

## **PART B Submission**

### **Title: Help for health anxiety: Results from a randomised controlled trial comparing internet-delivered cognitive behavioural therapy for severe health anxiety versus anxiety psychoeducation**

#### **1. Briefly describe your research (maximum 400 words)**

My research spans the fields of health psychology and clinical psychology. It focuses on using the internet as a platform of treatment delivery to improve access to evidence-based psychological treatments for adults with anxiety and depressive disorders. I also use the internet to develop and test new treatments for depression and anxiety, including the value of adding therapeutic enhancers in combination with best-practice CBT interventions. Together with collaborators I have developed 7 new online programs for the treatment of mental and physical health problems including transdiagnostic treatment for mixed depression and anxiety, illness anxiety disorder, chronic pain, perinatal mental health, and more recently a cancer-tailored treatment for people with early-stage cancer and cancer survivors suffering from depression and anxiety. My work has demonstrated strong evidence for the use of online programs for the treatment of depression and anxiety both in clinical trial settings and in routine care in Australian primary care settings. By delivering treatment online, it ensures that people in need receive best-practice evidence-based care, regardless of where they live, their financial circumstances, and their access to face-to-face care. In addition, my research has focused on finding innovative ways to improve existing 'best-practice' treatments for these psychological disorders with the ultimate aim of improving outcomes for patients. For example, my recent work has focused on evaluating whether combining mindfulness mediation within existing cognitive behavioural therapy treatment programs improves outcomes and reduces relapse rates for patients. In addition, I have also conducted research to explore whether online programs are effective for the treatment of depression in the context of chronic diseases such as osteoarthritis and diabetes. These studies have shown promising findings, and present a new approach to overcome the low rates of treatment of mental health problems in medical settings. The focus of the present study an evaluation of the efficacy of the first internet-delivered CBT program for the treatment of health anxiety (now called illness anxiety disorder). This represents the first clinical trial to evaluate the efficacy of iCBT for health anxiety outside of Sweden, and provides supporting evidence for the utility of this treatment modality, and the potential of this program to reduce the burden of health anxiety in the community.

#### **2. Describe how your research illustrates Innovation, Best Practice or Excellence (maximum 200 words)**

My research represents an innovative new approach to deliver best-practice psychological treatment for health anxiety. I have transformed gold-standard face-to-face CBT into the first English-language internet-delivered CBT (iCBT) program tailored for health anxiety (illness anxiety disorder). My research project is the first clinical trial to evaluate iCBT for health

anxiety outside of Sweden, and the first study to compare iCBT for health anxiety to an active placebo control group (receiving anxiety psychoeducation). CBT -the gold-standard treatment for health anxiety -is difficult for patients to access due to the lack of skilled therapists. Internet CBT overcomes many barriers to treatment, fidelity is ensured, access is optimised, programs are highly scalable, and it can be delivered at the first point of contact to these patients who typically present to medical settings (e.g., emergency, primary care) rather than psychiatric services. This trial provides the necessary supporting evidence showing that internet CBT is an effective treatment for health anxiety. This new program will be made available via This Way Up Clinic for all patients living in Australian and New Zealand to access, ensuring that patients living with this condition are able to access affordable, convenient evidence-based treatment.

**3. Summarise the potential contribution to and/or implications for society (maximum 200 words)**

Health anxiety (now illness anxiety disorder) is common affecting 1 in 20 individuals in their lifetime. Health anxiety is over-represented in medical clinics: 1 in 10 people attending primary care visits suffer from health anxiety, and 1 in 4 suffer from health anxiety in tertiary medical clinics (e.g., neurology). Health anxiety is not only debilitating for sufferers, it causes considerable economic burden, as people with this condition use twice the health care services per year compared to people with well-defined medical conditions. In their quest to alleviate their fears of illness, people with health anxiety request excessive tests and investigations and unnecessary treatments. This program represents the first scalable low-cost accessible evidence-based CBT program for the treatment of health anxiety. It will enable individuals suffering from health anxiety to access specialist tailored treatment for their condition. It will reduce the burden of health anxiety on the individual and their loved ones, but also reduce the high costs associated with excessive health service use.

