eCentreClinic: Some Recent Findings and Directions

Blake F. Dear, PhD

Co-Director, eCentreClinic
Senior Management Team, MindSpot
NHMRC Research Fellow
Department of Psychology

AGENDA

- **Part 1:** Australia …

- **Part 2:** Our Clinics …

- **Part 3:** Some results from the MindSpot Clinic …

- **Part 4:** Our Courses…

- **Part 5:** Research Areas…

- **Part 6:** Some interesting (hopefully!) research results …

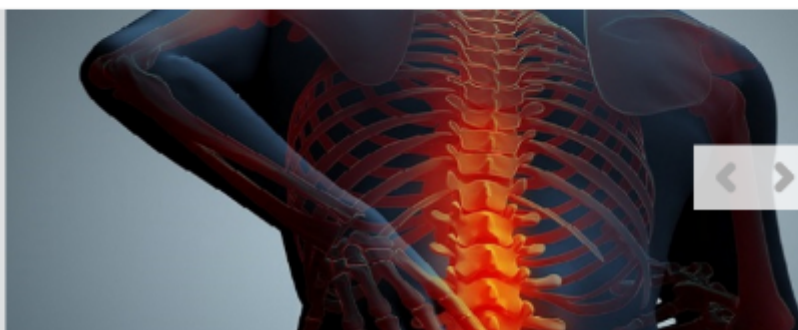- **Part 7:** Summary + Discussion …

Part 1:
Australia

7hrs

3hrs

14.5 hrs

Part 2:
Our Clinics

eCentreClinic
MACQUARIE UNIVERSITY

INFORMATION ˅   OUR COURSES ˅   RESEARCH RESULTS

HEALTH PROFESSIONALS ˅   ABOUT US ˅   DONATE   URGENT HELP

Chronic Pain

... Around 20% of Australians experience chronic pain ...

Welcome to the eCentreClinic

Dr Blake Dear
Co-Director, eCentreClinic
Macquarie University, Australia

Prof Nick Titov
Co-Director, eCentreClinic
Macquarie University, Australia

The eCentreClinic is specialist research clinic and a not-for-profit initiative of Macquarie University, Sydney, Australia. We develop and evaluate state-of-the-art free online treatment Courses for people with symptoms of worry (GAD), panic, social anxiety (Social Phobia), obsessive compulsive disorder (OCD), posttraumatic stress disorder (PTSD), stress, depression, low mood and other health conditions including chronic pain. We offer FREE access to these treatment courses via participation in clinical trials, which we run throughout the year.

We develop free online and Internet-delivered treatment Courses because we know that millions of Australians experience anxiety, depression and other conditions each year. But, few access or are able to access traditional face-to-face treatments. Our aim is to increase access to effective treatment.

To read more about the eCentreClinic, please click HERE. To take a tour of the eCentreClinic, please click HERE. You can also use the menu at the top of the page to explore all the areas of our website.

To read about and register or apply to participate in our free treatment Courses, please scroll down ...

LOGIN HERE! ➔

CONTACT US ... ➔

TAKE A TOUR ... ➔

MEASURE SYMPTOMS ... ➔

DONATE ... ➔

Please like us on Facebook!

facebook

MACQUARIE
UNIVERSITY

We are a not-for-profit clinical research unit and initiative of
Macquarie University, Sydney, Australia.

Core aim to develop psychological treatments – to increase access
to treatment and support good mental health.

Focus on common mental health and physical health conditions.

60+ clinical trials
7000+ patients
15+ different treatment programs

We have developed the treatments offered
at the **MindSpot Clinic.**

MindSpot

Online assessment and treatment
for anxiety and depression

Tel. 1800 61 44 34

I Need Urgent Help >

About Us

The MindSpot Clinic is a free telephone and online service for Australian adults troubled by symptoms of anxiety or depression.

We provide free Online Screening Assessments to help you learn about your symptoms, free Treatment Courses to help you to recover, or we can help you find local services that can help.

Learn more about the MindSpot Clinic
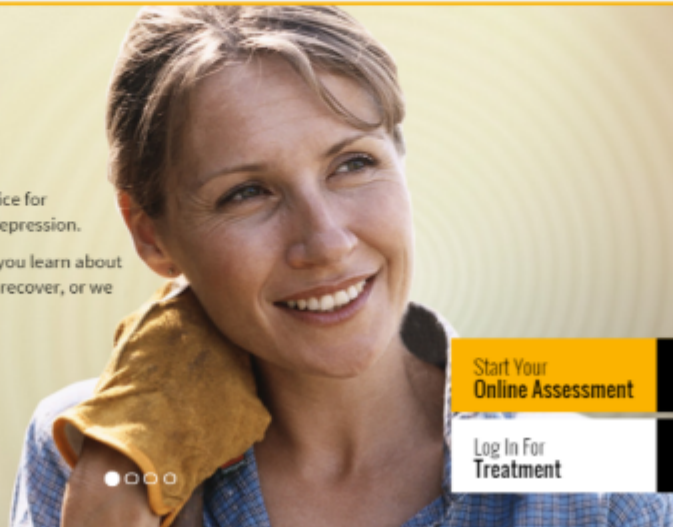
Start Your Online Assessment >

Log In For Treatment >

How MindSpot Works In 3 Easy Steps

1. Learn

Read the information on this website and try taking the **Depression** or **Anxiety Quiz.**

2. Get Assessed

Complete a telephone or **Online Screening Assessment.** We will provide information about your symptoms and discuss treatments that can help.

3. Treatment

Based on the results of your assessment we may recommend one of our free 8 week **Treatment Courses,** or provide referrals to other services.

Take The Brief **Depression Quiz** >

Take The Brief **Anxiety Quiz** >

Our Partners

mindhealthconnect
mental health and wellbeing

beyondblue
Depression, Anxiety

A program supported by
MACQUARIE University

The MindSpot Clinic

- A national online mental health service, operating 6 days/week
- Funded by Federal Government since 2013
- High volume, >15,000 consumers/year
- Stepped-care, with multiple points of entry.
- Provides assessments, referrals and online treatment.

Comprises a large team of 45+ staff:
- **Clinical:** Psychologists, psychiatrists, counsellors, nurses
- **IT/Admin:** Software engineers and clinical administrators
- **Managers/Evaluation:** Managers, clinical researchers.

> 65,000 consumers to date.

