings on the behavioural approach tendencies which differentiate individuals characterised by healthy versus unhealthy patterns of eating behaviours. Specifically, Sophia Moore, will focus on the distinction between overweight and healthy-weight individuals, whereas Daniel Rudaizky will focus on the distinction between successful and unsuccessful healthy eaters. Our third speaker, Laura Dondzilo, will then present findings on the specific attentional mechanisms that differentiate restrained and unrestrained eaters. The final two speakers will present findings on unhealthy consumption in the domain of alcohol, with Jemma Todd focusing on the role of attentional bias in efforts to reduce alcohol consumption, and Henry Austin focusing on the association between inhibitory control and negative emotional drinking.

The symposium will conclude with Daniel Rudaizky discussing the clinical implications of this research. By identifying the processes that contribute to the type of consumption that is known to lead to the development or exacerbation of substance misuse or eating disorders, this research serves to ultimately inform clinical interventions aimed at preventing or remediating problematic consumption.

**Chair:** Laura Dondzilo, Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Discussant:** Daniel Rudaizky, School of Population Health, Curtin University, Perth, WA, Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

### Paper 1

**Healthiness matters: approach motivation for (un)healthy food in overweight and obese individuals**

**Authors:** Moore, S<sup>1</sup>, Rudaizky, R<sup>1</sup>, MacLeod, C<sup>1</sup>, Dondzilo, L<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Speaker:** Sophia Moore

### **Introduction/Background:**

It is well documented that approach biases for appetitive substances play a role in certain unhealthy patterns of consumption. However, it remains uncertain whether overweight individuals differ from healthy-weight individuals in terms of their tendency to approach unhealthy foods. Thus, the present study aimed to empirically test the hypothesis that overweight individuals are characterised by an elevated behavioural tendency to approach unhealthy food, as compared to healthy-weight individuals.

### **Methods:**

Participants were forty overweight individuals (Mean BMI = 30.46 kg/m<sup>2</sup>) and forty-five healthy-weight individuals (Mean BMI = 22.17 kg/m<sup>2</sup>) aged between 17 and 47. They completed an Approach-Avoidance Task to assess behavioural approach-avoidance tendencies towards healthy and unhealthy food.

### **Results:**

Contrary to the hypothesis under test, results revealed a greater approach bias towards healthy food in overweight individuals, as compared to healthy-weight individuals, whereas there were no group differences in behavioural approach-avoidance tendencies towards unhealthy food.

### **Conclusion:**

These novel findings suggest that overweight individuals are characterised by an approach motivation for healthy food. Future researchers are encouraged to build on these findings to test whether this approach tendency contributes to consumption behaviour in overweight individuals.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 2**

## **Perceived healthiness and tastiness differentially impact on approach tendencies to food in successful and unsuccessful healthy eaters**

**Authors:** Rudaizky, D<sup>1,2</sup>, Razak, H<sup>2</sup>, MacLeod, C<sup>2</sup>

<sup>1</sup>School of Population Health, Curtin University, Perth, WA; <sup>2</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Speaker:** Daniel Rudaizky

### **Introduction/Background:**

Despite individuals being motivated to eat healthily, many are still unable to successfully translate this motivation into patterns of healthy food consumption. Two salient dimensions of a food item that could impact on an individual's relative approach/avoidance of that particular food item are its perceived tastiness and its perceived healthiness. In this study we sought to test alternative hypotheses concerning the impact that classifying food items in terms of each of these dimensions had on the relative approach/avoidance tendencies of successful and unsuccessful healthy eaters towards healthy and unhealthy food.

### **Methods:**

Successful and unsuccessful healthy eaters completed a Stimulus-Coding Approach Avoidance Task whereby they were required to first code food items either in terms of their healthiness or its tastiness and then make an approach or avoidance response to these same food items.

### **Results:**

Successful healthy eaters demonstrated an approach bias to healthy foods compared to unhealthy foods when they were required to code these foods in terms of their healthiness, no such bias was found in the unsuccessful healthy eaters. Successful healthy eaters demonstrated an approach bias to healthy foods even when they were perceived as not tasty and again, no evidence of such a bias was found in unsuccessful healthy eaters.

### **Conclusion:**

These findings indicate that the way in which a particular food item is classified in terms of its healthiness and how it is perceived in terms of its tastiness will differentially impact the degree to which successful and unsuccessful healthy eaters approach a particular food.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

### **Paper 3**

#### **Food-related attentional bias in restrained eaters: converging evidence from two attentional assessment approaches**

##### **Authors:**

Dondzilo L<sup>1</sup>, Mills C<sup>1</sup>, Pollitt S<sup>1</sup>, MacLeod C<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Crawley, WA

**Speaker:** Laura Dondzilo

##### **Introduction/Background:**

It has been proposed that high restrained eaters are characterised by a heightened attentional bias to high calorie foods. However, the validity of this hypothesis has not yet been convincingly established. The current study sought to empirically evaluate this hypothesis using two converging measures of attentional bias: the conventional dot probe task and the innovative Chase the Food task. The latter assessment approach has the capacity to differentiate between attentional switching and attentional maintenance within a complex and dynamic food environment.

##### **Methods:**

Participants were 98 undergraduate students (54 high restrained eaters and 44 low restrained eaters) aged between 17 and 45 and with a mean BMI of 21.97 kg/m<sup>2</sup>. They completed the novel Chase the Food task and the well-established Dot Probe Task to assess attentional bias to high calorie vs. low calorie food.

##### **Results:**

Findings obtained on the two attentional tasks converged in revealing a heightened attentional bias towards high calorie vs. low calorie food in high restrained eaters, as compared to low restrained eaters. Specifically, the Chase the Food task revealed that this attentional bias was due to high restrained eaters showing both an increased readiness to switch attention to high calorie foods as well as an increased attentional maintenance to high calorie foods.

### **Conclusion:**

These novel findings imply that in a complex and dynamic food environment, biased attentional switching and biased attentional maintenance towards high calorie foods both characterise elevated restrained eating. Implications include targeting biased attentional switching and/or biased attentional maintenance, using training variants of the Chase the Food task, in interventions designed to promote healthy patterns of eating behaviour.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Drinking more than planned: attentional bias in attempts to reduce alcohol consumption**

**Authors:** Todd, J<sup>1,2</sup>, Downey, J<sup>2</sup>, Grafton, B<sup>2</sup>, MacLeod, C<sup>2</sup>

<sup>1</sup>School of Psychology, University of Sydney, Sydney, NSW; <sup>2</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA

**Speaker:** Jemma Todd

### **Introduction/Background:**

Alcohol-related harm is a global health problem, and yet many who attempt to reduce their alcohol consumption do not succeed. The aim of the present study was to explore whether attentional bias towards alcohol-related information, using a novel attentional bias task, can predict the success of attempts to reduce alcohol consumption.

### **Methods:**

Individuals who reported consuming alcohol regularly and were trying to reduce their alcohol consumption (N=33) were recruited. Participants completed baseline demographic and alcohol consumption measures, and a novel dual probe attentional bias task. Within this task, video pairs of peers discussing the positive and negative aspects of alcohol consumption were presented, interspersed with a pair of probes. Participants were only able to see and respond to the probe in the location of the video that they were currently attending to. Participants then completed a week-long

diary measuring alcohol consumption and whether they had consumed more or less alcohol than planned.

### **Results:**

An attentional bias towards positive alcohol messages was associated with consuming a greater amount of alcohol than planned ( $r = .38$ ,  $p < .05$ ). There were no associations between attentional bias and reported alcohol consumption.

### **Conclusion:**

Individuals who attend more to positive rather than negative alcohol messages in their environment may find it more difficult to stick to their goal of reducing alcohol consumption. This has implications for alcohol-related treatments and the potential role of attentional bias modification. Future research could also consider the role of attentional bias in the process of setting health-related goals.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 5**

### **The role of impaired inhibitory control in negative emotional drinking**

**Authors:** Austin, H<sup>1,2</sup>, Notebaert, L<sup>1</sup>, Wiers, RW<sup>2</sup>, Salemink, E<sup>2,3</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>Centre for the Advancement of Research on Emotion, School of Psychological Science, University of Western Australia, Perth, WA; <sup>2</sup>Addiction Development and Psychopathology Lab, Universiteit van Amsterdam, Amsterdam, Netherlands;

<sup>3</sup>Experimental Psychopathology (EPP) Lab, Utrecht University, Utrecht, Netherlands

**Speaker:** Henry Austin

### **Introduction/Background:**

The tendency to drink alcohol in response to negative emotion (*negative emotional drinking*) is associated with harmful alcohol use and relapse. Inhibitory control has been implicated as a potentially important process underlying alcohol use.

Interestingly, inhibitory control has also been shown to fluctuate in response to emotional states. The present research aimed to investigate whether the tendency to engage in negative emotional drinking is associated with an impairment in inhibitory control following exposure to a negative emotional experience.

**Methods:**

Participants ( $N = 224$ ) reported on the degree to which negative emotion increases their alcohol consumption. They were then randomised to a positive or negative mood induction condition while also completing the Stop-signal Task to serve as a measure of inhibitory control.

**Results:**

As predicted, higher levels of individual differences in self-reported negative emotional drinking were associated with worse inhibitory control in the negative mood induction condition (as compared to the positive mood induction condition). This effect was only present in the context of alcohol cues (as compared to soft-drink cues) and was more pronounced in males.

**Conclusion:**

Negative emotional drinking may be underpinned by a tendency to experience impaired inhibitory control following exposure to a negative emotional experience (especially for males). These novel findings may have implications for future research aimed at improving cognitive and behavioural interventions for harmful alcohol use.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 11: Exposure therapy: diverse clinical applications and novel delivery methods

### Symposium Description:

A large body of research shows that exposure therapy is effective for treating a range of anxiety and related presentations. However, exposure therapy is difficult to access in the community, with research suggesting clinicians rarely, if ever, use exposure therapy in their clinical practice. It is also unclear how to deliver exposure most effectively, including whether it needs to be combined with other cognitive behavioural strategies (e.g. cognitive techniques), and whether massed delivery of exposure is as effective as weekly sessions. More studies are needed to refine the application of exposure therapy with different clinical populations and uncover ways of increasing access to exposure therapy.

This symposium will bring together advances in research and clinical applications of exposure therapy across this lifespan (including young people and older adults), for various clinical presentations (e.g. phobias, panic disorder, binge eating disorder), using a variety of delivery formats (face-to-face, online, and massed/intensive delivery). The series of studies within this symposium will explore the role of exposure as an active ingredient in treatments for anxiety, as well as binge eating disorder, and whether eliminating unnecessary components and focusing on exposure may lead to more parsimonious and powerful interventions. The talks will also explore issues of implementation in clinical practice, including clinician barriers to the dissemination of exposure therapy, whether exposure therapy can be delivered via an online course, whether exposure can be effectively delivered in a single-session massed format to accelerate outcomes, and strategies to optimize exposure therapy to reduce binge eating.

**Chair:** Dr Eileen Stech, Black Dog Institute, UNSW Sydney

**Discussant:** Professor Jennie Hudson, Black Dog Institute, UNSW Sydney

### Paper 1

#### Active ingredients for preventing and treating anxiety in young people: the effectiveness of exposure

**Authors:** Hudson, JH<sup>1</sup>, Teunisse, AK<sup>2</sup>, Pembroke, L<sup>2</sup>, O'Gradey-Lee, M<sup>1</sup>, Rapee, RM<sup>2</sup>, Wuthrich, VM<sup>2</sup>, Creswell, C<sup>3</sup>

<sup>1</sup>Black Dog Institute, University of New South Wales; <sup>2</sup>Centre for Emotional Health, Department of Psychology, Macquarie University; <sup>3</sup>Department of Experimental

Psychology and Department of Psychiatry, University of Oxford, Oxford, United Kingdom

**Speaker:** Jennie Hudson

### **Introduction/Background:**

Cognitive Behavioural Therapy (CBT) is the gold standard intervention for anxiety and related mental health disorders; however, the effectiveness of individual elements of CBT (e.g., exposure to feared stimuli) have received little scrutiny. This scoping review, informed by three stakeholder groups and a scientific advisory group, aimed to investigate the effectiveness of exposure to feared stimuli, moderators of effectiveness, and barriers to exposure delivery in young people aged 14-24 years.