**4. Describe any contribution by Mental Health consumers/persons with lived experience other than as subjects (e.g. reference group, researcher) (Maximum 200 words)**

Mental health consumers are actively engaged in research projects conducted at CRUfAD. During program development, we engage consumers in providing their feedback on early drafts of the online programs in the form of focus groups, and pilot studies. Consumer feedback is actively sought and incorporated into later drafts of the programs, to ensure our programs are continually improved and acceptable to consumers. For example, in our development of a cancer-tailored online program for anxiety and depression that incorporates components of health anxiety treatment, we engaged consumer advisory groups on 1) writing the initial grant application, 2) conducted focus groups to obtain feedback on the program from 20 consumers, 3) in-depth feedback from two members of the Joint Consumer Advisory Committee on the entire content of the program. For the Health Anxiety program, we actively

engaged consumers to provide feedback on the content of the program in a pilot trial, and obtained written feedback about suggested improvements to the content. The feedback obtained in the pilot study with consumers has resulted in substantial changes to the content of early version of the program, including additional components, extended time periods to complete the program, and more clinician input throughout the program.

### **Current Positions**

1. National Health and Medical Research Council (NHMRC) Early Career Postdoctoral Research Fellow and Clinical Psychologist | UNSW Faculty of Medicine at St Vincent's Hospital | Darlinghurst, 2010, AUSTRALIA

### **Previous Positions**

1. Investigator Scientist | Medical Research Council Cognition and Brain Sciences Unit (MRC-CBU) | Cambridge, United Kingdom

2. Clinical Psychologist | Clinical Research Unit for Anxiety and Depression (CRUfAD)| UNSW at St Vincent's Hospital | Darlinghurst, 2010, AUSTRALIA

### **Qualifications**

2011 PhD/Master of Psychology (Clinical), School of Psychology, UNSW, Sydney, Australia

2007 Bachelor of Psychology (Honours Class 1 with the University Medal, mark: 97), School of Psychology, UNSW, Sydney, Australia

### **Funding (past 5 years)**

#### **Competitive Grant Funding Received**

1. Cancer Institute of NSW Translational Program Grant: 2015-2017, **\$3,643,992**. Investigators: Butow, Andrews, Girgis, Kelly, Hack, Clayton, Price, Beale, Viney, Kirstin. Associate Investigators: J. Shaw, Dhillon, Coll, Grimison, T. Shaw, Rankin, Murphy, **Newby**, Stubbs, Orr, Lindsay.
2. HCF Foundation Grant: 2016-2018. **\$150,000**. Investigators: Andrews, Haskelberg, **Newby**, Milgrom, Holt, Austin, Black.
3. National Institute for Health Research for Patient Benefit Grant (United Kingdom): **£249,432**. Lead Applicant: Dalgleish, Co-Applicants: Watson, **Newby**, Brosan, Morant, Romana, Lafortune, Rae, Kuyken, Gilbody.
4. Brain Sciences Seed Funding Award, UNSW: 2015, **\$12,000**. Investigators: O'Dea, Perry, Werner-Seidler, Kelly, Batterham, Calex, Nickerson, **Newby**, & Mason.
5. St Vincent's Clinic Foundation Research Grant: 2014-2015, **\$30,000**. Investigators: **Newby**, Mahoney & Andrews.
6. National Health and Medical Research Council (NHMRC) Australian Clinical Early Career Research Fellowship, 2013-2016, **\$294,892**.
7. Faculty of Medicine Fellowship Enhancement Scheme Award: 2013-2016, **\$32,128**.
8. Australian Postgraduate Award, 2007-2010, **\$80,000**.
9. Faculty of Science Postgraduate Research Competition Prize – First Place, 2010, **\$5000**.

### **Travel Grants/Awards**

1. Ian Potter Travel and Conference Grant, 2013, **\$3000**.
2. American Association for Psychological Science Travel Assistance Award, 2010 **\$200USD**.
3. Postgraduate Research Support Scheme International Conference Travel Scholarship, 2010, **\$2,500**.
4. Australian Psychological Society College of Clinical Psychologists Student Prize, 2009.
5. The University Medal (i.e., awarded for outstanding academic performance in B. Psych (Hons) degree), UNSW, 2006.