Part 3:
MindSpot Results

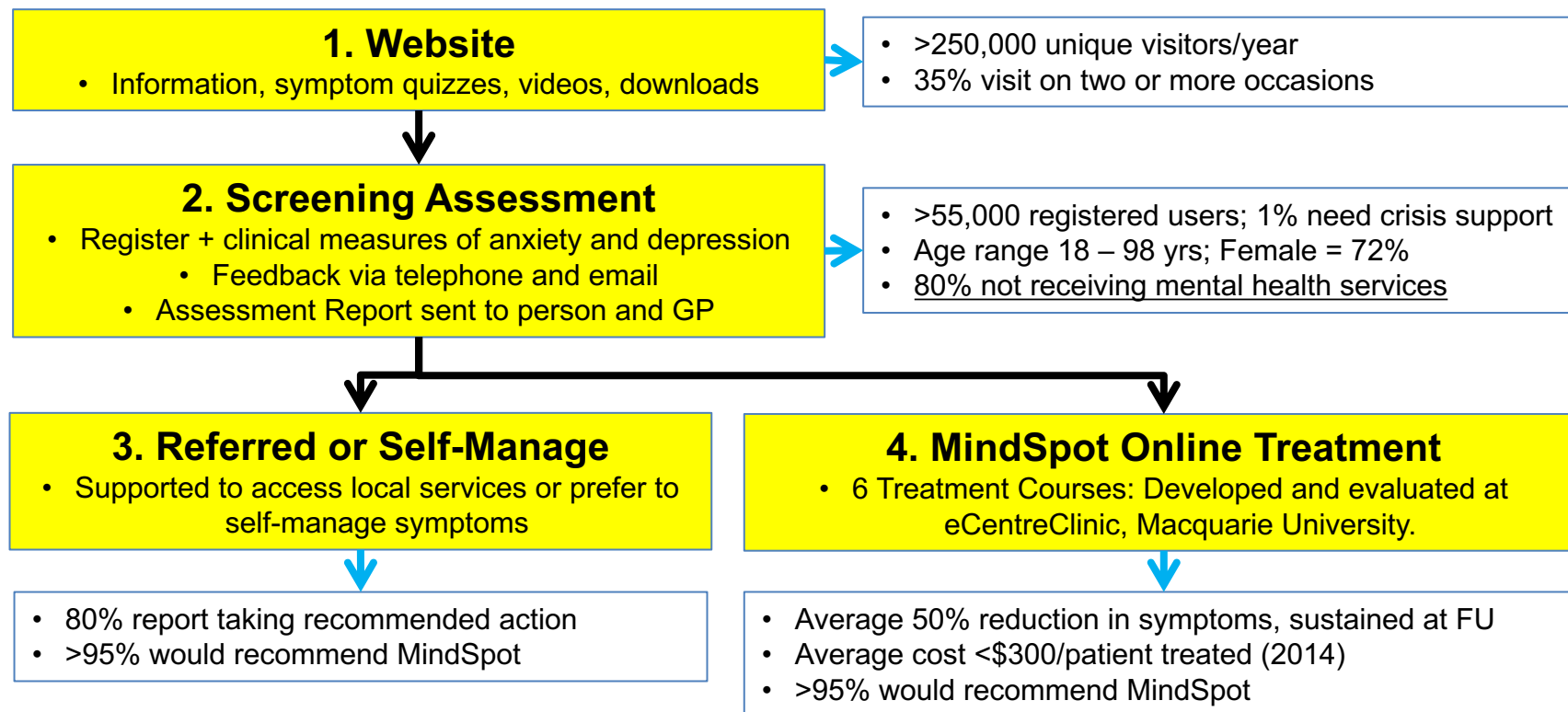# Why do people use MindSpot? (n > 50,000k)

Main Reason for Using MindSpot

- 58%: Want to understand symptoms and treatment options/information about local services

- 35%: Considering treatment at the MindSpot Clinic

- 7%: Other reasons

Why Not Use Face-to-Face Services?

- 39%: Attitudinal or evaluative reasons (e.g. privacy, anonymity, stigma)

- 35%: Structural reasons (e.g. convenience, availability, cost)

- 15%: No perceived need for face to face treatment

- 11%: Other

MindSpot Services

1. Website
- Information, symptom quizzes, videos, downloads

- >250,000 unique visitors/year
- 35% visit on two or more occasions

2. Screening Assessment
- Register + clinical measures of anxiety and depression
- Feedback via telephone and email
- Assessment Report sent to person and GP

- >55,000 registered users; 1% need crisis support
- Age range 18 – 98 yrs; Female = 72%
- 80% not receiving mental health services

3. Referred or Self-Manage
- Supported to access local services or prefer to self-manage symptoms

- 80% report taking recommended action
- >95% would recommend MindSpot

4. MindSpot Online Treatment
- 6 Treatment Courses: Developed and evaluated at eCentreClinic, Macquarie University.

- Average 50% reduction in symptoms, sustained at FU
- Average cost <$300/patient treated (2014)
- >95% would recommend MindSpot

MindSpot Treatment results (n>10,000; ITT)

	% Change in symptoms from assessment (30% reduction considered clinically significant)		Effect Size (Cohen's *d*) from assessment (0.8 effect size considered 'large')	
	Post-treatment	3-month follow-up	Post-treatment	3-month follow-up
PHQ-9 (depressive symptoms)	49%	**53%**	1.27	**1.44**
GAD-7 (anxiety symptoms)	50%	**55%**	1.38	**1.60**

- **Predictors:** No consistent predictors of outcome (most people benefit).

- **Satisfaction with Assessment:** >95% would refer a friend.

- **Satisfaction with Treatment:** >95% would refer a friend.

- **Deterioration Rate:** Very low (below 5%).

- **Therapist Time:** 1-2hrs per patient average time.

ANZJP

The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives

Nickolai Titov[1,2,3], Blake F Dear[1,2], Lauren G Staples[1,2],
James Bennett-Levy[4], Britt Klein[5], Ronald M Rapee[1],
Gerhard Andersson[6], Carol Purtell[2], Greg Bezuidenhout[2]
and Olav B Nielssen[2]

BMC Psychiatry

Procedures for risk management and a review of crisis referrals from the MindSpot Clinic, a national service for the remote assessment and treatment of anxiety and depression

Olav Nielssen[1,2,3*], Blake F. Dear[1,4], Lauren G. Staples[1,4], Rebecca Dear[1], Kathryn Ryan[1], Carol Purtell[1]
and Nickolai Titov[1,4]

MindSpot Clinic: An Accessible, Efficient, and Effective Online Treatment Service for Anxiety and Depression

Nickolai Titov, Ph.D., Blake F. Dear, Ph.D., Lauren G. Staples, Ph.D., James Bennett-Levy, Ph.D.,
Britt Klein, B.A., D.Psych. (Clinical), Ronald M. Rapee, Ph.D., Clare Shann, David Richards, Ph.D., Gerhard Andersson, Ph.D.,
Lee Ritterband, Ph.D., Carol Purtell, Greg Bezuidenhout, Luke Johnston, Ph.D., Olav B. Nielssen, M.B.B.S., Ph.D.

Contents lists available at ScienceDirect

Journal of Anxiety Disorders

ELSEVIER

Transdiagnostic Internet-delivered cognitive behaviour therapy in Canada: An open trial comparing results of a specialized online clinic and nonspecialized community clinics

H.D. Hadjistavropoulos[a,*], M.M. Nugent[b], N.M. Alberts[c], L. Staples[d], B.F. Dear[e], N. Titov[f]
[a] Department of Psychology, University of Regina, 3737 Wascana Parkway, Regina, SK, S4S 0A2, Canada
[b] Department of Psychology, University of Regina, 3737 Wascana Parkway, Regina, SK, S4S 0A2, Canada
[c] Department of Rehabilitation Medicine, University of Washington, Seattle, WA, United States
[d] MindSpot Clinic, Australian Hearing Hub Building, Macquarie University, Sydney, NSW 2109, Australia
[e] eCentreClinic, Department of Psychology, Macquarie University, Sydney, NSW 2109, Australia
[f] MindSpot Clinic, Australian Hearing Hub Building, eCentreClinic, Department of Psychology, Macquarie University, Sydney, NSW 2109, Australia
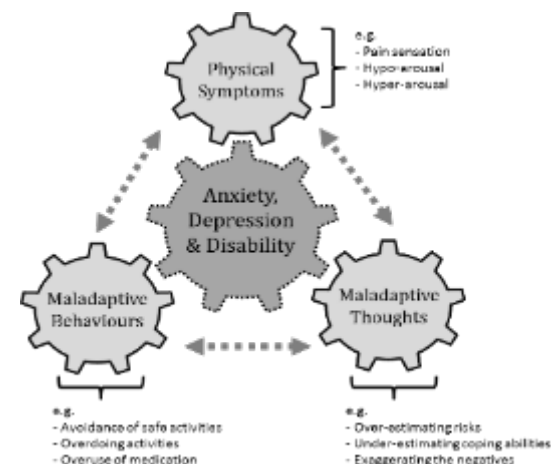