### **Methods:**

Three international stakeholder groups composed of clinicians (N = 8), parents/carers (N = 5) and youth with lived experience of anxiety (N = 7) provided input into study design and results. Using the PRISMA extension for scoping reviews, a search of MEDLINE/Ovid, PsycINFO, PubMed, CINAHL, SCOPUS, EMBASE, ERIC, and Health Collection (informit) was conducted using terms related to anxiety, ages 14 to 24, and exposure. From 3508 unique abstracts, 64 papers were included for the review.

### **Results:**

Most evidence came from studies examining post-traumatic stress disorder, obsessive-compulsive disorder, and specific phobias. Exposure was reported to be an effective treatment for anxiety disorders in young people. However, many studies added additional elements to exposure conditions (such as psychoeducation or cognitive strategies), making it difficult to determine the 'pure' effects of exposure in the treatment of anxiety disorders in young people.

### **Conclusion:**

A systematic and theoretically-driven program of research investigating factors that moderate the efficacy of exposure in young people, along with methods to overcome barriers for delivery, is urgently needed.

### **Disclosure of Interest Statement:**

Declaration of Interest: This work was funded by a Wellcome Trust Mental Health Priority Area 'Active Ingredients' commission awarded to JH, CC, RR, VW

## Paper 2

### **Factors associated with practitioners' use of exposure therapy for older adults with anxiety disorders**

**Authors:** Chen, J<sup>1,2</sup>, Wuthrich, V<sup>1,2</sup>, Zagic, D<sup>1,2</sup>

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**Speaker:** Dr Jessamine Chen

#### **Introduction/Background:**

Despite the empirical support for exposure-based cognitive behavioural therapy, it is unclear how many older adults in community settings receive this intervention. Prior research indicates that the majority of clinicians trained in exposure therapy rarely, if ever, use this treatment in their clinical practice. Research has also shown that clinicians are often sceptical about their ability to assist an older adult with mental health issues, and about the effectiveness of psychological interventions with older adults. This study will examine factors related to use of exposure therapy in clinicians who treat older adults with anxiety disorders.

#### **Methods:**

300 mental health treatment providers (e.g., psychologists, counsellors) will complete self-report questionnaires assessing the frequency of use of exposure and other treatment techniques for older clients with anxiety disorders, as well as beliefs about the safety and tolerability of exposure for older adults.

#### **Results & Conclusions:**

This study is still in the recruitment phase. Preliminary data will be presented in relation to frequency of use of exposure therapy with older clients relative to younger clients, frequency of use of exposure with clients relative to other intervention techniques, association of negative clinician beliefs about the safety, tolerability, and ethicality of exposure therapy for older clients with the frequency of use of exposure therapy, and interaction between years of practice, professional training (doctoral vs. others), therapist theoretical orientations (e.g., CBT only vs. combined CBT plus), and frequency of use of exposure therapy.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 3****The relative efficacy and efficiency of single- versus multi-session exposure therapy for specific phobia: a meta-analysis**

**Authors:** Odgers, K<sup>1</sup>, Graham, BM<sup>1</sup>

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

**Speaker:** Bronwyn M Graham

**Introduction/Background:**

Exposure therapy is the first-line treatment for specific phobia, the most common subtype of anxiety disorders. Exposure therapy can be administered in multi-session (i.e., several, shorter-duration sessions) or massed format (i.e., a single, long-duration session, known as One-Session-Treatment; OST), both of which have demonstrated effectiveness. Under the Better Access initiative, individuals receiving OST incur higher out-of-pocket expenses relative to individuals receiving the same amount (i.e., total duration) of exposure in multi-session format. However, the relative efficiency and efficacy of each format has not been rigorously assessed. Addressing this knowledge gap is essential to inform policy on rebates for psychological services.

**Methods:**

We searched the literature for publications reporting the effects of multi-session and/or OST in vivo exposure for specific phobia. We used a random-effects model to synthesise and compare pre- to post-treatment changes (Hedges'  $g$ ) in behavioural avoidance and self-reported phobic symptoms following multi-session ( $n = 29$  studies) versus OST ( $n = 53$  studies) formats ( $N = 1667$  participants with specific phobia).

**Results:**

There was no significant difference in the pooled effect sizes of OST and multi-session exposure at post-treatment and follow-up assessments. There were large effect sizes for reductions in both behavioural avoidance and self-reported phobia

symptoms. However, the mean total treatment duration was significantly longer for multi-session versus OST exposure formats.

### **Conclusion:**

OST is equally effective and more efficient than multi-session exposure therapy, yet OST incurs a greater out-of-pocket expense to the individual. Removing barriers to accessing equitable rebates for OST could increase treatment uptake.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **Delivering exposure therapy for panic disorder online: an RCT comparing exposure-based vs multi-component CBT programs**

**Authors:** Stech, EP<sup>1,3,4</sup>, Chen, AZ<sup>2,3</sup>, Sharrock, MJ<sup>2,3</sup>, Grierson, AB<sup>2,3</sup>, Upton, EL<sup>1</sup>, Mahoney, AEJ<sup>3</sup>, Grisham, JR<sup>1</sup>, Newby, JM<sup>1,3,4</sup>

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**Speaker:** Eileen Stech

### **Introduction/Background:**

A large body of research supports the efficacy of delivering CBT for panic disorder as an online course. However, 40 percent of people continue to report symptoms in the clinical range following online CBT programs. Eliminating unnecessary components and focusing on exposure may lead to more parsimonious and powerful internet interventions for panic disorder. However, no previous research has evaluated whether an exposure only program is safe, acceptable, and efficacious.

### **Methods:**

Participants diagnosed with panic disorder, with or without agoraphobia, were randomized to internet-delivered exposure therapy ( $n = 35$ ) or internet-delivered multi-component CBT ( $n = 34$ ). Both programs were clinician guided, with six lessons delivered over eight weeks. Outcomes included panic disorder and agoraphobia

symptom severity, as well as depression symptom severity, functional impairment and days out of role.

### **Results:**

Participants in both conditions displayed a large reduction in panic disorder symptom severity ( $ds > 1.30$ ) from pre- to post-treatment. Participants in both conditions displayed medium to large reduction in agoraphobia and depression symptom severity, functional impairment and days out of role. Effects were maintained at three- and six-month follow-up. There was no significant difference between the interventions in clinical outcomes, adherence, or treatment satisfaction.

### **Conclusion:**

These findings suggests that exposure therapy for panic disorder can be safely and successfully delivered online, with relatively minimal clinician guidance. Internet-delivered exposure therapy appeared to be as acceptable and efficacious as more established internet-delivered CBT, despite including less strategies.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 5**

### **Exposure therapy for binge eating – It works!**

**Authors:** Norberg, MM<sup>1</sup>, Magson, T<sup>1</sup>, Handford, C<sup>1</sup>

<sup>1</sup>Macquarie University, Centre for Emotional Health

**Speaker:** Melissa M. Norberg

### **Introduction/Background:**

Approximately half of individuals with binge eating disorder (BED) fail to improve when treated with cognitive behavioral therapy; thus, better treatments are needed. Cue exposure and response prevention (CERP) may be one option, but its full potential for reducing binge eating remains unknown because prior applications for binge eating have not utilized the broad range of strategies believed to optimize exposure therapy.

### **Methods:**

This presentation will review how exposure therapy has been done in the past as well as describe a recent single-subject AB design that investigated the acceptability and effectiveness of a comprehensive CERP treatment among 8 women who met DSM-5 criteria for binge eating disorder. Changes in the number of binges were measured from baseline to the end of treatment, and desire to eat, salivation, and idiographic expectancies of aversive outcomes to food-cue exposure (idiographic CS-US expectancies), including expectancies about ability to tolerate distress when exposed to food cues were measured across the course of treatment.

**Results:**

Statistical analysis revealed a significant reduction in the number of binges from baseline to the end of treatment. Across the course of treatment, desire to eat and idiographic CS-US expectancies reduced, and distress tolerance expectancies increased. No participants dropped out and all reported being maximally satisfied with the treatment.

**Conclusion:**

Based on these findings, future randomized-control trials with larger samples should examine the efficacy of CERP and mechanisms underlying change with the aim of establishing a more effective treatment for binge eating disorder.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 12: Loneliness – theory and practice

### Symposium Description:

In recent years, loneliness has been recognized as a major public health issue. The COVID-19 pandemic and associated lockdown and social distancing restrictions has further isolated people and yet CBT practitioners are often not well prepared to address this issue in their clients. This symposium is strongly aligned with the 2021 conference theme of 'Recovery and Reconnection' and aims to present the AACBT audience with up-to-date knowledge on the theory, correlates and treatment targets related to loneliness. There are four papers: paper one, presented by Dr David Preece (Curtin & UWA), is a narrative synthesis of evidence linking loneliness with various presenting problems in psychological practice. The second paper presented by Shaun Hayes (UQ) tests an integrated model of emotion regulation and social identity constructs in UK adults with and without a history of mental illness. Paper 3 from Dr Marlee Bower (Matilda Centre, NSW) presents preliminary findings from a national survey of loneliness and its correlates during the first wave of COVID-19 and six months later. In the final paper, Assoc. Professor Genevieve Dingle (UQ) shares data from a longitudinal study of loneliness and risky drinking among first year university students in 2019 (pre-COVID-19) and in 2020 (first wave of COVID-19). Together, this research builds a picture of loneliness in various populations and identifies specific targets for psychological treatment.

**Chair:** Genevieve Dingle, The University of Queensland

### Paper 1

#### Evidence that loneliness matters in psychological practice

**Authors:** Badcock, JC<sup>1,2</sup>, Badcock, AC<sup>1</sup>, Becerra, R, Preece, DA<sup>3,1</sup>

<sup>1</sup>University of Western Australia, WA; <sup>2</sup>Ending Loneliness Together, Inc; <sup>3</sup>Curtin University, WA

**Speaker:** David Preece

### Introduction/Background:

Loneliness has an adverse effect on mental health and is associated with increased use of healthcare services, yet loneliness is not often discussed by healthcare practitioners or factored into treatment plans. Here, we provide an overview of recent

evidence on the impact of loneliness on mental health, the 'state of the art' in assessing and treating loneliness, and the stigma of loneliness in clinical settings.

### **Methods:**

Narrative synthesis.

### **Results:**

Loneliness is associated with an increased risk of developing a variety of common mental health problems (e.g., depression, anxiety, suicide, sleep disturbance, dementia). Loneliness is also prevalent in people with psychological and neurodevelopmental disorders (e.g. autism, psychotic disorder) and in others seeking help (e.g. new parents, bereaved people, carers). Studies show it can be robustly assessed with psychometric measures, though rates of loneliness are often lower when direct (rather than indirect) measures are used. Reviews suggest that the most promising interventions use cognitive-behavioral therapy to change maladaptive social cognitions. Recent studies are focused on identifying mechanisms of change, the role of social networks, and the use of digital technologies to augment treatment. Evidence suggests that the stigma of loneliness can prevent clients and healthcare professionals from talking openly about it, but the best strategies for combating loneliness stigma are unclear.

### **Conclusion:**

The evidence underscores the importance of enquiring about loneliness in psychological practice and incorporating clients' goals to reduce loneliness in case formulations. Cognitive-behavioural therapy appears to be effective at alleviating loneliness. Further exploration of the mechanisms involved is needed.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 2**

### **Exploring links between social identity, emotion regulation, and loneliness in those with and without a history of a mental disorder**

**Authors:** Hayes, S<sup>1,3</sup>, Carlyle, M<sup>1,2</sup>, Haslam, SA<sup>1</sup>, Haslam, C<sup>1,3</sup>, Dingle GA<sup>1,3</sup>

<sup>1</sup>School of Psychology, The University of QLD; <sup>2</sup>Lives Lived Well Group, The University of QLD; <sup>3</sup>Centre for Health Outcomes Innovation and Clinical Education (CHOiCE), School of Psychology, University of QLD

**Speaker:** Shaun Hayes

### **Introduction/Background:**

Two prominent models of loneliness include the emotion model and social identity model. The emotion model views loneliness as a negative emotional state that can be managed using internal and interpersonal emotion regulation strategies, while the social identity model views loneliness as resulting from a loss or lack of important social groups and related identities. No research has explored the inter-relationships between these theories, and their unique contributions to perceptions of loneliness. The aim of this research was to explore the differences and relationships between these constructs in adults with and without a mental health history.