6. The Istvan Tork Prize in Neuroscience for best Honours thesis in the field of Neuroscience at UNSW, 2006.
7. The Staff Prize for Third Year Psychology (i.e., the highest average performance in Research Methods and five other 3rd year psychology courses completed within a single year), UNSW, 2005

## **Publications**

### **Published Articles**

1. **Newby, J.M.**, *Healthy mind, healthy body: recent advances in internet-delivered interventions for chronic physical conditions and their comorbidities*. Chapter published in the Innovations and Future Directions in the Behavioural and Cognitive Therapies. Australian Academic Press: Sydney, Australia.
2. **Newby, J.M.**, *Innovations in transdiagnostic internet and face-to-face treatments for anxiety and depression in adults*. Chapter published in the Innovations and Future Directions in the Behavioural and Cognitive Therapies. Australian Academic Press: Sydney, Australia.
3. **Newby, J. M.**, Twomey, C., Li, S., & Andrews, G. (in press). Transdiagnostic computerised cognitive behavioural therapy for depression and anxiety: a systematic review and meta-analysis *Journal of Affective Disorders*.
4. Allen, A.R, **Newby, J.M.**, Mackenzie, A., Smith, J., Boulton, M., Loughnan, S., & Andrews (in press). Internet cognitive behavioural treatment for panic disorder: a randomised controlled trial and evidence of effectiveness in primary care. *BJPsych Open*.
5. **Newby, J.M.**, Mewton, L., & Andrews, G. (under review). Transdiagnostic versus disorder-specific internet cognitive behavioural therapy for depression and anxiety: a naturalistic comparison study. *Journal of Anxiety Disorders*.
6. Andrews, Hobbs, & **Newby** (in press). Computerised cognitive behaviour therapy for major depression: a reply to the REEACT trial. *Evidence-based Mental Health*.
7. Robins, L., **Newby, J.**, Wilhelm, K., Smith, J., Fletcher, T., Ma, T., et al. (2015). Internet-delivered cognitive behaviour therapy for depression in people with diabetes: study protocol for a randomised controlled trial. *BMJ Open Diabetes Research & Care*, 3(1). doi: 10.1136/bmjdr-2015-000144.
8. Allen, A. R., **Newby, J. M.**, Smith, J., & Andrews, G. (2015). Internet-based cognitive behavioural therapy (iCBT) for posttraumatic stress disorder versus waitlist control: study protocol for a randomised controlled trial. *Trials*, 16, 544. doi: 10.1186/s13063-015-1059-5.
9. Rosenbaum, S., Vancampfort, D., Steel, Z., **Newby, J.**, Ward, P. B., & Stubbs, B. (2015). Physical activity in the treatment of Post-traumatic stress disorder: A systematic review and meta-analysis. *Psychiatry Res*, 230(2), 130-136. doi: 10.1016/j.psychres.2015.10.017.
10. Anderson, R., Wong, N., **Newby. J.M.**, & Andrews, G. (in press). The cost to attend (non-medical out of pocket costs) for patients accessing free mental health services in Australia. *Australasian Psychiatry*. doi: 10.1177/103985621561300
11. **Newby, J.M.**, McKinnon, A., Kuyken, W., Gilbody, S., & Dalglish, T. (2015). Systematic review and meta-analysis of transdiagnostic psychological treatments for anxiety and depressive disorders in adulthood. *Clinical Psychology Review*, 40, 91-110. doi: 10.1016/j.cpr.2015.06.002