Internet-delivered treatment for older adults with anxiety and depression: implementation of the Wellbeing Plus Course in routine clinical care and comparison with research trial outcomes

Lauren G. Staples, Vincent J. Fogliati, Blake F. Dear, Olav Nielssen and Nickolai Titov

Part 4:
Our Courses

Pain Course

- Comprises (CBT-based):
  - 5 Core lessons (delivered over 8 weeks)
  - Lots of additional resources
  - Detailed case stories and examples
  - Automated emails
  - Brief, weekly, contact with clinician

- Designed to provide:
  - Same information/skills as 'best practice' face-to-face programs
  - A clear structure/approach for learning self-management skills

- Standard online learning environment:
  - Easy-to-use
  - Low bandwidth
  - Smart IT

eCentreClinic
CENTRE FOR EMOTIONAL HEALTH

You are logged in as Blake Dear (Blak3) | 1 new message(s) | Sign Out

Home | Announcements | Patient Results | Timeline

Clinician Menu

Course Progress [close]

Lesson 1 Materials
- Lesson — NEW
- DIY Guide — NEW
- Case Stories — NEW
Lesson 2 Materials
Lesson 3 Materials
Lesson 4 Materials
Lesson 5 Materials

Resources [close]

- Assertive Communication — NEW
- Attention and Pain — NEW
- Panic Attacks and Pain — NEW
- Beliefs and Chronic Medical Conditions — NEW
- Problem Solving and Worry Time — NEW
- Treatments and Chronic Pain — NEW
- Good Sleep Guide — NEW

Private Messages [close]

- 1 new message(s).
- 46 old message(s).
- 0 sent message(s).
- Compose Message

Additional Resources

Lessons, DIY Guides and Case Stories

Private Messaging

Pain Course Homepage

We built this Course to provide good information and teach practical skills to help manage chronic pain and symptoms of low mood and anxiety often caused by pain. You won't be able to access everything at once - see the dates below for when the Lessons will become available. But, there will be something new most weeks and all the materials builds on the previous materials.

As you probably know chronic pain can result from almost anything and it is actually very common. Hundreds of scientific research studies show that having good information about pain and what people do when they have pain can make a big difference in how much pain affects their life. Unfortunately, many people do not have access to good information and are never taught some of the practical skills that can make a difference. [...] ese practical, proven, skills which people find helpful.

The aim of the research is to [...] ate a course that is as [...] lia for all people with Chronic Pain. We know that managing chronic pain is challenging and difficult, esp[...]ally when pain is [...] Australians have now completed the Pain Course and we have received very encouraging and helpful fee[...]ck. So, ple[...] will help us to further improve the Course for others - we will be asking for lots of feedback at the end of the Cour[...] and [...] n Course helpful.

About the Pain Course
The Pain Course contains the following:

- 5 online lessons.
- 5 Do It Yourself Guides.
- Additional Resources.
- Case Stories.

Our Recommendation [...]
We recommend you rea[...] [...] d you read all the Additional Resources and Case Stories but focus on the [...] ls multiple times throughout the Course and well after the Course is over[...]

Most importantly we re[...] ls a little bit each day. Our results and feedback from past participants i[...] get out of it. Most participants in our Courses are [...] y and managing [...] s report finding the Course helpful if they spend [...] hours a week [...]

[...] timeline that we believe will help you achieve the best results. Please put these dates in your calendars:

Course background and timeline

LESSONS — DIY & VALIDITY GUIDES
THE COURSE
FEEDBACK — PRIVATE MESSAGING — PAST STORIES — EXTRA RESOURCES

Log in
Read Lesson 1
Do It Yourself
Resources + Stories

Read Lesson 2
Do It Yourself
Resources + Stories
Practice Core Skills

Read Lesson 3
Do It Yourself
Resources + Stories
Practice Core Skills

Read Lesson 4
Do It Yourself
Resources + Stories
Practice Core Skills

Read Lesson 5
Do It Yourself
Resources + Stories
Practice Core Skills

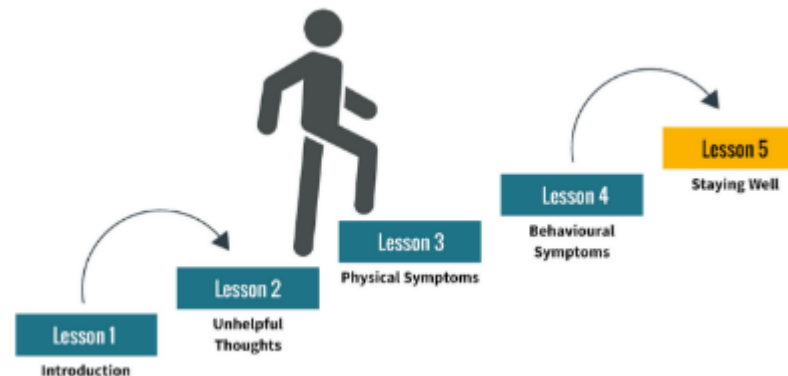| LESSON 1	LESSON 2	LESSON 3	LESSON 4	LESSON 5	FINAL DAY
Monday 29 September	Monday 6 October	Monday 20 October	Monday 27 October	Monday 10 November	Sunday 23 November
(1 week)	(2 weeks)	(1 week)	(2 weeks)	(2 weeks)	

Participant experience ...

Participant:

- Logs in regularly and reads lessons
- Downloads summaries and relevant materials
- Reads case stories and examples
- Practices skills (using worksheets)
- Discusses skills use and challenges with clinician ...

Lesson 1 — Introduction
Lesson 2 — Unhelpful Thoughts
Lesson 3 — Physical Symptoms
Lesson 4 — Behavioural Symptoms
Lesson 5 — Staying Well

Clinician:

- Monitors safety and general wellbeing
- Guides participants through course
- Discusses lessons and answers questions
- Gets feedback ...

Online Lessons

DIY Guides + Worksheets

Additional Resources

Case Stories

Part 5:
Research Areas

Multiple! **All very pragmatic.**

1. **Transdiagnostics** (e.g., broadly effective interventions)

2. **Models of support** (e.g., clinician-guided, optional-guided, self-guided)

3. **Different age groups** (e.g., young adults, older adults)

4. **Chronic health conditions** (e.g., pain, kidney disease, neurological conditions, etc.)

5. **Mechanisms of treatment** (e.g., skills practice, prompting)

6. **Nature of clinical change** (e.g., when it occurs, proportional nature)

7. **Cultural interventions** (e.g., Chinese, Arabic)

8. **Cost-effectiveness and implementation** (e.g., cost and how to do)

9. **Prevention of mental disorder** (e.g., in high risk groups)

Research Areas

<u>Multiple!</u> All very pragmatic.

1. **Transdiagnostics** (e.g., broadly effective interventions)

2. **Models of support** (e.g., clinician-guided, optional-guided, self-guided)

3. **Different age groups** (e.g., young adults, older adults)

4. **Chronic health conditions** (e.g., pain, kidney disease, neurological conditions, etc.)

5. **Mechanisms of treatment** (e.g., skills practice, prompting)

6. **Nature of clinical change** (e.g., when it occurs, proportional nature)

7. **Cultural interventions** (e.g., Chinese, Arabic)

8. **Cost-effectiveness and implementation** (e.g., cost and how to do)

9. **Prevention of mental disorder** (e.g., in high risk groups)

A quick note ...