### **Methods:**

A sample of 1036 adults representative of the UK completed a cross-sectional survey including measures of group membership, social support, Emotion Regulation of Others and Self (EROS), and the UCLA Loneliness Scale (RULS-8). Following data cleaning, 875 participants remained. Of these, 217 (24.8%) had a history of mental illness (MH Hx), while 658 (75.2%) had no history of mental illness (No MH Hx).

### **Results:**

The MH Hx group reported higher internal affect worsening strategies and loneliness than the no MH Hx. Hierarchical regressions showed that for the No MH Hx group, the unique level of loneliness accounted for by emotion regulation (25%) and social identity (25%) were equivalent, with a number of inter-relationships also identified. In the MH Hx, the unique contributions of emotion regulation (22%) and social identity (19%) were also similar, but with fewer inter-relationships compared to the No MH Hx group. Together, social identity and emotion regulation explained 35% of loneliness in the No MH Hx subsample, and 30% of loneliness in the MH Hx subsample.

### **Conclusion:**

These findings indicate that emotion regulation and social identity had equivalent roles in explaining reported loneliness across both groups. Models and strategies integrating the two theories may offer novel targets for the prevention and management of loneliness. Future studies are recommended to examine the longitudinal relationships between these factors and to address issues of causality.

### **Disclosure of Interest Statement:**

This study was supported by funding from the Australian Research Council LP18010761, including a PhD stipend for Mr Hayes. Dr Carlyle is supported by a Lives Lived Well research fellowship.

### **Paper 3**

#### **Alone together?: A longitudinal study of loneliness among Australians during COVID-19**

**Authors:** Bower, M<sup>1</sup>, Barrett, E<sup>1</sup>, Teesson, M<sup>1</sup>

<sup>1</sup>The Matilda Centre for Research in Mental Health and Substance Use, The University of Sydney

**Speaker:** Marlee Bower

#### **Introduction/Background:**

During the height of national COVID-19 restrictions, the ABS reported that one-in-four women and one-in-six men reported feeling lonely as result of the pandemic. Loneliness was reported to be the most common personal stressor during this time. It is critical to understand the impact of loneliness during this period and later as restrictions ease. This study aims to examines the psychological, social and demographic characteristics of Australians who to experience loneliness during COVID-19 and related restrictions over time.

#### **Methods:**

The Alone Together study is a national survey of 2,056 Australian adults. Online assessments were conducted at baseline in 2020 (during COVID-restrictions), at 6-months, and will be conducted at 12-months post-baseline.

#### **Results:**

Of the 2,065 surveyed, 66% identified as female, 32% as male and 2% as neither female/ male. The median age was 44 years (range 18-88). Just over half (59%) had been diagnosed with a mental disorder during their lifetime. One-in-three participants reported feeling lonely a moderate amount of time at baseline. Generalised estimating equations (GEE) will model relationships between loneliness, COVID-19 exposure and psychological variables (resilience, personal control, self-efficacy), social network variables (group membership, network characteristics) and demographic variables (socioeconomic status, employment, service use, negative experiences), over time.

## **Conclusion:**

It is vital for us to determine the short term and prolonged psychological impacts of COVID-19 and related restrictions on Australians. This study will respond to an urgent need to understand the impact of COVID-19 to inform design, timing, and delivery of effective mental health support.

## **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Paper 4**

### **The impact of COVID-19 on stress, loneliness, and risky drinking in university students**

**Authors:** Dingle, GA<sup>1</sup>, Carlyle M<sup>1,2</sup>

<sup>1</sup>School of Psychology, The University of QLD; <sup>2</sup>Lived Lived Well Group, The University of QLD

**Speaker:** Genevieve Dingle

## **Introduction/Background:**

The COVID-19 pandemic and related restrictions on travel and social contact caused significant stress and disruption for university students in Australia. First year students were particularly affected by the move to online learning as it prevented them from developing friendships and joining clubs and group activities in their new university. It is therefore hypothesised that, compared to pre-COVID levels, stress and loneliness increased during the pandemic and that drinking as a way of coping with these negative states also increased (H1). It was further hypothesized that international students were more negatively affected than domestic students due to travel restrictions and lack of certainty about returning to the university (H2).

## **Methods:**

The study used a 2 (enrolment: domestic and international students) x 2 (cohort: 2019 and 2020) between groups design. The total sample (n = 874; 28% males, 71% females, 1% others) had a mean age= 19.75 years ( $SD = 3.89$ ) and included 32% international students. Measures included causes of stress adapted from the APS stress and wellbeing surveys; the 3-item loneliness scale and the AUDIT-C screen for risky drinking.

**Results:**

2 x 2 analyses of variance results revealed that the number of stressors ( $p < .001$ ) and loneliness ( $p < .001$ ) were worse during COVID-19 than in 2019, supporting H1. Contrary to H2, domestic students were more lonely than international students across both years ( $p = .044$ ). Unexpectedly, risky drinking did not increase during COVID-19, with domestic students more likely to engage in risky drinking than their international counterparts ( $p < .001$ ) in both years.

**Conclusion:**

The COVID-19 pandemic was associated with increased stress and loneliness in first year university students in Australia. There was no associated increase in risky drinking, which may have been due to lockdown conditions and the lack of social gatherings in which young people typically consume alcohol.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Symposium 13: From measurement to mechanisms: examining impairments in attentional control and their relationship with anxiety vulnerability

### Symposium Description:

The ability to control one's own attention is a critical function of the central executive component of working memory. Prevailing theories of emotional dysfunction suggest that elevations in anxiety are associated with impairments in an individual's ability to exert top-down control over their attention (Eysenck, Derakshan, Santos, & Calvo, 2007). It has been argued that the presence of these attentional control deficits may play a role in the aetiology and maintenance of elevated trait anxiety and anxiety disorders. However, because of limitations with instruments designed to measure attentional control and despite the identification of several candidates, the mechanisms by which attentional control might lead to the development or maintenance of anxiety have yet to be empirically assessed. The presentations in this symposium will showcase attempts to identify and rectify the issues currently plaguing the measurement of attentional control and examine the mechanisms by which attentional control might be associated with increased anxiety. Specifically, presentations will highlight issues with current instruments used to measure attentional control in research and clinical settings, provide evidence supporting new and more practical alternative measures of attentional control and examine how patterns of biased attention may provide a mechanism by which impairments in attentional control might result in the development and maintenance of anxiety.

**Chair:** Owen Myles, The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA

**Discussant:** Patrick Clarke, Affective, Behavioural, and Cognitive Neuroscience research group, Curtin University, Bentley, WA

### Paper 1

#### **The mediating role of beliefs about attentional control in the relationship between self-report measures of attentional control and anxiety**

**Authors:** Notebaert, L<sup>1</sup>, van Bockstaele, B<sup>1, 2</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA; <sup>2</sup>Faculty of Social and Behavioural Sciences, University of Amsterdam, Amsterdam, The Netherlands

**Speaker:** Lies Notebaert

**Introduction/Background:**

Attentional control refers to the ability to exert voluntary control over attention. Poor attentional control has been related to high levels of emotional vulnerability, including symptoms of anxiety. Empirical evidence for this association however is mixed, and is stronger in studies measuring attentional control through self-reports, than through behavioural methods. The current study tests the proposal that self-report measures of attentional control may reflect an individual's beliefs about their attentional control, and that this may explain their relationship with anxiety symptoms.

**Methods:**

Participants (N=80) completed a commonly used self-report measure of attentional control (the Attentional Control Scale, ACS), a behavioural attentional control task (The Attentional Network test, ANT), a measure of anxiety symptoms (the Anxiety subscale of the Depression, Anxiety, and Stress Scale, DASS-A), and a newly developed measure in which participants reported their beliefs on how well they performed on the ANT (the PerformANT).

**Results:**

There was a significant association between ACS and DASS-A scores. There was no association between DASS-A scores and ANT scores. Participants' beliefs about their performance on the ANT (PerformANT scores) were not associated with ANT performance. Critically, beliefs about attentional control (PerformANT) scores fully mediated the relationship between ACS and DASS-A scores.

**Conclusion:**

These results corroborate previous findings showing no relationship between anxiety symptoms and behavioural measures of attentional control. The mediation results suggest that anxiety is associated with negative beliefs about attentional control, rather than a behavioural attentional control deficit.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 2****On the validity of self-report attention control: does the Attention Control Scale predict behavioural attention control performance**

**Authors:** Clarke PJF<sup>1</sup>, Todd, J<sup>2</sup>, Notebaert, L<sup>3</sup>

<sup>1</sup>Affective, Behavioural, and Cognitive Neuroscience research group, Curtin University, Bentley, WA; <sup>2</sup>School of Psychology, University of Sydney, Camperdown, NSW; <sup>3</sup>The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA

**Speaker:** Patrick Clarke

### **Introduction/Background:**

Attention control theory indicates a relationship between poor attentional control and heightened anxiety vulnerability. While attention control is often assessed via self-report, there is inconsistency as to whether such self-report measures (in particular the Attention Control Scale) provide an indication of genuine attention control abilities. The present study sought to determine the presence or absence of a relationship between questionnaire and behavioural measures of attentional control, and to examine the association between these measures and psychological symptoms of depression, anxiety and stress, in a large non-clinical sample.

### **Methods:**

Undergraduate students and individuals from the community (final sample n=207) completed the Attentional Control Scale and measures of psychological distress (depression, anxiety, stress), as well as the antisaccade task as an objective measure of attentional control.

### **Results:**

Antisaccade performance was significantly associated with both anxiety ( $r=-.187$ ) and stress ( $r=-.195$ ). Self-reported attention control correlated significantly with all measures of psychological distress ( $r=-.267$  to  $-.459$ ). Critically however, there was no evidence for an association between full or subscale measures on the Attention Control Scale and antisaccade performance ( $r=.027$  to  $.110$ ). Bayesian analyses indicated moderate to strong evidence that the null hypothesis is true ( $B10=0.094$  -  $0.302$ ), suggesting that this finding was likely to represent the genuine absence of an association.

### **Conclusion:**

The present study is consistent with growing evidence that self-reported measures of attentional control are not in fact measuring variation in attentional control abilities, and speaks to the importance of incorporating objective assessments of attention control in research.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 3****Do the eyes have it? Comparing eye-movement and attentional-probe based approaches to indexing attentional control**

**Authors:** Basanovic, J<sup>1</sup>, Myles, O<sup>1</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA

**Speaker:** Owen Myles

**Introduction/Background:**

Impairments in attentional control have been implicated in a variety of clinical disorders and emotional dysfunction. One of the most widely used measures of attentional control is the anti-saccade task, which requires expensive, specialized, and immobile eye-tracking equipment. To overcome these limitations researchers are increasingly employing non-eye movement, probe-based, variants of the anti-saccade task. Critically, no research has yet determined whether the indices yielded by eye-tracking versions of the anti-saccade are equivalent to the indices yielded by the more accessible probe-based variants. Thus, the present study sought to determine whether a probe-based variant of the anti-saccade task demonstrates converging validity with an eye-tracking variant, and suitable reliability.

**Methods:**

Ninety-six undergraduate students completed both an eye-tracking-based version of the anti-saccade task and a probe-based variant of the anti-saccade task, in a counterbalanced order. Participants then repeated this experiment after a five-minute break to assess test-retest reliability.

**Results:**

Results indicate a medium-to-large correlation ( $r < .4$ ,  $p < .001$ ) between eye-tracking and probe-based measures of anti-saccade performance. Furthermore, test-retest reliability was found to be strong ( $r < .7$ ,  $p < .001$ ).

**Conclusion:**

Our findings indicate that, while eye-tracking-based anti-saccade tasks remain the gold-standard measure of attentional control, probe-based variants of the anti-saccade task are an accessible and suitable research alternative where eye-tracking is impossible or impractical. Implications for research and for clinical evaluation of neuro-behaviour are discussed.

#### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

#### **Paper 4**

#### **The moderating role of attentional control on the relationship between attentional preference for negative information and trait anxiety**

**Authors:** Basanovic, J<sup>1</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA

**Speaker:** Julian Basanovic

#### **Introduction/Background:**

Cognitive theories of anxiety implicate an attentional preference towards negative information in the maintenance of heightened anxiety. However, evidence of anxiety-linked attentional preference for negative information has been inconsistent in cognitive experimental paradigms. Recent cognitive theories have also proposed that variation in attentional control ability may influence the degree to which anxiety is characterized by attentional preference for negative information. Understanding the role of attentional control in the relationship between attentional preference towards negative information and anxiety will illuminate the mechanisms that underpin this relationship and inform cognitive models of anxiety.

#### **Methods:**

The present study examined the strength of the association between anxiety vulnerability and attentional preference for negative information across individuals who varied in level of attentional control ability. Participants (N = 104) completed cognitive-experimental assessments of anxiety vulnerability, attentional preference for negative information, and attentional control ability in an online assessment session.

**Results:**

The results reveal the nature of the direct associations between individual differences in attentional control, attentional preference of negative information, and trait anxiety. Further, results illuminate the degree to which attentional control moderates the association between attentional preference to negative information and trait anxiety.

**Conclusion:**

The present findings describe the moderating role of attentional control on the relationship between attentional preference for negative information and trait anxiety. These findings inform contemporary cognitive theories on the attentional mechanisms underpinning elevated anxiety vulnerability and anxiety-linked attentional preference for negative information.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Paper 5****The role of poor attentional control in the relationship between elevated social anxiety and selective attention to negative social information**

**Authors:** Mazidi, M<sup>1</sup>, Grafton, B<sup>1</sup>, Basanovic, J<sup>1</sup>, MacLeod, C<sup>1</sup>

<sup>1</sup>The Elizabeth Rutherford Memorial Centre for the Advancement of Research on Emotion, The University of Western Australia, Crawley, WA

**Speaker:** Mahdi Mazidi

**Introduction/Background:**

Cognitive theories of social anxiety implicate selective attention to negative social information in the development and maintenance of heightened social anxiety. Empirical evidence for this proposal, however, has been inconsistent. The aim of the current study was to examine the role of attentional control, which is one's ability to deploy attention to goal-relevant information as a potential moderator of the association between selective attention to negative social information and social anxiety.

**Methods:**

Eighty-nine adults were recruited through Mechanical Turk platform and completed the Social Interaction Anxiety Scale as well as a novel paradigm designed to measure selective attention to negative social information (angry faces) and attentional control. Attentional control was operationalised as the relative speeding to orient attention to goal-relevant stimuli compared to goal-irrelevant stimuli.

### **Results:**

The results supported the hypothesis that attentional control plays this moderating role. Specifically, while participants with low levels of attentional control exhibited a positive association between social anxiety and selective attention to negative social information, this association was eliminated among participants with high levels of attentional control.

### **Conclusion:**

The current study is the first to our knowledge that has tested the hypothesis that attentional control moderates the association between social anxiety and selective attention to negative social information using a task that employs an objective measure of attentional control, and the well-established probe approach to assess selective attention to negative social information. This finding may explain the heterogeneity of research findings in this area. Implications, limitations and directions for future research are discussed.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Open Papers

Rodrigo Becerra

School of Psychological Sciences, University of Western Australia, Crawley, WA

*Psychometric properties of the Emotion Beliefs Questionnaire and the mediating role of emotion regulation between beliefs and affective symptoms*

**Authors:** Becerra, R<sup>1</sup>, Preece, DA<sup>2,1</sup>, Gross, JJ<sup>3</sup>

<sup>1</sup>University of Western Australia, School of Psychological Sciences; <sup>2</sup>Curtin University, School of Population Health; <sup>3</sup>Stanford University, Department of Psychology

### Introduction/Background:

Recent developments in the theoretical understanding of beliefs suggest that beliefs about emotions can be grouped into two umbrella categories, controllability and usefulness. This clinically relevant distinction cannot be captured with extant scales. Here we introduce the Emotion Beliefs Questionnaire (EBQ) that assesses beliefs about controllability and usefulness across positive and negative emotions. In this study, we examine the EBQ's psychometric properties, its association with several related emotional constructs, and the mediating role of emotion regulation between beliefs about emotions and affective symptoms.

### Methods:

508 participants were administered the EBQ, and measures assessing psychological wellbeing, emotion regulation, and a range of related emotional constructs.

### Results:

Factor analysis results supported a theoretically congruent 3-factor structure of the EBQ; namely, a *General-Controllability* factor (including both negative and positive emotions), and two valence-specific usefulness factors (*Negative-Usefulness*, *Positive-Usefulness*). This factor structure was invariant (consistent) across gender, age, and education categories. All EBQ subscales and composites had good reliability. Further, the EBQ was related to several other emotional constructs in expected ways, and its association with psychological affective symptoms was significantly mediated by emotion regulation.

### Conclusion:

The EBQ appears to be a scale that reliably assesses controllability and usefulness beliefs about emotions; two conceptually separable and core components of the belief system. The present study suggests that targeting beliefs about emotions in therapy might improve outcomes, via improving emotion regulation. CBT is ideally situated to incorporate these specific beliefs as modifiable unhelpful cognitions.

#### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

#### **Madelyne Bisby**

eCentreClinic, Macquarie University, Sydney, NSW

*A meta-analytic review of online treatments for anxiety: eligibility, engagement, and outcomes*

**Authors:** Bisby, MA<sup>1</sup>, Karin, E<sup>1</sup>, Hathway, T<sup>1</sup>, Scott, AJ<sup>1</sup>, Heriseanu, AI<sup>1</sup>, Dudeney, J<sup>1</sup>, Fisher, A<sup>1</sup>, Gandy, M<sup>1</sup>, Titov, N<sup>1,2</sup>, Dear, BF<sup>1</sup>

<sup>1</sup>eCentreClinic, Macquarie University, Sydney, NSW; <sup>2</sup>MindSpot Clinic, Macquarie University, Sydney, NSW

#### **Introduction/Background:**

Online treatments are cost-effective options for individuals with anxiety. This meta-analysis examined rates of eligibility, uptake, treatment adherence, questionnaire completion, and treatment outcomes in internet-delivered treatments for anxiety.

#### **Methods:**

This meta-analysis included 127 trials with 181 treatment arms. Multi-level meta-regressions were conducted to obtain estimates of eligibility, uptake, adherence, post-treatment questionnaire completion, and treatment effect size. Moderator analyses examined the effect of anxiety type, clinician guidance, and treatment type.

#### **Results:**

An average of 43% of applicants were eligible for inclusion, 99% of individuals took up treatment, 77% of the assigned treatments were completed, 86% of individuals completed post-treatment questionnaires, and an overall within-group effect size of 0.99 was obtained. Moderator analyses indicated that the eligibility rates and treatment outcome differed between anxiety disorders, while the treatment

orientation impacted post-treatment questionnaire completion and the treatment effect size. The level of clinician guidance impacted uptake and treatment effect size.

### **Conclusion:**

The presence of a specified comorbid mental health disorder was the most common reason for exclusion. However, once deemed eligible, individuals are likely to begin treatment and receive a substantial 'dose' in research trials. As differences in treatment efficacy were obtained in moderator analyses, further meta-analytic reviews should explore these differences in more depth and compare to outcomes in routine care. This meta-analysis indicates that randomized trials for online treatments for anxiety exclude up to half of applicants, report high participant engagement, and attain large within-group effect sizes.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

### **Simon Byrne**

Department of Psychiatry, Westmead Hospital, NSW

*The prevalence and burden of insomnia among U.S. military veterans*

**Authors:** Byrne, S<sup>1</sup>, McCarthy, E<sup>2</sup>, DeViva, J<sup>3,4</sup>, Southwick, S<sup>4</sup>, Pietrzak, R<sup>3,4,5</sup>

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<sup>3</sup>U.S. Department of Veterans Affairs National Center for Posttraumatic Stress Disorder, VA Connecticut Healthcare System, CT, USA; <sup>4</sup>Department of Psychiatry, Yale School of Medicine, New Haven, CT, USA; <sup>5</sup>Department of Social and Behavioral Sciences, Yale School of Public Health, CT, USA

### **Introduction/Background:**

Veterans are a vulnerable population who experience high levels of trauma, psychiatric and medical conditions which may increase their risk for insomnia. Insomnia provides an indication of their general health and wellbeing, as it is associated with social disadvantage and several health conditions. This study examined the prevalence, risk factors and comorbidities of insomnia in veterans.

### **Methods:**

A nationally representative sample of 4,069 U.S. military veterans reported their insomnia severity, trauma, medical and psychiatric histories, as well as their psychosocial functioning. Multivariable analyses examined the association between insomnia, psychiatric and medical comorbidities, suicidality and functioning.

### **Results:**

A total of 37.4% of veterans screened positive for clinical or subthreshold insomnia. Greater age was associated with less insomnia whereas greater life stress was associated with greater risk. A “dose response” was observed for health comorbidities, with increasing insomnia associated with greater odds of psychiatric and medical conditions (clinical vs. no insomnia OR’s=1.8-13.4) and greater reductions in health and functioning (d’s=0.2-0.4). The prevalence of suicidal ideation was five times higher in veterans with clinical insomnia relative to those without (23.9% vs. 4.5%).

### **Conclusion:**

Many veterans sleep will regulate once stress associated with their military service is over. Nevertheless, nearly two in five U.S. veterans experience insomnia, which is associated with considerable health burden and suicidal ideation. Results suggest the importance of managing and regulating sleep during and after military service.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Miranda Cashin**

Clinical Psychology Unit, University of NSW, Sydney, NSW

*A meta-analysis and systematic review of quality of life in lower-limb amputees*

**Authors:** Cashin, M<sup>1</sup>, Sharpe, W<sup>1</sup>, Wilson, E<sup>1</sup>, Menzies, R<sup>1</sup>

<sup>1</sup>Clinical Psychology Unit, University of NSW, Sydney, NSW

### **Introduction/Background:**

This systematic review and meta-analysis investigated quality of life (QoL) lower-limb amputees compared to healthy or illness controls, and the likely predictors of QoL.

### **Methods:**

Computerised literature search of MEDLINE, CINAHL, PUBMED and PsycINFO was performed. Studies were included if 1) the study population comprised of adult lower-limb amputees and had ten or more subjects; (2) the study involved subjective assessment of QoL; (3) the study was an empirical research study and (4) at least one of the study outcomes was QoL. Studies were included in meta-analysis if they included a control group. Data was analysed at the aggregate level. Quantitative synthesis of the overall mean, overall mean difference between individuals with lower-limb amputation and healthy controls, and the overall pooled prevalence of poor QoL was conducted in comprehensive meta-analysis.

### **Results:**

Included in the final review were 49 articles, of which 22 studies were included in descriptive evaluation and 35 in meta-analytic evaluation. Lower-limb amputees had significantly worse QoL in physical, psychological and overall QoL compared to healthy controls and other illness controls. People who had limb-sparing procedures had significantly worse QoL than lower-limb amputees in physical, psychological and overall QoL. Depressive symptoms, anxiety and pain were found to be predictors of QoL.

### **Conclusion:**

Overall lower-limb amputees had lower QoL than healthy and other illness controls. The finding that limb-sparing controls had worse QoL is an important finding to inform treatment decisions. The included studies demonstrated that psychological factors are more strongly associated with QoL than medical variables.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Joan Chan**

University of Western Australia

*Assessing alexithymia across Asian and Western cultures: psychometric properties of the Toronto alexithymia scale-20 and Perth alexithymia questionnaire in Singaporean and Australian samples*

### **Authors:**

Chan J<sup>1</sup>, Preece DA<sup>2,1</sup>, Weinborn M<sup>1</sup>, Becerra R<sup>1</sup>

<sup>1</sup>University of Western Australia, <sup>2</sup>Curtin University

### **Introduction/Background:**

Alexithymia was developed based on the Western notion that emotions are useful and should be the focus of attention in order to improve psychological well-being. Recent research suggests that Asians, in general, believe that emotions may be more harmful and are, overall, more alexithymic than Westerners. We present here findings from research investigating the validity and application of the alexithymia construct in Asian cultures.