12. Rosenbaum, S. & **Newby, J.M. (co-first author)**, Steel, Z., Andrews, G., & Ward, P. (2015). Online physical activity interventions for mental disorders: a systematic review. *Internet Interventions*, 2(2), 214-220. [doi:10.1016/j.invent.2015.04.001](https://doi.org/10.1016/j.invent.2015.04.001)
13. Watts, S.E., Turnell, A., Kladnitski, N., **Newby, J.M.**, Andrews, G. (2015). Treatment as usual (TAU) is anything but usual: a meta-analysis of CBT versus TAU for anxiety and depression. *Journal of Affective Disorders*, 175, 152-167. <http://dx.doi.org/10.1016/j.jad.2014.12.025>
14. Andrews, G., **Newby, J.M.**, & Williams, A.D. (2015). Internet-delivered cognitive behavior therapy for anxiety disorders is here to stay. *Current Psychiatry Reports*, 17(1), 533. 10.1007/s11920-014-0533-1
15. Mewton, L., Hobbs, M., Sunderland, M, **Newby, J.M.**, & Andrews, G. (2014). Reductions in the internalising construct following internet-delivered transdiagnostic treatment for anxiety and depression in primary care. *Behaviour Research and Therapy*, 63, 132-138. doi: 10.1016/j.brat.2014.10.001
16. **Newby, J.M.**, Williams, A.D., & Andrews, G. (2014). Reductions in negative repetitive thinking and positive metacognitive beliefs during internet cognitive behavioural therapy (iCBT) for mixed anxiety and depression. *Behaviour Research and Therapy*, 59, 52-60.
17. **Newby, J.M.**, Mewton, L., Williams, A.D., & Andrews, G. (2014). Effectiveness of transdiagnostic internet cognitive behavioural treatment for anxiety and depression in primary care. *Journal of Affective Disorders*, 165, 45-52.
18. **Newby, J. M.**, Lang, T., Werner-Seidler, A., Holmes, E., & Moulds, M. L. (2014). Alleviating distressing intrusive memories in depression: A comparison between computerised cognitive bias modification and cognitive behavioural education. *Behaviour Research and Therapy*, 56(0), 60-67.
19. **Newby, J.M.**, Mackenzie, A., Williams, A.D., Watts, S., McIntyre, K., Wong, N., & Andrews, G. (2013). Internet cognitive behavioural treatment for mixed anxiety and depression: a randomised controlled trial and evidence of effectiveness in primary care. *Psychological Medicine*. 1-14.
20. Sunderland, M., **Newby, J.M.**, & Andrews, G. (2013). Health anxiety in Australia: prevalence, comorbidity, disability, and service use in the 2007 National Survey of Mental Health and Wellbeing. *British Journal of Psychiatry*, 202, 56-61.
21. Watts, S., **Newby, J.M.**, Mewton, L., & Andrews, G. (2012). A clinical audit of changes in suicide ideas with internet treatment for depression. *BMJ Open*, 2(5):e001558.
22. **Newby, J. M.** & Moulds, M.L. (2011). Do intrusive memory characteristics predict depression at six months? *Memory*, 19(5), 538-546.
23. **Newby, J. M.** & Moulds, M.L. (2012). A comparison of the content, themes and features of intrusive memories and rumination in major depressive disorder. *British Journal of Clinical Psychology*, 51(2), 197-205.
24. **Newby, J. M.** & Moulds, M.L. (2011). Intrusive memories in depression: does the centrality of the event matter? *Journal of Behavior Therapy and Experimental Psychiatry*, 42, 277-283.
25. **Newby, J. M.** & Moulds, M.L. (2011). Characteristics of intrusive memories in a community sample of depressed, recovered depressed and never-depressed individuals. *Behaviour Research and Therapy*, 49, 234-243.

26. **Newby, J. M.** & Moulds, M.L. (2011). Do negative appraisals and avoidance of intrusions predict depression at six months? *International Journal of Cognitive Therapy: Intrusive Imagery in Psychopathology Special Issue, 4*, 178-186.
27. **Newby, J.M.** & Moulds, M.L. (2010). Negative intrusive memories in depression: the role of maladaptive appraisals and safety behaviours. *Journal of Affective Disorders, 126(1)*, 147-154
28. **Newby, J. M.,** & Moulds, M.L. (2010). The role of features, maladaptive appraisals and avoidance of negative intrusive memories in depression: comparison between clinically depressed, recovered and never-depressed individuals. *Abstract published in Clinical Psychologist.*
29. Hamlin, A.S., **Newby, J.,** & McNally, G.P. (2007). The neural correlates and role of D1 dopamine receptors in renewal of extinguished alcohol-seeking. *Neuroscience, 146(2)*, 525-536.