Absolute (additive) depression improvement scores; per intial severity
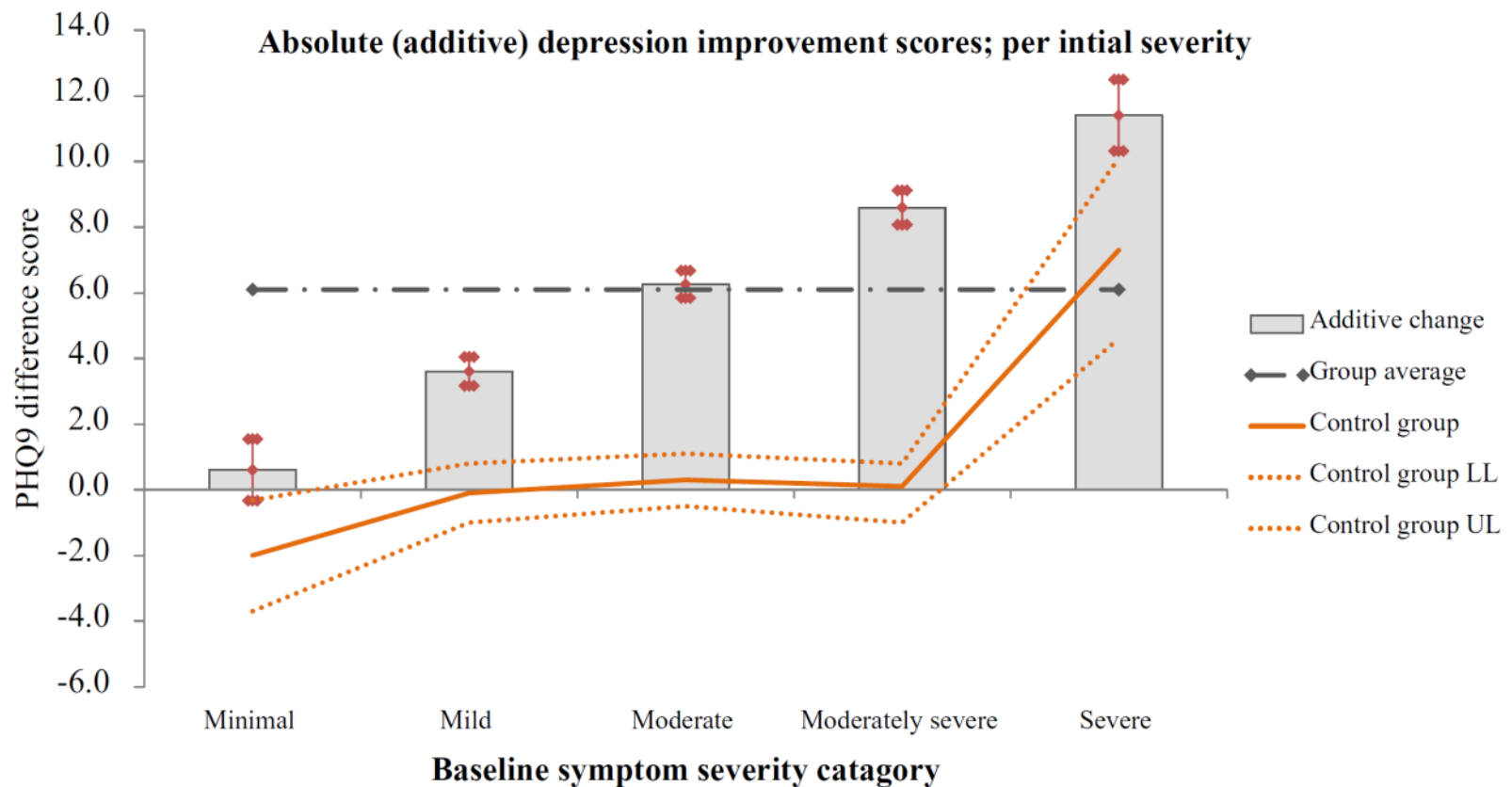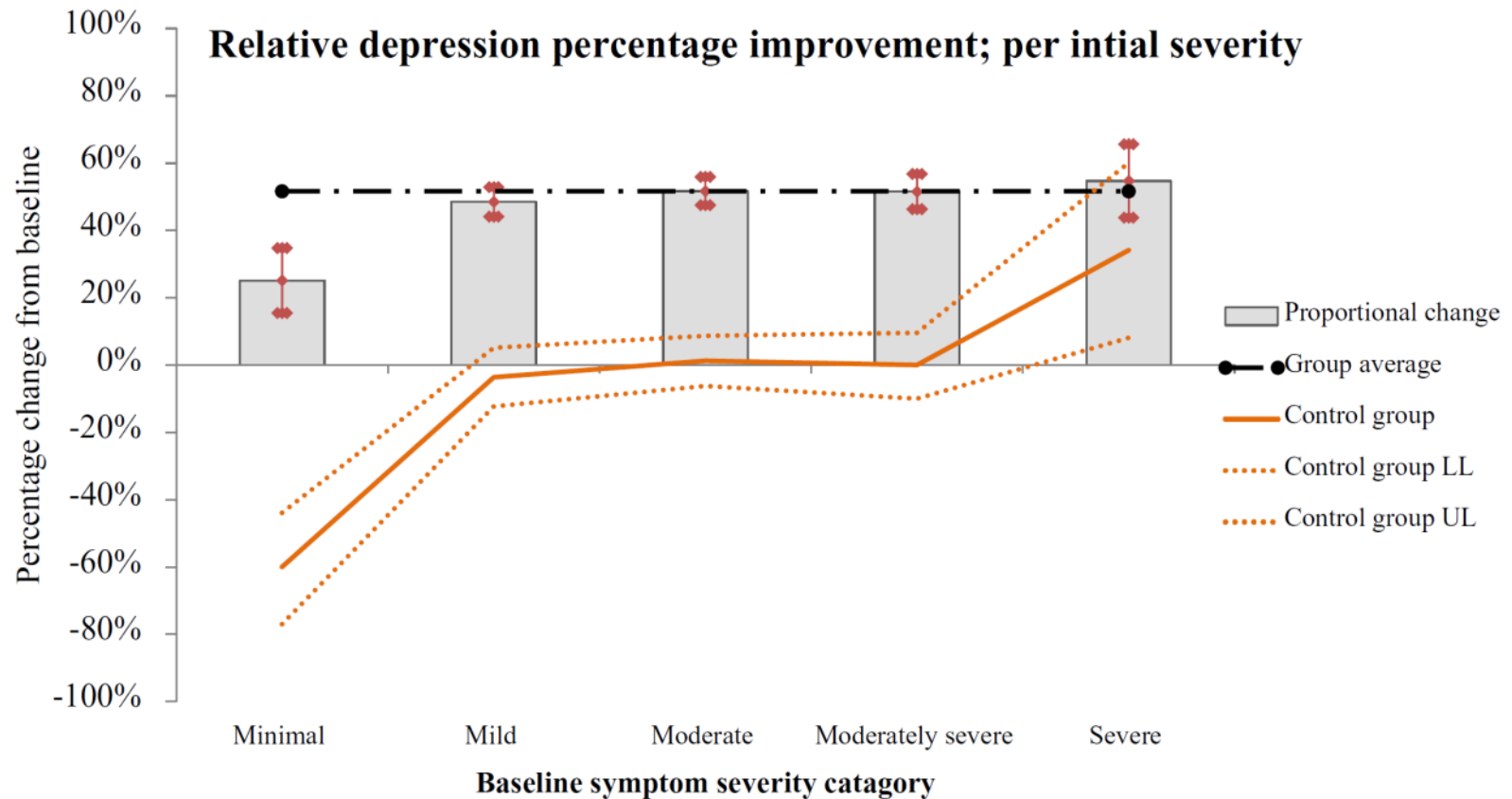
Part 6:

Interesting Research Results

FOCUS

Transdiagnostics

Models of Support

Transdiagnostics

Transdiagnostic Treatments [Barlow, 2004]

- Aim to treat more than one disorder, simultaneously.
- Use same treatment strategies, but packaged in a general way.