### **Methods:**

The present study sought to address this by examining the psychometric properties and measurement invariance of two alexithymia measures, the Toronto Alexithymia Scale-20 (TAS-20) and the Perth Alexithymia Questionnaire (PAQ), across samples of Singaporeans (N=434) and Australians (N=489).

### **Results:**

Factor analyses of the TAS-20 and the PAQ revealed the three expected components of alexithymia (Difficulties identifying [DIF] and describing feelings [DDF], and externally orientated thinking [EOT]), were consistent in both samples for both measures. The TAS-20 demonstrated partial residual invariance, while the PAQ demonstrated residual invariance across samples. Both measures demonstrated adequate internal consistency and concurrent validity across samples, supporting their use in Asian and Western countries, although the EOT subscale of the TAS-20 had inadequate internal consistency reliability and factor loadings.

### **Conclusion:**

Our findings collectively suggest that alexithymia has conceptual equivalency across Western and Asian countries.

### **Disclosure of Interest Statement: See example below:**

The authors have no conflicts of interest to disclose.

**James Clarke**

Curtin University, Bentley, WA

*Restoring our emotional tank: the effects and management of emotional labour in psychotherapy*

**Authors:** Clarke, JJ<sup>1</sup>, Rees, CS<sup>1</sup>, Breen, LJ<sup>1</sup>, Heritage, B<sup>2</sup>

<sup>1</sup>Curtin University, Bentley, WA; <sup>2</sup> Murdoch University, Murdoch, WA

**Introduction/Background:**

Emotional labour conceptualises the process by which people regulate emotions to meet their occupation's emotional demands. Emotional labour is not considered in psychologist burnout literature despite strong associations between these constructs in other occupations and previously identified high rates of burnout and distress in psychologists. Research supporting practitioner wellbeing is important to ensure retention in the workforce and efficacious delivery of evidence-based interventions like cognitive behavioural therapy (CBT). The current project sought to identify the contributing factors and consequences of emotional labour in psychologists.

**Methods:**

Semi-structured interviews were conducted with 24 psychologists (17 women) who provide individual psychotherapy. Participants were diverse in age (24–67 years,  $M = 39.2$ ,  $SD = 11.1$ ), sectors (e.g., government, NGO, private), registration/endorsement type (e.g., clinical, counselling, general), primary models of therapy (e.g., CBT, ACT), and career stage (e.g., early-career, mid-career, and experienced). Interview transcripts were then subject to thematic analysis.

**Results:**

Multiple contributing factors were identified as being significant in the emotional labour process including emotion regulation, therapeutic alliance, general lifestyle, self-efficacy, personal predispositions, and career experience. Personal growth, exhaustion, and needing psychological distance from work-related experiences were identified as consequences of emotional labour.

**Conclusion:**

Findings highlight emotional labour's contribution to personal wellbeing in psychologists and identify key variables that may inform psychologist burnout and wellbeing interventions. Attendees will gain an understanding of how emotional labour operates in the context of providing psychotherapy, what behaviours may improve its management, and consequently, how they may improve their personal wellbeing.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose

Rachelle Dawson

Australian National University, Canberra, ACT

*Brief telehealth-delivered expressive writing therapy for post-traumatic stress*

**Authors:** Dawson, RL<sup>1</sup>, Nixon, R<sup>1</sup>, Calear, A<sup>1</sup>, O'Kearney, R<sup>1</sup>

<sup>1</sup>Australian National University; <sup>2</sup>Flinders University

### **Introduction/Background:**

There is emerging evidence of the effectiveness of expressive writing therapies in reducing symptoms of post-traumatic stress. Expressive writing, in this context, refers to a range of therapeutic interventions that involve writing in-depth about one or more stressful or traumatic events. There remains questions as to which specific writing protocols may produce the most benefit and whether expressive writing can be delivered remotely.

### **Methods:**

This presentation reports on the results of a randomised trial comparing three telehealth-delivered writing interventions in reducing post-traumatic stress symptoms (PTSS; using the PTSD Checklist). Participants were randomised to receive either: Written Recounting (WR), which involved repeated writing about the traumatic event, Written Cognitive Reprocessing (WCR), which involved re-processing (i.e., cognitive restructuring) around the traumatic event, or Positive Experiences Writing (PEW), which involved writing about past positive experiences. Participants met with a researcher (who is also a psychologist) for three weekly one-hour appointments, with 20 minutes of writing in each appointment. Assessments were conducted at baseline, before each session, as one-week post-intervention, and at one-month follow-up.

### **Results:**

Preliminary findings ( $n = 34$ ) indicate that across all conditions, 21 participants (62%) have demonstrated clinically significant change by one-month follow-up. Analyses of the full sample ( $n = 100$ ) will be provided in October, at the time of the conference. This will include comparisons of writing conditions and effect sizes.

### **Conclusion:**

Preliminary findings suggest that brief telehealth-delivered expressive writing may be a therapeutic intervention for some adults with PTSS.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Mark Donovan

University of Wollongong, NSW

*Mind the family: mindfulness and imagery integrated behavioural parent training*

**Authors:** Donovan, M<sup>1,2</sup>, Konza, G<sup>2</sup>

<sup>1</sup>University of Wollongong, NSW; <sup>2</sup>Private practice, Wollongong, NSW

### Introduction/Background:

Behavioural parenting programs work for half to two-thirds of parents/carers, however various socio-demographic and parent factors often lead to poor engagement or persistence with well-proven social learning theory strategies (Chacko 2016). This paper reports findings from a mindfulness and imagery integrated parenting program – Confident Carers Cooperative Kids – which was developed to improve engagement and persistence.

### Methods:

Parents (n=34) with children aged 3-12 years presenting with behavioural/emotional problems attended an 8-week, 2 hours per week, ACT-integrated parenting program at either a university psychology clinic or a community organisation for parents at risk of child welfare involvement. Pre and post measures were taken of mindful parenting, child behaviour, parenting style.

### Results:

Significant positive pre-post intervention effects were found for improvements in mothers' parental mindfulness, parenting style and child behaviour, with large effect sizes. Improvements were greater for the at-risk parents across all measures.

### Conclusion:

Findings show preliminary support for mindful parenting interventions which integrate ACT and behavioural components in improving child and parenting outcomes in families of 3 to 12 year olds with moderate to severe behavioural and emotional problems.

### Disclosure of Interest Statement:

The authors have no conflicts of interest to disclose.

## Danielle Fynn

University of Western Australia

*Validity and reliability of the Perth alexithymia questionnaire in adults with acquired brain injury*

### Authors:

Fynn DM<sup>1</sup>, Preece DA<sup>2,1</sup>, Gignac GE<sup>1</sup>, Pestell CF<sup>1</sup>, Weinborn M<sup>1</sup>, Vander Kraats C<sup>3</sup>, Allan, A<sup>3</sup>, & Becerra R<sup>1</sup>

<sup>1</sup>University of Western Australia, Perth, WA, <sup>2</sup>Curtin University, Perth, WA, <sup>3</sup>Edith Cowan University

### Introduction/Background:

Empirical research shows that alexithymia is associated with adverse effects on psychosocial functioning and community reintegration after acquired brain injury (ABI) and is therefore of clinical interest. Measures of alexithymia have not been psychometrically investigated in an ABI sample. We aimed to assess the psychometrics of the Perth Alexithymia Questionnaire (PAQ) in adults with ABI, to establish its validity and investigate whether alexithymia manifests similarly in people with ABI compared to the general community.

### Methods:

The PAQ and Depression Anxiety Stress Scale-21 (DASS-21) was administered to an ABI (N=350) and community sample (N=1032). A series of confirmatory factor analyses (CFA) were conducted using the Lavaan R package to evaluate the factor structure of the PAQ. Multigroup CFA were conducted to determine measurement invariance. Internal consistency and concurrent and discriminant validity were also assessed.

### Results:

The PAQ had a factor structure consistent with its multidimensional theoretical basis. Good reliability and concurrent and discriminant validity were established. In line with community samples, the facets of alexithymia observed in an ABI sample include difficulty identifying positive and negative emotions, difficulty describing positive and negative emotions, and externally oriented thinking.

**Conclusion:**

Alexithymia manifests similarly in ABI and community samples. Our data suggest that the PAQ has strong psychometric properties as a measure of alexithymia in ABI and is thus suitable for clinical/research applications. We think emotional difficulties in general, and alexithymia in particular should be considered at the assessment and intervention level after an ABI, as these areas could obstruct recovery.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

Nicole Gray

Curtin University, Perth, WA

*Cognitive and emotional factors associated with the desire to cease non-suicidal self-injury*

**Authors:** Gray, N<sup>1</sup>, Boyes, M<sup>1</sup>, Hasking, P<sup>1</sup>

<sup>1</sup>Faculty of Health Sciences, Curtin University, Perth, WA

**Background:**

A variety of cognitive and emotional differences exist between those who have recently engaged in self-injury and those who have not engaged in the past 12 months. The aim of this study was to explore whether the factors associated with stopping self-injury are also associated with the desire to stop self-injury.

**Method:**

University students ( $n = 374$ ) with lived experience of self-injury completed a battery of cognitive and emotional measures with comparisons between those who had self-injured in the past 12 months ( $n = 210$ ) and those who had not ( $n = 164$ ). Additionally, we investigated group differences between individuals who expressed wanting to stop self-injuring ( $n = 299$ ) and those who did not ( $n = 75$ ).

**Results:**

Approximately 20% of participants reported that they did not want to stop engaging in self-injury. There were differences on almost all factors when comparing individuals who had self-injured in the past 12 months and those who had not. However, there were few differences between individuals who wanted to stop the

behaviour and those who did not. Individuals who wanted to stop self-injuring were more likely to report self-injuring to regulate affect than individuals who did not want to stop, regardless of whether they had self-injured in the past 12 months or not.

### **Conclusion:**

Our findings suggest that the factors associated with the desire to stop are not the same as factors underlying cessation of the behaviour. Motivational approaches to behaviour change would dictate consideration of cognition in volitional behaviour.

### **Declaration of Interest:**

The authors have no conflicts of interest to disclose.

**Sophie Haywood**

Curtin University, Perth, WA

*Emotional regulation in non-suicidal self-injury*

**Authors:** Haywood, SB<sup>1</sup>, Hasking, P<sup>1</sup>, Boyes, M<sup>1</sup>

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

### **Introduction/Background:**

Most theoretical models of NSSI focus on the experience and regulation of emotion. Emotion regulation, distress tolerance, experiential avoidance, and both positive and negative affect have all been linked to NSSI. These constructs are proposed to be distinct; however, closer examination reveals that there are conceptual similarities between them. Relationships between emotion-related constructs and NSSI were explored, with a focus on potential overlap between constructs. Specifically, we aimed to determine if constructs previously linked with NSSI (when studied in isolation), remain significant correlates of NSSI when considered alongside other related construct.

### **Methods:**

University students ( $n = 479$ ) aged 18-52 ( $M = 21.35$ ,  $SD = 3.66$ , 75% female) completed well-validated self-report measures of NSSI, difficulties with emotional regulation, distress tolerance, experiential avoidance, emotional reactivity, positive and negative affect, and alexithymia.

### **Results:**

Moderate to large correlations were observed between all emotion-related constructs ( $r = -.47 - 0.71$ ), and all were significantly associated with NSSI ( $r = -.38 - .38$ ). However, in multivariate analyses, only positive affect, distress tolerance, and emotional reactivity were uniquely associated with NSSI history.

### **Conclusion:**

These findings raise the possibility that associations between some emotion-related constructs (e.g. experiential avoidance, alexithymia) and NSSI may actually reflect variance that is shared with other constructs. If true, this will have important theoretical, conceptual, and measurement implications for NSSI research. Additionally, these findings may have clinical implications due to the different treatment techniques/approaches associated with the unique constructs.