### **Presentations:**

Presented research findings at 21 local and international conferences including the World Congress for Behavioural and Cognitive Therapies (WCBCT), the European Association for Behavioural and Cognitive Therapies), the Society for Mental Health Research, and the Australian Association for Cognitive and Behavioural Therapies.

### **Supervision**

Primary PhD Supervisor to one PhD candidate, and secondary supervisor to 3 PhD candidates.

### **Teaching Appointments**

1. Invited Guest Lecturer for Experimental and Clinical Psychology (ECP2), in the Masters of Clinical Psychology Program (School of Psychology, UNSW).
2. Adjunct Lecturer, Phase 2 Society and Health, Undergraduate Medicine Program (Faculty of Medicine, UNSW).
3. Graduate Teaching Assistant, 2nd and 3rd year Psychology Courses (Psychopathology, Research Methods and Statistics, and Developmental Psychology)

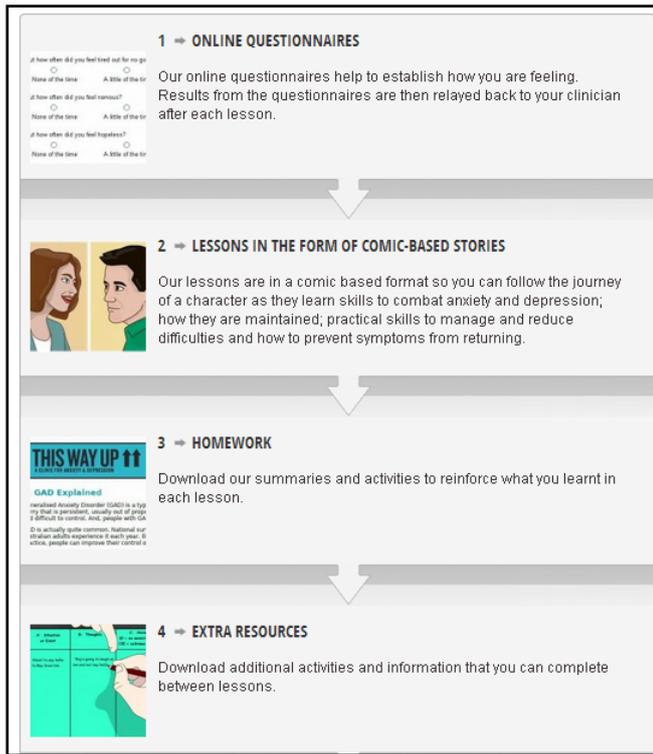
### **Professional Roles/Activities**

- Associate Editorial Board, Behaviour Research and Therapy (2015-current).
- Member of the Organising Committee for St Vincent's Research Week (2015).
- Member of the NSW AACBT Branch Organising Committee (2015-current).
- Assistant Chair of the Online Treatment for Depression and Anxiety Working Group (Cancer Institute of NSW Translation Grant) (2015-current).
- Participated in NHMRC Grant Reviewer Pilot Training Program (2014).
- Early Career Observer, NHMRC Project Grant Review Panels (2014).
- Symposium Chair and Convenor (October, 2013). *CBT via the internet and mobile phone: outcomes, innovations, and clinical applications.* The 36<sup>th</sup> annual AACBT Conference, Adelaide, Australia.
- Volunteer Organiser (July, 2012). The 40th Annual British Association for Behavioural and Cognitive Psychotherapies (BABCP).
- Symposium Chair and Convenor (October, 2011). *Computerised cognitive bias modification (CBM): a novel intervention for depression and pain management?* The 34<sup>th</sup> Annual AACBT Conference, Sydney, Australia.