Pragmatic Benefits [McHugh et al., 2009]

- Simplify diagnostic assessments / clinician decision making
- Easier to disseminate and train clinicians to competence

Outstanding Question

- Are transdiagnostic treatments as effective?

Clinician Support

Clinician-Guided vs. Self-Guided treatment [Andersson et al., 2014]

- Many trials examining self-guided and clinician-guided treatments
- Meta-analyses suggest self-guided ↓ effective and ↑ attrition
- Very few studies directly compare the two formats.

Pragmatic Benefits

- Self-guided very cost efficient > potential for increasing access

Outstanding Question

- Are self-guided treatments as effective?

- **Design:** 4 x four-arm RCTs for principal:

  - Generalised Anxiety Disorder (n = 291)
  - Major Depressive Disorder (n = 217)
  - Social Anxiety Disorder (n = 206)
  - Panic Disorder (n = 145)

  All received diagnostic assessment **(n = 1558)**

- **Randomised to receive:**

  - Clinician-guided iCBT / **OR** / Self-guided iCBT
  - Transdiagnostic iCBT / **OR** / Disorder-specific iCBT

- **Treatment:** Transdiagnostic treatment and 4 disorder-specific treatments.

- **Primary Outcomes:** Symptom measures for each disorder.

- **Assessments:** Pre, weekly, post, 3-month, 12-months, 24-months.

WB RCT 3, 4, 5, 6

- **Completion rates:** > 55%

- **Response rates:** > 75%

- **Satisfaction rates:** > 90%

No marked differences ...
Transdiagnostic vs. Disorder-specific
Clinician-guided vs. Self-guided

- **Clinician time:** 35 mins

Principal GAD

Transdiagnostic v. Disorder-specific

	n	Post and 3, 12, 24 MFU
GAD (GAD-7)		
Trans	140	51% to 66%
Specific	151	51% to 57%
MDD (PHQ-9)	157	45% to 62%
SAD (MINI-SPIN)	122	29% to 51%
PAN (PDSS-SR)	92	36% to 60%

Clinician-guided v. Self-guided

	n	Post and 3, 12, 24 MFU
GAD (GAD-7)		
Clinician	144	52% to 59%
Self	147	50% to 61%
MDD (PHQ-9)	157	47% to 59%
SAD (MINI-SPIN)	122	29% to 46%
PAN (PDSS-SR)	92	33% to 70%

… No marked differences

Principal MDD

Transdiagnostic v. Disorder-specific

	n	Post and 3, 12, 24 MFU
MDD (PHQ-9)		
Trans	109	51% to 55%
Specific	108	51% to 55%
GAD (GAD-7)	152	43% to 56%
SAD (MINI-SPIN)	95	29% to 42%
PAN (PDSS-SR)	25	32% to 61%

Clinician-guided v. Self-guided

	n	Post and 3, 12, 24 MFU
MDD (PHQ-9)		
Clinician	112	51% to 60%
Self	105	45% to 51%
GAD (GAD-7)	152	43% to 55%
SAD (MINI-SPIN)	95	29% to 46%
PAN (PDSS-SR)	25	31% to 57%

… No marked differences

Principal SAD

Transdiagnostic v. Disorder-specific

	n	Post and 3, 12, 24 MFU
SAD (MINI-SPIN)		
Trans	100	35% to 44%
Specific	106	32% to 47%
MDD (PHQ-9)	157	39% to 51%
GAD (GAD-7)	122	36% to 55%
PAN (PDSS-SR)	92	25% to 55%

Clinician-guided v. Self-guided

	n	Post and 3, 12, 24 MFU
SAD (MINI-SPIN)		
Clinician	107	37% to 46%
Self	99	30% to 42%
MDD (PHQ-9)	157	42% to 50%
GAD (GAD-7)	122	36% to 55%
PAN (PDSS-SR)	92	27% to 55%

... No marked differences

Principal PAN

Transdiagnostic v. Disorder-specific

	n	Post and 3, 12, 24 MFU
PAN (PDSS-SR)		
Trans	64	44% to 57%
Specific	68	37% to 54%
MDD (PHQ-9)	38	34% to 63%
SAD (MINI-SPIN)	47	23% to 43%
GAD (GAD-7)	39	34% to 57%

Clinician-guided v. Self-guided

	n	Post and 3, 12, 24 MFU
PAN (PDSS-SR)		
Clinician	65	36% to 55%
Self	67	44% to 57%
MDD (PHQ-9)	38	33% to 51%
SAD (MINI-SPIN)	47	15% to 49%
GAD (GAD-7)	39	35% to 55%

… No marked differences

Transdiagnostic versus disorder-specific and clinician-guided versus self-guided internet-delivered treatment for Social Anxiety Disorder and comorbid disorders: A randomized controlled trial

B.F. Dear [a,*], L.G. Staples [a], M.D. Terides [a], V.J. Fogliati [a], J. Sheehan [a], L. Johnston [a], R. Kayrouz [a], R. Dear [a], P.M. McEvoy [b], N. Titov [a]

[a] eCentreClinic, Department of Psychology, Macquarie University, Sydney, Australia
[b] School of Psychology and Speech Pathology, Curtin University, Australia

Transdiagnostic versus disorder-specific and clinician-guided versus self-guided internet-delivered treatment for generalized anxiety disorder and comorbid disorders: A randomized controlled trial

B.F. Dear [a,*], L.G. Staples [a], M.D. Terides [a], E. Karin [a], J. Zou [a], L. Johnston [a], M. Gandy [a], V.J. Fogliati [a], B.M. Wootton [a,b], P.M. McEvoy [c], N. Titov [a]

[a] ...g, Department of Psychology, Macquarie University, Sydney, Australia
[b] ...dicine (Psychology), University of Tasmania, Tasmania, Australia
[c] ...chology and Speech Pathology, Curtin University, Western Australia, Australia

Disorder-specific versus transdiagnostic and clinician-guided versus self-guided internet-delivered treatment for panic disorder and comorbid disorders: A randomized controlled trial

V.J. Fogliati [a], B.F. Dear [a,*], L.G. Staples [a], M.D. Terides [a], J. Sheehan [a], L. Johnston [a], R. Kayrouz [a], R. Dear [a], P.M. McEvoy [b], N. Titov [a]

[a] eCentreClinic, Department of Psychology, Macquarie University, Sydney, Australia
[b] School of Psychology and Speech Pathology, Curtin University, Australia

Disorder-specific versus transdiagnostic and clinician-guided versus self-guided treatment for major depressive disorder and comorbid anxiety disorders: A randomized controlled trial

N. Titov [a], B.F. Dear [a,*], L.G. Staples [a], M.D. Terides [a], E. Karin [a], J. Sheehan [a], L. Johnston [a], M. Gandy [a], V.J. Fogliati [a], B.M. Wootton [a,b], P.M. McEvoy [c]

[a] eCentreClinic, Department of Psychology, Macquarie University, Sydney, Australia
[b] School of Medicine (Psychology), University of Tasmania, Tasmania, Australia
[c] School of Psychology and Speech Pathology, Curtin University, Australia

Part 6:
Interesting Research Results

FOCUS
Older Adults

Models of Support

Older Adults:

- Increasingly online
- Anxiety and depression still prevalent, although less.
- But, what about clinician contact?

iCBT Program for older adults, *the Wellbeing Plus Course*:

- Transdiagnostic intervention
- **2 RCTs** and **3 Open Trials** (n > 400)

WBPlus RCT3

- **Design:** 3-arm RCTs for anxiety and depression:

  - Clinician-Guided + Initial Assessment
  - Self-Guided + Initial Assessment
  - Self-Guided only

  (n = 433)

- **Group:** 60+ years of age.