### **Disclosure of Interest Statement:**

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### **Amy Joubert**

Clinical Research Unit for Anxiety and Depression (CRUfAD), Darlinghurst, NSW

*Managing rumination and worry – a randomised controlled trial of an internet intervention delivered with and without clinician guidance versus treatment as usual*

**Authors:** Joubert, AE<sup>1,3</sup>, Grierson, AB<sup>1,2</sup>, Li, I<sup>1,2</sup>, Sharock, M<sup>1,2</sup>, Moulds, M<sup>3</sup>, Werner-Seidler, A<sup>4</sup>, Stech, E<sup>4</sup>, Mahoney, AEJ<sup>1,2</sup>, Newby, J<sup>4</sup>

<sup>1</sup>Clinical Research Unit for Anxiety and Depression (CRUfAD), St. Vincent's Hospital, Sydney; <sup>2</sup>School of Psychiatry, University of New South Wales, Sydney; <sup>3</sup>School of Psychology, University of New South Wales, Sydney; <sup>4</sup>Black Dog Institute, The University of New South Wales, Sydney

### **Introduction/Background:**

Rumination and worry, both forms of repetitive negative thinking (RNT), have been implicated in the onset, maintenance, severity, and relapse risk of depression and anxiety disorders. Despite promising initial findings for internet-delivered interventions simultaneously targeting rumination and worry, no studies have investigated treatment effects or adherence in adults or compared these when delivered with and without clinician guidance. We developed a 3-lesson online

treatment program targeting both rumination and worry and evaluated adherence and effectiveness using a randomised controlled trial (RCT).

### **Methods:**

Adult participants (N=137) self-identifying as experiencing elevated levels of RNT were randomly allocated to the clinician-guided (n=45), self-help (n=47), or treatment as usual (TAU) control group (n=45). Self-reported levels of RNT, anxiety, depression, and distress were assessed at baseline, post-treatment, and 3-month follow-up. Program adherence was compared between clinician-guided and self-help groups.

### **Results:**

Majority of participants were female (81%), aged between 18-74 years ( $M=43.78, SD=13.41$ ), and employed in either full-time (40.8%) or part-time (24.8%) paid work/study. At baseline, 32% and 67.8% of participants met criteria for a probable diagnosis of current Major Depressive Disorder and Generalised Anxiety Disorder, respectively. Preliminary findings indicate greater symptom reduction in both active treatment groups compared to TAU. Group differences in adherence will be presented.

### **Conclusion:**

This is the first RCT to evaluate an internet intervention targeting both rumination and worry in adults and compare treatment effects and adherence when delivered with and without clinician guidance. Results provide promising preliminary evidence for its feasibility and acceptability in reducing levels of RNT, anxiety, depression, and distress. Optimal levels of clinician guidance will be discussed.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Ratih Arruum Listiyandini**

School of Psychology, UNSW, Sydney, NSW

*Developing a culturally-attuned internet-delivered mindfulness program for university students in Indonesia: outcome of end-user consultation and pilot study*

**Authors:** Listiyandini, RA<sup>1,4</sup>, Moulds, M<sup>1</sup>, Mahoney, A<sup>3</sup>, Newby, J<sup>1,2</sup>

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<sup>3</sup>Clinical Research Unit for Anxiety and Depression (CRuFAD), St Vincent's Hospital, Sydney, NSW; <sup>4</sup>Fakultas Psikologi, Universitas YARSI, Indonesia

### **Introduction/Background:**

University students experience elevated levels of psychological distress (depression, anxiety, and stress). Mindfulness-based treatments that reduce distress have been growing in popularity and are increasingly being delivered through the Internet. However, research is needed to develop and evaluate this kind of intervention in people from Low and Middle-income countries (LMICs) and non-western cultural backgrounds, such as Indonesia. In this presentation, we will describe the process of developing a culturally-attuned internet-delivered mindfulness intervention, the results of end-user consultation, and a pilot evaluation of the intervention.

### **Methods:**

We culturally adapted a 4-lesson Australian internet-delivered mindfulness intervention using the theoretical framework from Barrera et al. (2013). We conducted qualitative interviews with six experts and three focus group discussions with five to eight Indonesian university students per group. This consultation informed the intervention development. We then piloted the program with 20 students with elevated psychological distress to test the acceptability, satisfaction and initial outcome related to distress level, pre and post-intervention.

### **Results:**

End-user consultation informed several improvements to the intervention to ensure it was culturally appropriate to Indonesian students, including delivery (audio/visual, rather than written; Indonesian-style graphics), clinician support (counsellor support rather than self-guided), content focus and relatable examples of the application of mindfulness. Preliminary pilot results indicate high acceptability, user satisfaction and improvements in distress from pre to post-treatment.

### **Conclusion:**

This is the first study to develop and evaluate a culturally attuned internet-delivered mindfulness intervention for university students in Indonesia. The methodology used to create a culturally-attuned intervention has great potential for application to other interventions and other low and middle-income countries, to increase access to evidence-based mental health care.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Sylvanna Mirichlis

Curtin University, Perth, WA

*Correlates of disclosure and non-disclosure of non-suicidal self-injury*

**Authors:** Mirichlis, S<sup>1</sup>, Hasking, P<sup>1</sup>, Boyes, M<sup>1</sup>, Lewis, SP<sup>2</sup>

<sup>1</sup>Curtin University, Perth, WA; <sup>2</sup>University of Guelph, Guelph, ON

### **Introduction/Background:**

Whilst non-suicidal self-injury (NSSI) can serve a valued function for those who engage in the behaviour it has been associated with negative outcomes including psychological disorders and suicide. Given its potential to catalyse help-seeking, understanding disclosure of NSSI is important. We aimed to identify socio-demographic, NSSI-related, socio-cognitive, and socio-emotional correlates of NSSI disclosure.

### **Methods:**

University students with lived experience of NSSI ( $n = 573$ ) completed online surveys, 80.2% had previously disclosed their self-injury. Participants were predominantly female (80.6%) and were aged between 17 and 52 years of age ( $M = 23.66$ ,  $SD = 6.55$ ).

### **Results:**

NSSI disclosure was associated with having a mental illness diagnosis, intrapersonal NSSI functions, having physical scars from NSSI, cutting as a main form of NSSI, greater perceived impact of NSSI, lower NSSI communication outcome expectancies, and greater perceived social support from friends and significant others.

### **Conclusion:**

The ways in which individuals think about the noticeability and impact of their NSSI, as well as the potential to gain support appear to influence decision to disclose NSSI. Addressing the way that individuals with lived experience think about these aspects of Self-injury and fostering their support networks may therefore facilitate NSSI disclosure and subsequent help-seeking.

### **Disclosure of Interest Statement:**

Mark Boyes is supported by the National Health and Medical Research Council, Australia (Investigator Grant 1173043)

## Bronte Morgan

University of Sydney, Sydney, NSW

*Australians under strain: the experience of the COVID-19 pandemic for families with young children*

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### Introduction/Background:

Australian families with young children were impacted by the COVID-19 pandemic. However, the extent of these impacts are still unknown. It is likely that families who experienced the biggest structural changes to family-life due to pandemic-related impacts (e.g., employment changes, working-from-home, childcare/school closures) will also see the biggest changes in key aspects of family functioning (e.g., child behaviour and mental health problems, spousal relationship problems, satisfaction with family time).

### Methods:

The current study used a mixed-methods design to investigate the changes to daily life experienced by 168 families with young children from South-West Sydney during the first 3 months of the COVID-19 pandemic. This study used questionnaire data about child and parent mental health collected pre-pandemic, and compared it to data collected in June 2020.

### Results:

Hierarchical multiple regression analyses showed that structural family changes due to the pandemic did not impact family functioning beyond the effects of demographic factors. Qualitative thematic analysis of open-ended responses generated two manifest themes (i.e., 'strengths' and 'strains'), indicating that the pandemic has been associated with both positive and negative changes for families.

### Conclusion:

Implications of this study highlight a need for improved mental health literacy during such societally challenging times, further exploration of the changing constellation of family structures, and the potential inequality of pandemic-related effects, including access to clinical therapies. Overall, the findings were nuanced, suggesting that during the first 3 months of the COVID-19 pandemic, Australian families with young children experienced a range of challenges, in addition to unexpected benefits.

**Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Kristin Naragon-Gainey**

University of Western Australia, Crawley, WA

*Understanding the temporal dynamics of decentering on clinical outcomes in daily life*

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**Introduction/Background:**

Decentering—taking an observer perspective on one's current internal experiences—is associated with greater psychological health and resilience from stress. As such, it is a skill that is taught in numerous therapies, with the assumption that decentering causes better psychological functioning, in part by facilitating recovery from strong affective experiences or symptoms. However, little is known about the causal direction or time course of these processes as they occur in daily life when experienced naturally.

**Methods:**

379 community adults completed an ecological momentary assessment in which their current decentering, positive and negative affect, dysphoria symptoms, ideographically-assessed strongest symptom, and wellbeing were measured six times each day for seven days. Dynamic structural equation modeling was used to test these data prospectively in cross-lagged panel models (e.g., current decentering predicting negative affect and decentering at the next report, and current negative affect predicting decentering and negative affect at the next report).

## **Results:**

Results indicated bidirectional prospective effects of decentering with all other variables, after accounting for their stability over time. In addition, greater decentering was associated with less persistent negative affect and dysphoria across reports, consistent with theory. However, individuals with higher levels of decentering had stronger carryover of positive affect from one report to the next.

## **Conclusion:**

Decentering and affect, symptoms, and wellbeing appear to mutually reinforce one another over time, with implications for how the skill can optimally be taught in therapy. In addition, decentering may be effective in facilitating recovery from negatively-valenced emotions and symptoms in daily life, but not positively-valenced emotions.

## **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Jennifer Nicholas**

Orygen, Melbourne, VIC

*Implementation lessons from the transition to telehealth during COVID-19: perspectives of clinicians and youth mental health service users*

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## **Introduction/Background:**

Whilst telehealth may overcome some traditional barriers to care, successful implementation into service settings is scarce, particularly within youth mental health care. However, during COVID-19, youth mental health services around Australia rapidly implemented telehealth to continue providing services. This study used this opportunity to understand the perspectives of young people and clinicians on how telehealth impacted service delivery, service quality, and to develop pathways for future uses.

## **Methods:**

Youth mental health service users (aged 12-25) and clinicians took part in an online survey exploring service provision, use, and quality following the adoption of telehealth. Service use data from the period were compared to 2019 data.

### **Results:**

Ninety-two clinicians and 308 young people responded to the survey. Service use was reduced compared to the same period in 2019, however, appointment attendance rates were higher. Across eight domains of service quality, the majority of young people reported that telehealth positively impacted quality, and were significantly more likely to rate telehealth as having a positive impact on service quality than clinicians. There was high interest in continuing to use telehealth as part of care beyond the pandemic, with clinicians supporting its permanent role in youth mental health care for a segment of service users.

### **Conclusion:**

Telehealth should continue to be offered as a method of youth mental health service delivery beyond the pandemic. Further consideration is required regarding how best the system can officially adopt telehealth, including determining who it is appropriate for and building the infrastructure to support its long-term implementation.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Jennifer Nicholas**

Orygen, Melbourne, VIC

*Implementing a CBT-based digital mental health intervention within Victorian youth mental health services: barriers and facilitators*

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### **Introduction/Background:**

Digital mental health interventions (DMHI) have the potential to transform mental health care by blending technology and traditional services, creating technology-

enabled care that increases the accessibility and reach of mental health support. However, this potential remains unrealized as DMHIs are disconnected from services where they could have the greatest impact. We report on a world-first large-scale implementation of a DMHI in youth mental health services and outline implementation barriers and facilitators.

### **Methods:**

MOST (Moderated Online Social Therapy) is a CBT-based digital intervention that offers continuous, integrated face-to-face and digital care to young people. Implementation adoption and reach are measured by the number of clinician referrals to MOST and the number of clients using MOST, respectively. Implementation barriers and facilitators were identified by qualitative interviews with clinical service staff.

### **Results:**

Updated adoption and reach (currently 1134 and 595 respectively) will be presented. Implementation facilitators included champions (individuals who support the integration of MOST within each service), implementation team support, and MOST being discussed day-to-day within the service. Barriers included clinician uncertainty about (i) how to introduce MOST to clients; (ii) what happens to clients after referral, and if they are using and benefiting from MOST; and (iii) the role of clinicians, peer-workers, and vocational workers on MOST. Outcomes of implementation strategy changes based on these qualitative findings on adoption and reach will be presented.