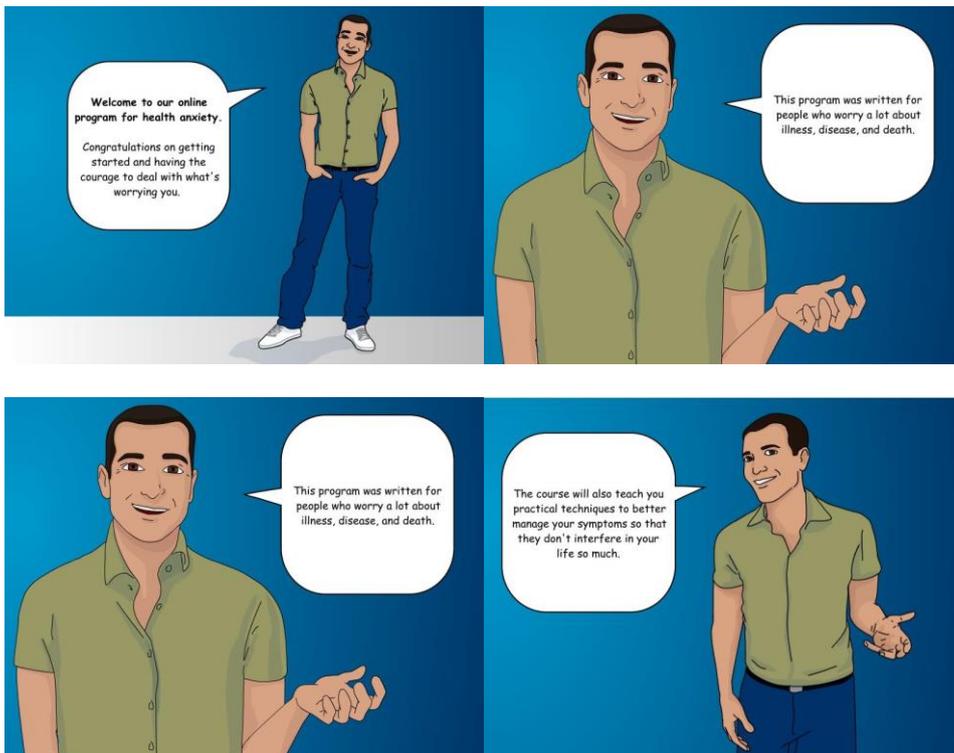
REFEREES

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**SUPPORTING MATERIAL (maximum 2 pages)**  
**Components of the Health Anxiety Program**



**Examples of lesson slides from Health Anxiety Program**



## Examples of lesson slides from Health Anxiety Program



## Examples of action plans/homework summaries from Health Anxiety Program



**ST VINCENT'S HOSPITAL**  
UNIVERSITY OF WESTERN AUSTRALIA

# LESSON ONE

## Health Anxiety Program

Understanding Health Anxiety

Virtualclinic.org.au - Homework



### 4. The Three Parts of Health Anxiety

Any emotion including anxiety can be broken down into three different parts: physical sensations, thoughts and behaviours. Each of these symptoms is important in maintaining the problem (that is, keeping it going).

The 3 types of symptoms are:

**Physical Sensations**  
What you feel in your body

(e.g., racing heart, shaky, dizzy, pain)

**HEALTH ANXIETY**

**Thoughts**  
What you think

(e.g., There must be something wrong with me! Is it a brain tumour?)

**Behaviours**  
What you do or don't do

(e.g., check body, search the internet, seek reassurance from others)

**HEALTH ANXIETY**

As you saw in James's story, each of these symptoms affects the others. For example, when James noticed he felt tired, he thought he had cancer. The more he focused on his symptoms, the more anxious he became, and the more he became convinced his thought 'I have cancer' was true. Let's have a closer look at your own symptoms of Health Anxiety over the next few pages. Once you identify your own symptoms, fill out your own Health Anxiety cycle below. Understanding your own Health Anxiety cycle is a very important part of this program.

My Health Anxiety Cycle:

**Physical Sensations**

\_\_\_\_\_

\_\_\_\_\_

**HEALTH ANXIETY**

**Thoughts**

\_\_\_\_\_

\_\_\_\_\_

**Behaviours**

\_\_\_\_\_

\_\_\_\_\_

**HEALTH ANXIETY**

**Thoughts**

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