- **Treatment:** Transdiagnostic treatment

- **Primary Outcomes:** GAD-7 and PHQ-9

- **Assessments:** Pre, weekly, post, 3-month.

% ⬇ Symptoms

	n	Post	3-M	Cohen's d
Anxiety (GAD-7)				
Clinician + assessment	153		> 58%	≥ 1.33
Self-guided + assessment	140		> 55%	≥ 1.36
Self-guided	140		> 50%	≥ 1.29
Depression (PHQ-9)				
Clinician + assessment	153		> 59%	≥ 1.45
Self-guided + assessment	140		> 55%	≥ 1.36
Self-guided	140		> 54%	≥ 1.30

NOTE: Age range = 60 to 93 / Age not a predictor

WBPlus RCT3

Completion / Time

	N= 433
Completed @ post	
Clinician + assessment	= 92%
Self-guided + assessment	= 76%
Self-guided	= 79%
Avg. Clinician Time	
Clinician + assessment	68 mins
Self-guided + assessment	4 mins
Self-guided	6 mins

Acceptability

	N= 386
Worth Their time?	
Clinician + assessment	> 92%
Self-guided + assessment	> 94%
Self-guided	> 95%
Recommend to Others?	
Clinician + assessment	> 95%
Self-guided + assessment	> 94%
Self-guided	> 91%

Part 6:
Interesting Research Results

FOCUS
Chronic Pain
Proof-of-Concept to Dissemination

Chronic Pain:

- Affects **1 in 5** adults [Blyth et al., 2001]
- **1 in 3** with chronic pain experience marked disability [Blyth et al., 2003]
- **> 1 in 2** meet criteria for clinical anxiety/depression [Blair et al., 2003]
- Huge personal and societal costs
- Few receive access to pain management programs [Hogg et al., 2012]

iCBT Pain Program, *the Pain Course*:

- Same information/skills as face-to-face pain management program
- **5 RCTs** and **3 Open Trials** (n > 1500)

Models of support for Chronic Pain …

- **Pain RCT1 basic proof-of-concept**

- **Pain RCT2**
  - N = 472 (mixed chronic pain)
  - Outcomes: Disability, pain, depression and anxiety
  - Assessed: Pre, post, 3mfu, 12mfu, 24mfu
  - Randomised to 1 of 4 groups:

     1. Regular contact
     2. Optional contact (**patient-centred**)
     3. No contact
     4. TAU Control

Pain Course

Models of support …

% ↓ Disability

	Post, 3mfu, 12mfu, 24mfu
Regular Contact	> 21%
Optional Contact	> 18%
No Contact	> 20%
Control	= 3%

% ↓ Depression

	Post, 3mfu, 12mfu, 24mfu
Regular Contact	> 33%
Optional Contact	> 36%
No Contact	> 37%
Control	= -1%

% ↓ Pain

	Post, 3mfu, 12mfu, 24mfu
Regular Contact	> 13%
Optional Contact	> 15%
No Contact	> 12%
Control	= 5%

% ↓ Anxiety

	Post, 3mfu, 12mfu, 24mfu
Regular Contact	> 21%
Optional Contact	> 18%
No Contact	> 20%
Control	= 3%

Models of support …

Completion / Time

	N= 472
Completed @ post	
Regular Contact	= 78%
Optional Contact	= 74%
No Contact	= 68%
Avg. Clinician Time	
Regular Contact	**67 mins**
Optional Contact	**12 mins**
No Contact	**5 mins**

Acceptability

	N= 340
Worth Their time?	
Regular Contact	
Optional Contact	> 95%
No Contact	
Recommend to Others?	
Regular Contact	
Optional Contact	> 90%
No Contact	

Also, reductions in medication and service use …

Workbook v. Internet ...

- **Pain RCT3**
  - N = 168 (mixed chronic pain)
  - Outcomes: Disability, pain, depression and anxiety
  - Assessed: Pre, post, 3mfu, 12mfu
  - Randomised to 1 of 2 groups:

    1. Internet
    2. Workbook   **Pain Course**

Workbook v. Internet …

% ↓ Disability

	Post, 3mfu, 12mfu
Internet	16% to 29%
Workbook	24% to 35%

% ↓ Depression

	Post, 3mfu, 12mfu
Internet	36% to 43%
Workbook	29% to 36%

% ↓ Pain

	Post, 3mfu, 12mfu
Internet	10% to 26%
Workbook	21% to 28%

% ↓ Anxiety

	Post, 3mfu, 12mfu
Internet	34% to 39%
Workbook	26% to 41%

… No marked differences

Workbook v. Internet ...

Completion / Time

	N= 168
Completed @ post	
Internet	= 75%
Workbook	= 73%
Avg. Clinician Time	
Internet	71 mins
Workbook	70 mins

Acceptability

	N= 168
Worth Their time?	
Internet	
Workbook	> 95%
Recommend to Others?	
Internet	
Workbook	> 90%

No marked differences ...

Can we implement?

- **Pain Open 2**
  - N = 39 (mixed chronic pain)
  - Offered to patients of tertiary pain management clinic
  - Outcomes: Disability, pain, depression and anxiety
  - Assessed: Pre, post, 3mfu
  - Singe group feasibility trial

Implementation …

% ⬇ Disability

	Post, 3mfu
Internet	5% to 12%

% ⬇ Depression

	Post, 3mfu
Internet	29% to 38%

% ⬇ Pain

	Post, 3mfu
Internet	4% to 9%

% ⬇ Anxiety

	Post, 3mfu
Internet	12% to 18%

Completion / Time

	N= 39
Completed @ post	
Internet	= 92%
Avg. Clinician Time	
Internet	71 mins

Acceptability

	N= 39
Worth time?	
Internet	= 95%
Recommend to others?	
Internet	= 95%

Can we predict who will benefit?

- Focus on:
  - Demographic variables
  - Initial severity variables
  - Clinical variables
  - Treatment variables

- Predict ≥30% improvement [Moore et al., 2010; Ostelo et al., 2008]

- Series of stepwise logistic regressions

≥ 30% Improvement

Demographic	Post	3MFU
Age	✓	✓
Gender	✓	✓
Relationship status	✓	✓
Employment status	✓	✓

Clinical	Post	3MFU
Pain duration (years)	✓	✓
# pain sites	✓	✓
Meds for pain	✓	✓
Meds for MH	✓	✓
Compensation	✓	✓

Initial Severity	Post	3MFU
Disability	✓	✓
Anxiety	✓	✓
Depression	✓	✓
Average Pain	✓	✓
Pain self-efficacy	✓	✓
Fear of pain / movement	✓	✓
Pain acceptance	✓	✓

Treatment	Post	3MFU
Level of support	✓	✓
Completed?	✓	✓
# of logins	✓	✓

Our ability to predict …

	Proportion making ≥ 30% improvement	Total variance in odds explained	
		Post	3MFU
Disability	32% / 39%	14% (.599)	18% (.644)
Avg. pain	19% / 25%	6% (.500)	9% (.532)
Depression	59% / 64%	13% (.602)	12% (.595)
Anxiety	60% / 60%	7% (.557)	6% (.545)

+ AUC shown in parentheses

… No dominant predictors across outcome domains.
… Unable to predict who will benefit.