### **Conclusion:**

Decreasing uncertainty for clinicians in early-stage implementation may improve adoption and reach. Champions are critical to implementation, and can have varied roles, including peer-workers.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

**Jaimie Northam**

University of Sydney, Sydney, NSW

*More than a feeling? Investigating emotional reactivity in children with conduct problems and callous-unemotional traits*

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

### **Introduction/Background:**

Children with conduct problems (CPs) and callous-unemotional (CU) traits have demonstrated affective deficits thought to impair development of prosocial attitudes and behaviours. Yet, little is known about the etiology of these affective deficits and studies conducted in early childhood present mixed results. Here we examine these deficits, and explore potential reasons for mixed results, using novel multimodal tests of emotional reactivity (ER) designed to characterize the contexts that elicit impaired versus normative affective responding.

### **Methods:**

Data were collected for children aged 2-8 years, with CPs and high CU traits ( $n = 36$ ), CPs and low CU traits (CP-CU;  $n = 82$ ) and a non-clinical community sample (CC;  $n = 27$ ). Group differences were tested for attention patterns and multiple measures of emotional reactivity: physiological (heart rate and electrodermal activity), behavioural, and self-reported, to an emotion-eliciting stimulus.

### **Results:**

No differences were found between groups in attention to the stimulus, though results indicated a selective pattern of impairment across measures of ER. Specifically, group differences were found for physiological and observational measures, but not self-report measures. The CC group demonstrated higher ER across all measures when compared to the clinical groups, yet few differences were found between the CP+CU and CP-CU groups.

### **Conclusion:**

This study supports theories that CPs and antisocial behaviour may be linked to lower ER in response to the distress cues of others and suggests that the affective deficits associated with CU traits may be less stable in early childhood than previously thought.

### **Disclosure of Interest Statement:**

This study was funded in part by NHMRC Project Grant 2017-2021 APP1123072 to the last-named author.

Shaunagh O'Sullivan

Orygen, Melbourne, VIC

*Piloting an integrated face-to-face and virtual clinic to enhance specialist treatment for complex youth mental health disorders: eOrygen.MOST*

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### **Introduction/Background:**

Specialist treatments for complex youth mental health disorders face challenges in terms of maintaining engagement, providing timely support, achieving full functional recovery and preventing future relapse. Online cognitive behavioural therapy (CBT) integrated with face-to-face care may assist in addressing these challenges. However, despite young people's preferences and calls for integration of face-to-face and online services, current mental health services do not offer blended models of care. The current study, therefore, aimed to test eOrygen.MOST as a blended model of care for young people with complex mental health disorders.

### **Methods:**

Fourty-one young people (16-25 years) accessing specialist care had access to eOrygen.MOST for three months. The feasibility, acceptability, safety and effectiveness of eOrygen.MOST, as an adjunctive to face-to-face treatment, was tested.

### **Results:**

Significant improvements were observed for depression ( $t(32) = 2.44, p = .02$ ), flourishing ( $t(31) = -2.17, p = .038$ ), social isolation ( $t(31) = 3.24, p = .003$ ), social anxiety ( $t(31) = 2.54, p = .016$ ), stress ( $t(31) = 4.21, p < .001$ ), psychological distress ( $t(31) = 2.09, p = .045$ ) and social and occupational functioning ( $t(21) = -3.92, p = .001$ ) at 3-months follow-up. Qualitative feedback from young people and clinicians on eOrygen.MOST will also be presented.

### **Conclusion:**

This integrated face-to-face and online CBT intervention shows promising findings for the effectiveness of blended models of care for complex mental health disorders. Future research is need to determine how to successfully implement such models of care into clinical services, which will also be discussed in this presentation.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

### **Shaunagh O'Sullivan**

Orygen, Melbourne, VIC

*Characterising usage of a multicomponent digital intervention to predict treatment outcomes in first-episode psychosis*

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### **Introduction/Background:**

Online cognitive behavioural therapy (CBT) can increase treatment accessibility and support. However, adequately tailoring interventions to the individual is a significant challenge which may account for low engagement rates. Horyzons is a flexible, multi-component digital CBT-based relapse prevention intervention incorporating therapy and social networking. This flexibility enables a potentially more engaging and individualized treatment approach, however presents a challenge in determining which components lead to improved treatment outcomes. The current study aimed to identify user profiles on Horyzons and examine how they predicted treatment outcomes.

### **Methods:**

Eighty-two young people (16-27 years) recovering from first-episode psychosis received Horyzons for six months. Clusters of longitudinal usage data from therapy and social networking components were analysed to identify user profiles. Analyses examined how usage profiles predicted outcomes of social functioning, psychotic symptoms, depression and anxiety at 6 months.

## Results:

Three user profiles were identified based on usage metrics including: (a)low usage; (b)maintained social; and (c)maintained therapy and social. The maintained therapy and social group showed improvements in social functioning ( $F(2,51) = 3.58; P =.04$ ), negative symptoms ( $F(2,51) = 4.45; P =.02$ ) and overall psychiatric symptom severity ( $F(2,50) = 3.23; P =.048$ ) compared to the other user profiles.

## Conclusion:

Within an online CBT intervention for relapse prevention in early psychosis, continued engagement with both therapy and social components might be key in achieving long-term recovery. Although the social network may increase engagement, it should be leveraged to direct young people to therapeutic content for continued support, to ensure treatment effects are maintained.

## Disclosure of Interest Statement:

The authors have no conflicts of interest to disclose.

## David Preece

Curtin University, Perth, WA

*Advancing the assessment of emotional regulation: psychometric properties of the Perth Emotion Regulation Competency Inventory (PERCI)*

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## Introduction/Background:

Cognitive behaviour therapy often focuses on improving emotion regulation skills, so the assessment of emotion regulation is important. People regulate both negative and positive emotions, and their ability to do this successfully is a cornerstone of adaptive psychological functioning. However, until recently, few measures were available to comprehensively assess emotion regulation ability across both negative and positive emotions. The Perth Emotion Regulation Competency Inventory

(PERCI) is a 32-item questionnaire recently developed for this purpose. In this study, our aim was to examine its validity and reliability in a large adult community sample.

### **Methods:**

508 adults (representative of the USA population in demographic distributions) completed the PERCI as part of an online survey battery.

### **Results:**

Confirmatory factor analysis supported the intended eight-factor (subscale) structure of the PERCI (e.g., CFI=.962, RMSEA=.036), thus supporting the separability of the negative/positive valence domains and the various subcomponents of emotion regulation ability. This structure was invariant across gender, age, and education categories. All PERCI subscale and composite scores had strong alpha/omega reliabilities (.81-.94), and correlated in expected ways with psychopathology, emotional reactivity, and emotion regulation strategy use (e.g., cognitive reappraisal).

### **Conclusion:**

The PERCI had strong psychometric properties. Given that previous measures have tended to focus only on negative emotions, future use of the PERCI in research/clinical settings should provide a more comprehensive mapping of emotion regulation ability. Such insights could help to better understand the effect of cognitive behaviour therapy on different components of emotion regulation, and inform case conceptualisations and treatment planning.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Seyran Ranjbar**

Centre for the Advancement of Research on Emotion, University of Western Australia, Perth, WA

*The factor structure of the Emotion Beliefs Questionnaire and examining the mediating role of emotion regulation between maladaptive beliefs about emotions and affective disorder symptoms among adolescents*

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and Rehabilitation Sciences, Tehran, Iran; <sup>4</sup>Curtin University, Perth, WA; <sup>5</sup>School of Psychology, University of Western Australia, Perth, WA.

### **Introduction/Background:**

It has been proposed that individuals' beliefs about emotions affect their wellbeing and risk of psychopathology. The present study examined the psychometric properties of the Emotion Beliefs Questionnaire (EBQ) in adolescents for the first time, a questionnaire that measures main domains of beliefs about emotions across both positive and negative emotions. We also examined emotion regulation ability as a mechanism through which maladaptive beliefs about emotions might lead to higher psychopathology symptoms using parallel mediation analyses.

### **Methods:**

A large sample of adolescents (N = 673) from Iran completed self-report measures of beliefs about emotions (EBQ), emotion regulation ability (Perth Emotion Regulation Competency Inventory), and affective disorder symptoms (Depression Anxiety Stress Scale-21) using online platforms.

### **Results:**

The EBQ had a factor structure consistent with its multidimensional theoretical basis (i.e. capturing separable dimensions on beliefs about the *usefulness* and *controllability* of negative and positive emotions). Mediation analyses supported the mediating role of emotion regulation ability between both belief domains and affective disorder symptoms. Furthermore, the mediation effect was found for emotion regulation of positive and negative emotions.

### **Conclusion:**

This study provides the first empirical evidence of the psychometric properties of the EBQ among adolescents. This study also supports the role of emotion regulation as a mechanism through which maladaptive beliefs about emotions may lead to affective disorder symptoms. The findings emphasize the critical importance of both domains of maladaptive beliefs about emotions for both positive and negative emotions and their interaction with emotion regulation in case conceptualizations and CBT treatment plans.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## Melissa Ree

School of Psychological Sciences, University of Western Australia, Perth, WA

*Improving sleep to promote healthy brain aging: a CBT-insomnia intervention study*

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### **Background:**

Suboptimal sleep is the most significant cause of disease burden in Australia after poor diet and insufficient exercise. It is an under recognised problem impacting 6 in 10 adults over the age of 65. Poor sleep detrimentally impacts mood and anxiety, memory and thinking, and quality of life. Further, poor sleep has long been seen as a symptom of dementia, and more recently as a possible causal factor. It may also be that poor sleep is a modifiable risk factor for dementia. Effective treatments for poor sleep in the form of insomnia exist, with CBT-Insomnia being the recommended first line treatment.

### **Methods:**

An intervention trial is underway to test the relationship between sleep and dementia by investigating sleep, cognitive function and brain health for 18<sup>th</sup> months following a four session group CBT-Insomnia treatment.

### **Results:**

Preliminary data supports that CBT-I for older adult poor sleepers improves sleep, brain health, and cognitive function.

### **Conclusion:**

It is hoped that non pharmacological treatments to improve sleep may delay the onset of dementia from Alzheimer's disease. This research highlights the benefits of psychological treatments for sleep difficulties such as insomnia.

### **Disclosure of Interest Statement:**

The AACBT recognise the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations. Dr Melissa Ree owns a private clinic that treats sleep difficulties with psychological interventions such as CBT.

## Gemma Sharp

Monash Alfred Psychiatry Research Centre, Monash University, Melbourne, VIC

*“I felt seen by this chatbot”: a qualitative focus group study with young people and parents/carers to develop a positive body image chatbot called “KIT”*

**Authors:** Beilharz, F<sup>1</sup>, Sukunesan, S<sup>2</sup>, Rossell, SL<sup>3,4</sup>, Kulkarni, J<sup>1</sup>, Sharp, G<sup>1</sup>

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### Introduction/Background:

Body image and eating disorders represent a significant public health concern; however, many affected individuals never access appropriate treatment. Artificial Intelligence conversational agents or chatbots reflect a novel opportunity to target those affected by providing online psychoeducation and cognitive behaviour therapy (CBT) techniques, thus filling a gap in service provision. A world-first body image chatbot, “KIT”, was designed together with Australia’s national eating disorder support organisation, the Butterfly Foundation. This study aimed to assess KIT’s preliminary acceptability and feasibility.

### Methods:

A prototype KIT was developed with support from technical developers, Proxima, offering psychoeducational information and CBT techniques focused on body image/eating disorders. Six focus groups were conducted using semi-structured interviews to seek feedback, including four groups of people seeking help for themselves (n=17; age 13-18) and two groups of parents/carers (n=8; age 46-57). Participants provided feedback on KIT’s cartoon chatbot character, as well as content, structure and design.

### Results:

Thematic analyses identified three main themes: (1) chatbot character and design, (2) content presentation, and (3) flow. Overall, the participants provided positive feedback, with young people and parents/carers generally providing similar reflections. Participants approved of KIT's character and engagement. Specific suggestions related to the brevity and tone of the psychoeducation/CBT technique content to increase KIT's interactivity.

### **Conclusion:**

Focus groups provided overall positive qualitative feedback regarding the content, structure and design of the chatbot. Incorporating the feedback of lived experience from individuals and parents/carers allowed the refinement of KIT. KIT was officially launched in November 2020 and efficacy testing is underway.