Pain Course: Future Directions?

- Lots of questions:
  - Equally effective for different pain populations?
  - Can we enhance outcomes?
  - Mechanisms of treatment? (Skills practice?)
  - Independent replication? (one down!)

- Finishing large health economics RCT (n = 630)

- Finishing open trial (n > 60) with adults with Spinal Cord Injury and chronic pain

- Implementation at the MindSpot Clinic.

The *Pain Course*: A randomised controlled trial of a clinician-guided Internet-delivered cognitive behaviour therapy program for managing chronic pain and emotional well-being

Blake F. Dear [a,*], Nick Titov [a], Kathryn Nicholson Perry [b], Luke Johns, Matthew D. Terides [a], Ron M. Rapee [a], Jennifer L. Hudson [a]

[a] The Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney, Australia
[b] School of Social Sciences and Psychology, Centre for Health Research, University of Western Sydney, Australia

---

Research Paper

PAIN®

The Pain Course: a randomised controlled trial examining an internet-delivered pain management program when provided with different levels of clinician support

Blake F. Dear [a,*], Milena Gandy [a], Eyal Karin [a], Lauren G. Staples [a], Luke Johnston [a], Bethany M. Wootton [b], Matthew D. Terides [a], Rony Kayrouz [a], Kathryn Nicholson P, Michael K. Nicholas [e], Nickolai Titov [a]

ORIGINAL ARTICLE

EJP
European Journal of Pain

Short message service prompts for skills practice in Internet-delivered cognitive behaviour therapy for chronic pain – are they feasible and effective?

M. Gandy [1], V.J. Fogliati [1], M.D. Terides [1], L. Johnston [1], K. Nicholson Perry [2], C. Newall [3], N. Titov [1], B.F. Dear [1]

Research Paper

PAIN®

The Pain Course: exploring predictors of clinical response to an Internet-delivered pain management program

B.F. Dear [a,*], M. Gandy [a], E. Karin [a], T. Ricciardi [a], N. Langman [a], L.G. Staples [a], V.J. Fogliati [a], L. Sharpe [b], L.F. McLellan [c], N. Titov [a]

Examination of an Internet-Delivered Cognitive Behavioural Pain Management Course for Adults with Fibromyalgia: A Randomized Controlled Trial.

Friesen, Lindsay N.; Hadjistavropoulos, Heather D.; Schneider, Luke H.; Alberts, Nicole M.; Titov, Nikolai; Dear, Blake F.

Part 6:
Interesting Research Results

FOCUS

Chronic Health Conditions

Rationale for focus …

- **Reciprocal risk factors** - poor mental health and poor physical health
- Anxiety and depression **2** to **3** times as prevalent
- Psychological treatment core component of management
- But, treatment barriers often even more significant …

Transdiagnostic iCBT, *the Chronic Conditions Course*:

- Multi-morbidity a key issue for treatment
- Implementation of condition-specific treatment challenging
- Encouraged by Pain Projects and collaborative projects (CKD and Cancer)
- *Chronic Conditions Course* developed based on *Pain Course*
- **2 Open Trails** (n > 54) **and 1 RCT** (target n > 600)

CCC Open 1 and 2

- **Epilepsy Open 1**
  - n = 27
  - Outcomes: Disability, depression and anxiety
  - Assessed: Pre, post, 3mfu, 12mfu
  - Single treatment group

- **FGID Open 1**
  - n = 27
  - Outcomes: Disability, depression and anxiety
  - Assessed: Pre, post, 3mfu, 12mfu
  - Single treatment group

Chronic Conditions Course ...

% ⬇ Disability

	Post, 3mfu
Epilepsy	33% to 46%
FGIDs	-

% ⬇ GSRS

	Post, 3mfu
Epilepsy	-
FGIDs	20% to 38%

% ⬇ Depression

	Post, 3mfu
Epilepsy	54%
FGIDs	36% to 44%

% ⬇ Anxiety

	Post, 3mfu
Epilepsy	50% to 54%
FGIDs	44% to 46%

CCC Open 1 and 2

Completion / Time

Completed @ post	
Epilepsy	= 81%
FGIDs	= 70%
Avg. Clinician Time	
Epilepsy	80 mins
FGIDs	42 mins

Acceptability

Worth Their time?	
Epilepsy	> 95%
FGIDs	
Recommend to Others?	
Epilepsy	> 95%
FGIDs	

- **Chronic Conditions Course RCT1**
  - n = 80 (target 600+)
  - Adults with variety of chronic health conditions (affecting QOL and MH)
  - Outcomes: Disability, depression and anxiety
  - Full health economic analysis
  - Assessed: Pre, post, 3mfu, 12mfu
  - Randomised to 1 of 2 groups:

    1. Internet Treatment
    2. TAU Waitlist

Chronic Conditions Course ...

% ⬇ Disability

	Post
Treatment	35% (d = 0.89)
Waitlist	- 10% (d = -0.23)

% ⬇ Depression

	Post
Treatment	35% (d = 1.21)
Waitlist	-3% (d = 0.09)

% ⬇ Anxiety

	Post
Treatment	34% (d = 0.83)
Waitlist	7% (d =0.16)

Completion / Time

Completed @ post	
Treatment	= 81%
Avg. Clinician Time	
Treatment	66 mins

Acceptability

Worth Their time?	
Treatment	> 95%
Recommend to Others?	
Treatment	> 95%

Examining internet-delivered cognitive behaviour therapy for patients with chronic kidney disease on haemodialysis: A feasibility open trial

Ramony Chan PhD [a,b,c,*], Blake F. Dear PhD [d], Nick Titov PhD [d], Josephine Chow PhD [e,f,g], Michael Suranyi PhD [a,c,h]

CrossMark

A feasibility trial of an Internet-delivered and transdiagnostic cognitive behavioral therapy treatment program for anxiety, depression, and disability among adults with epilepsy

Milena Gandy, Eyal Karin, Vincent J. Fogliati, Sarah McDonald, Nick Titov, and Blake F. Dear

---

Clinical Correspondence

Internet-delivered cognitive-behaviour therapy for recent cancer survivors: a feasibility trial

Nicole M. Alberts[1], Heather D. Hadjistavropoulos[1,*], Blake F. Dear[2] and Nickolai Titov[2]
[1] Department of Psychology, University of Regina, Regina, Saskatchewan, Canada
[2] eCentreClinic, Department of Psychology, Macquarie University, Sydney, Australia

Part 6:
Interesting Research Results

FOCUS
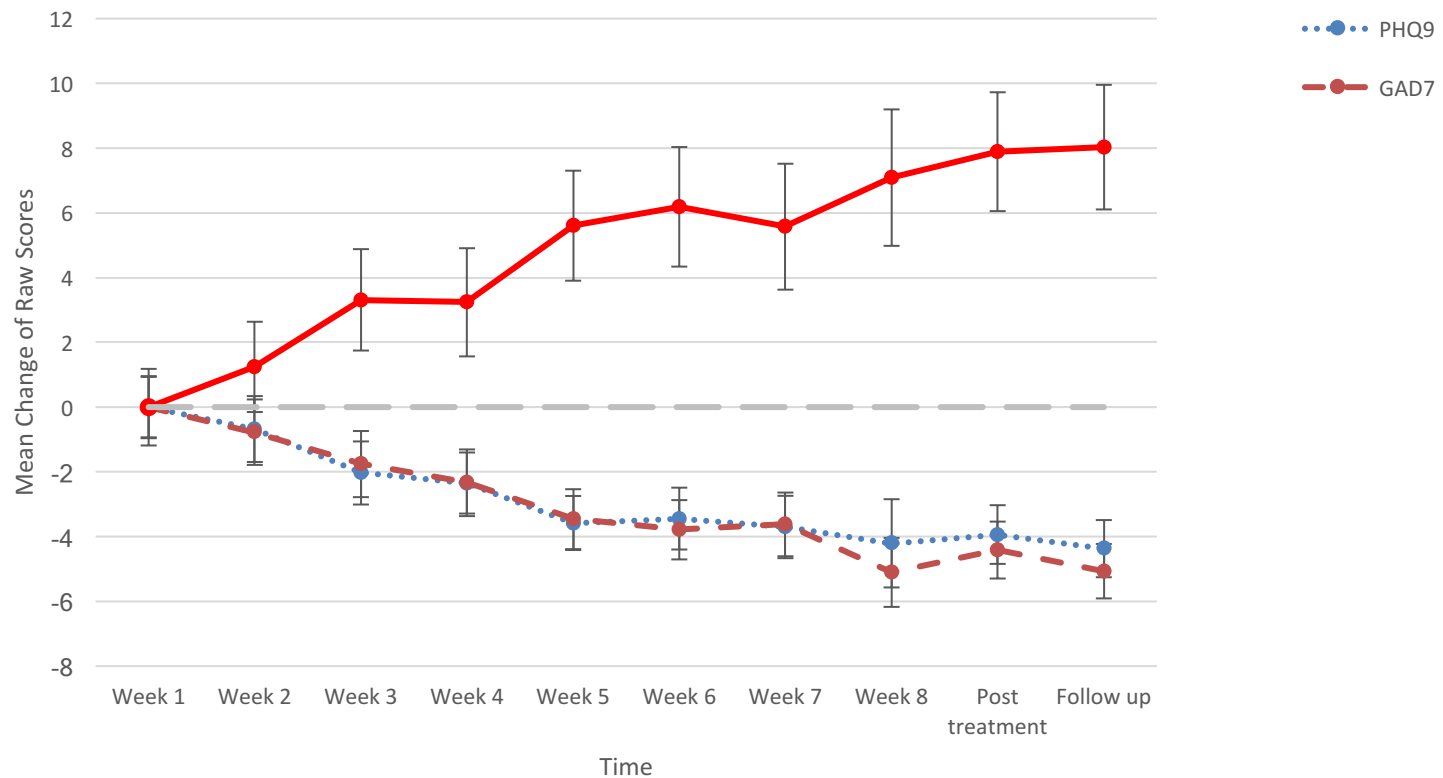Pragmatic Mechanisms

Our Research Areas

Mechanisms …

- Rationale …
  - Significant variability in outcomes between treatments
  - Little known about 'pragmatic mechanisms' of effective treatment
  - Some evidence for adherence as important
  - Regular use of **simple behaviours/skills** may be very important …

- **Numerous trials (ongoing)**
  - Mental health v. skills practice

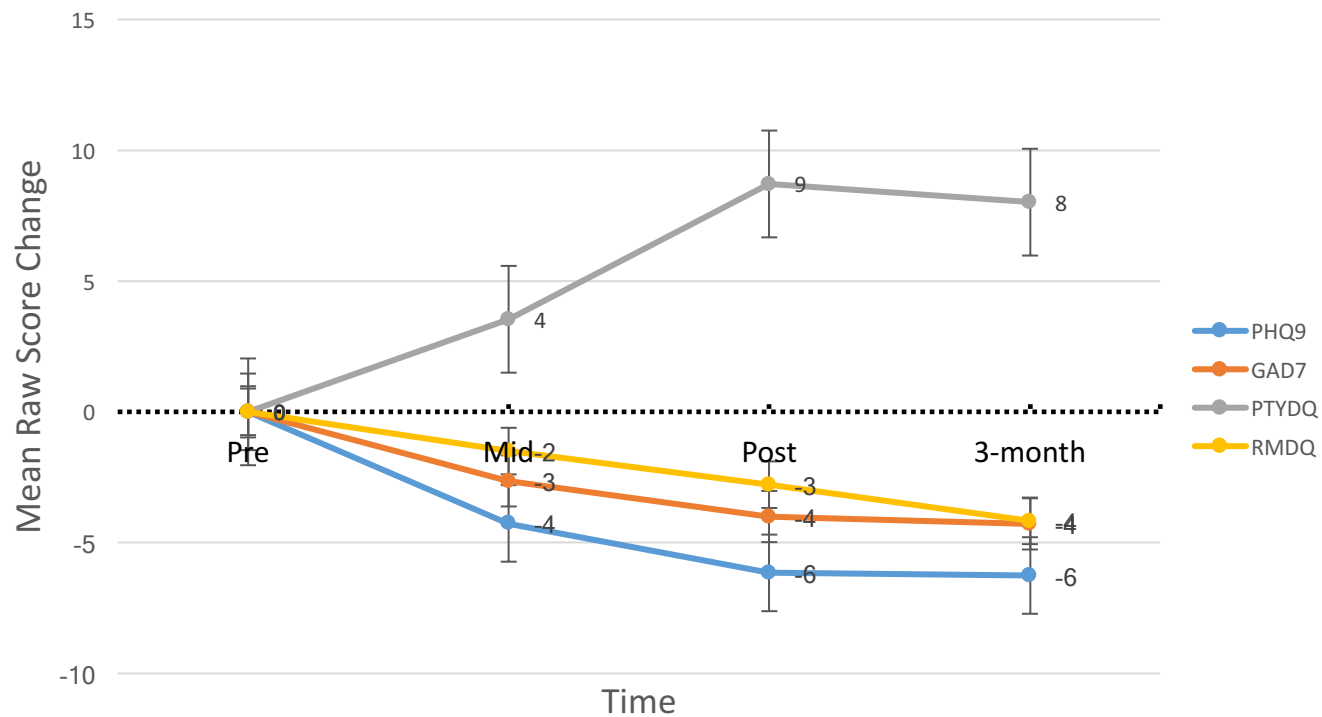| Some examples ('In the past week, how often did you…')	
Change your thinking to be more realistic and helpful?	Do something to help you relax?
Deliberately plan your day to get more done?	Work on a project that was meaningful to you?
Talk about your day with a friend or family member?	Have a meaningful conversation with someone?
Reframe a negative situation into a more positive one?	Do a hobby or personal interest on your own?
Do something that was very satisfying for you?	Do something that got you active?

Mechanisms ...

Skills use and mental health

Mechanisms ...

Skills use and mental health

Routledge
Taylor & Francis Group

The frequency of actions and thoughts scale: development and psychometric validation of a measure of adaptive behaviours and cognitions

Matthew D. Terides[a], Blake F. Dear[a], Eyal Karin[a], Michael P. Jones[b], Milena Gandy[a], Vincent J. Fogliati[a], Rony Kayrouz[a], Lauren G. Staples[a] and Nickolai Titov[a]

Part 7:
Summary + Discussion

Summary + Discussion

- Australia is a 'warm' and 'safe' country. All welcome.

- Summary of research findings ...
  - MindSpot very successful as routine service ...
  - Transdiagnostic programs seem to work!
  - Self-guided maybe as effective? Not a simple issue ...
  - Online pain management programs look effective, acceptable, promising ...
  - Transdiagnostic iCBT for chronic health conditions looks promising ...
  - Skills practice as a core mechanism?

Discussion ...

eCentreClinic: Some Recent Findings and Directions

Blake F. Dear, PhD
Co-Director, eCentreClinic
Senior Management Team, MindSpot
NHMRC Research Fellow
Department of Psychology