### **Disclosure of Interest Statement:**

Dr Gemma Sharp was the recipient of an AMP Tomorrow Maker Grant to fund this project and holds a National Health and Medical Research Council (NHMRC) Early Career Fellowship (GNT1146033). Professor Susan L. Rossell holds a Senior NHMRC Fellowship (GNT1154651) and Professor Jayashri Kulkarni holds an NHMRC Investigator Grant Leadership Level 3 (GNT1177729).

## **Eileen Stech**

Black Dog Institute, UNSW, Sydney, NSW

*Using artificial intelligence (AI) to run more efficient and flexible clinical trials*

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<sup>1</sup>Black Dog Institute, UNSW, Sydney, NSW; <sup>2</sup>The Applied Artificial Intelligence Institute (A<sup>2</sup>I<sup>2</sup>), Deakin University, VIC

### **Introduction/Background:**

Randomized controlled trials have provided a wealth of knowledge on the efficacy of specific psychological interventions. However, teasing apart which types and components of psychological interventions are most effective, and for whom, is rarely feasible using current clinical trial methodology. This talk will present a new method that aims to overcome these issues.

### **Methods:**

The Vibe Up study uses AI-driven response adaptive randomization to seek to identify the most effective smartphone-based intervention for reducing psychological distress in university students, as quickly as possible. It compares three very-brief app-delivered interventions of mindfulness, physical activity and sleep hygiene, to an active control condition of mood monitoring. The study involves a series of 'mini-trials' with 120 participants per trial, each lasting 3-4 weeks, across one year. After each mini-trial, a live mathematical model of intervention effectiveness (driven by AI, based on the multi-arm bandit solution) is updated. As the mini-trials continue, the proportion of participants allocated to each intervention will change relative to effectiveness, with progressively fewer participants allocated to the less effective interventions.

### **Results:**

This talk will present an overview of the study design, initial results from the pilot phase, and discussion of the experiences of clinician-researchers in setting up this novel approach.

### **Conclusion:**

This study is the first attempt to use AI-driven response-adaptive randomization to evaluate psychological interventions. Compared to a traditional RCT, using AI to drive adaptive treatment studies can potentially save time and money, and allow us to ask more nuanced questions about what works for whom.

### **Disclosure of Interest Statement:**

The authors have no conflicts of interest to disclose.

## **Heidi Sturk**

Queensland University of Technology, Brisbane, QLD

*Connecting with the digital mental health world: increases in use of digital mental health services as a result of COVID-19*

**Authors:** Sturk, H<sup>1</sup>, Connolly, J<sup>1</sup>, McMahon, T<sup>1</sup>

<sup>1</sup>Queensland University of Technology, Brisbane, QLD

### **Background:**

The onset of the COVID-19 pandemic had significant impact on the mental health and wellbeing of Australians and forced a rapid shift to alternative service models for

many health services, while also managing substantially increased demand. Digital mental health (dMH) services offer obvious advantages in such circumstances and have a strong evidence base for their safety and effectiveness. This paper explores changes in the use of dMH services in the wake of COVID-19.

### **Methods:**

Data were collected as part of the annual activities of the eMHPrac project, which is funded by the Australian Government to promote dMH in primary care. Data on user registrations and practitioner referrals have been collected annually from Australian dMH service providers since 2014. Data is totalled across providers and also examined within provider. Journal articles, reports and media releases from participating services were also examined for relevant data.

### **Results:**

Many phone lines, web counselling services, forums and programs reported increases between 30-60% compared to the same time period in the previous year. Some programs saw registrations increase by over 300%. Data trends over the 6 years prior to the pandemic will be presented along with the data for key services since the pandemic began.

### **Conclusion:**

Numbers of new users and referrals to dMH services have risen substantially following onset of the COVID-19 pandemic. This highlights the value of dMH services in facilitating rapid access to mental health and wellbeing support, and in assisting to manage high demand for services.

Heidi Sturk, Jennifer Connolly and Tania McMahon recognise the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations. We acknowledge all the Australian digital mental health services who provide us with data, but have no potential conflicts of interest to declare.

**Zoe Walter**

University of Queensland, Brisbane, QLD

*Parental behaviours and protective factors for children in the context of parental substance use: an exploratory analysis of factors identified by practitioners*

**Authors:** Walter, Z<sup>1,2</sup>, McMaster, J<sup>1</sup>, Quinn, C<sup>1,2</sup>, Hides, L<sup>1,2</sup>

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**Introduction/Background:**

Parental substance misuse has been identified as a key risk factor for child abuse and neglect. However, there is little understanding of how to promote positive parenting behaviours specifically to reduce the risk of harm to the child from parental substance misuse. The aim of this study was to examine practitioners' perceptions of protective factors that contribute to child safety in the context of parental substance use.

**Methods:**

A semi-structured interview was conducted with 20 practitioners who have experience working with parents who use substances. A thematic analysis was conducted to analyse key emerging factors.

**Results:**

Four broad themes were identified that represented key factors in child safety considerations and potential targets for treatment. Parenting behaviours was the largest theme, which included (lack of) exposure to drug use; financial (in)stability; (lack of) exposure to unsafe environments; routine, and openness with children. Practitioners also highlighted the importance of psychological factors such as parental insight, attachment style, sense of powerlessness vs confidence, and stigma and shame. Practitioners also emphasized comorbidities (e.g., trauma, mental health, exposure to domestic violence) and the need to treat comorbidities alongside substance use. Finally, they highlighted the key role of a socially supportive network, different types of supports needed, and the importance of enabling access to supports.

**Conclusion:**

The study provided an exploratory examination of parents' risk and protective behaviours from practitioners' perspectives. Next steps for research and practice will be discussed, including how these findings can be utilised in treatment and the need for parental viewpoints.

**Disclosure of Interest Statement:**

The project was supported by a partnership between Lives Lived Well and The University of Queensland. There was no external funding for this project. The authors have no conflicts of interest to disclose.

## Posters

Amy Black

Curtin University, Perth, WA

*The effect of the fear of positive and negative evaluation on state anxiety and repetitive negative thinking in high and low socially anxious individuals*

Type: Rapid poster

Jack Brett

University of Western Australia, Perth WA

*Am I happy or sad? How autistic traits relate to alexithymia and its sequential impacts.*

Type: Poster

Emma Bryant

University of New South Wales, Sydney, NSW

*The role of fibroblast growth factor 2 in predicting psychological outcomes during the COVID-19 pandemic*

Type: Poster

Simon Byrne

School of Psychology, University of Queensland, Brisbane, QLD

*Coaching parents to conduct powerful exposure therapy with their child*

Type: Poster

Wenting Chen

School of Psychology, University of New South Wales, Sydney, NSW

*Investigating empathy in hoarding: a potential target for improving interpersonal connection*

Type: Rapid poster

Cassandra Crone

Macquarie University, Sydney, NSW

*Supporting relationship diversity: can extended and imagined social contact reduce bias toward consensual non-monogamy?*

Type: Rapid poster

Jonathan David

Macquarie University, Macquarie Park, NSW

*Getting distracted by reward cues: evidence that hoarding and compulsive buying are similar to behavioural addictions*

Type: Rapid poster

Jessica De Agrela

Curtin University, Perth, WA

*Profiling emotion regulation abilities across negative and positive emotions in psychopathology symptoms*

Type: Rapid poster

Nicole Gray

Curtin University, Perth, WA

*Cognitive and emotional factors associated with the desire to cease non-suicidal self-injury*

Type: Poster

**Kirsty Hird**

Curtin University, Perth, WA

*Emotion regulation difficulties and self-efficacy to resist NSSI moderate the relationships between outcome expectancies and NSSI*

Type: Poster

**Anthony Joffe**

Centre for Emotional Health, Macquarie University, Sydney, NSW

*The heart of the issue: Understanding the relationship between emotion regulation and emotional labour*

Type: Rapid poster

**Amy Joubert**

Clinical Research Unit for Anxiety and Depression (CRUfAD), St Vincent's Hospital, Sydney, NSW

*Understanding rumination and worry: Clinical and theoretical implications from an online qualitative survey*

Type: Poster

**Amy Joubert**

Clinical Research Unit for Anxiety and Depression (CRUfAD), St Vincent's Hospital, Sydney, NSW

*Managing rumination and worry: a pilot study of an internet intervention targeting repetitive negative thinking in Australian adults*

Type: Poster

**Isabelle Kaiko**

The Brain and Mind Centre, University of Sydney, Sydney, NSW

*Cognitive flexibility and mind-wandering: different profiles in anxiety*

Type: Rapid poster

**Erin Kelly**

The Matilda Centre of Research in Mental Health and Substance Use, University of Sydney, Sydney, NSW

*Is self-compassion an important intervention target for adolescents with problematic alcohol use and anxiety symptoms?*

Type: Rapid poster

**Erin Kelly**

The Matilda Centre of Research in Mental Health and Substance Use, University of Sydney, Sydney, NSW

*The school-led preventure study: preventing adolescent mental illness and substance use through teacher-delivered intervention*

Type: Poster

**Olivia Kingsley**

The University of Western Australia, Perth, WA

*The ecological validity of the Flexible Regulation of Emotional Expression Scale*

Type: Poster

**Ian Li**

Clinical Research Unit for Anxiety and Depression (CRUfAD), St Vincent's Hospital, Sydney, NSW

*COVID-19 related differences in the uptake and effects of internet-based cognitive behavioural therapy*

Type: Rapid poster

**Stephanie Lu**

School of Psychological Sciences, The University of Western Australia, Perth, WA

*Will it be worth it? Investigating depression-linked anomalies in reward expectancy formation*

Type: Poster

**Tamsin Mahalingham**

School of Population Health, Curtin University, Bentley, WA

*Attention control moderates the relationship between social media use and psychological distress*

Type: Rapid poster

**Mahdi Mazidi**

Centre for the Advancement of Research on Emotion, The University of Western Australia, Perth, WA

*Eating disorder-specific rumination moderates the association between attentional bias to high-caloric foods and eating disorder symptoms: evidence from a reliable eye-tracking task*

Type: Rapid poster

**Mahdi Mazidi**

Centre for the Advancement of Research on Emotion, The University of Western Australia, Perth, WA

*Worry mediates the association between general intolerance of uncertainty, health-specific intolerance of uncertainty and health anxiety*

Type: Poster

**Mahdi Mazidi**

Centre for the Advancement of Research on Emotion, The University of Western Australia, Perth, WA

*Emotion regulation mediates the relationship between alexithymia and affective disorder symptoms among adolescents and adults*

Type: Poster

**Owen Myles**

The Elizabeth Rutherford Centre for the Advancement of Research on Emotion, The University of Western Australia, Perth, WA

*Anxiety and inhibition: the interactive role of state and trait anxiety in inhibitory attentional control deficits*

Type: Poster

**Jaimie Northam**

The University of Sydney

*Developing the growing minds check-up: a narrative review and scoping study*

Type: Poster

**Ethan Pemberton**

Curtin University, Perth, WA

*Alexithymia profiles characterising affective disorder psychopathologies*

Type: Rapid poster

**Anastasia Pourliakas**

Northern Health Psychology Department, Melbourne, VIC

*A co-design process to assess the feasibility and acceptability of a group-based psycho-oncology program*

Type: Rapid poster

**Seyran Ranjbar**

Centre for the Advancement of Research on Emotion, The University of Western Australia, Perth, WA

*Attentional control moderates the relationship between pain catastrophizing and selective attention to pain faces on the antisaccade task*

Type: Rapid poster

**Tanika Sgherza**

The University of Western Australia, Perth, WA

*Testing the mindfulness-to-meaning theory in daily life*

Type: Poster

**Lexy Staniland**

Curtin University, Bentley, WA

*Application of the nonsuicidal self-injury stigma framework*

Type: Rapid poster

**Laura Strachan**

Curtin University, Perth, WA

*Post-traumatic stress symptoms, voice hearing, and associated psychological mechanisms of maintenance and change: a systematic review*

Type: Rapid poster

**Alyssa Tan**

Curtin University, Perth, WA

*Emotion regulation strategy profiles that characterise loneliness and general distress*

Type: Rapid poster

**Kate Tonta**

Curtin University, Perth, WA

*Modelling pathways to non-suicidal self-injury: the roles of perfectionism, negative affect, rumination, and attentional control*

Type: Rapid poster

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