

MumSpace: Reaching perinatally depressed women with internet cognitive-behavioural therapy for treatment and prevention tools

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PIRI is dedicated to tackling perinatal depression, anxiety and their consequences through research and translating research evidence to practice.

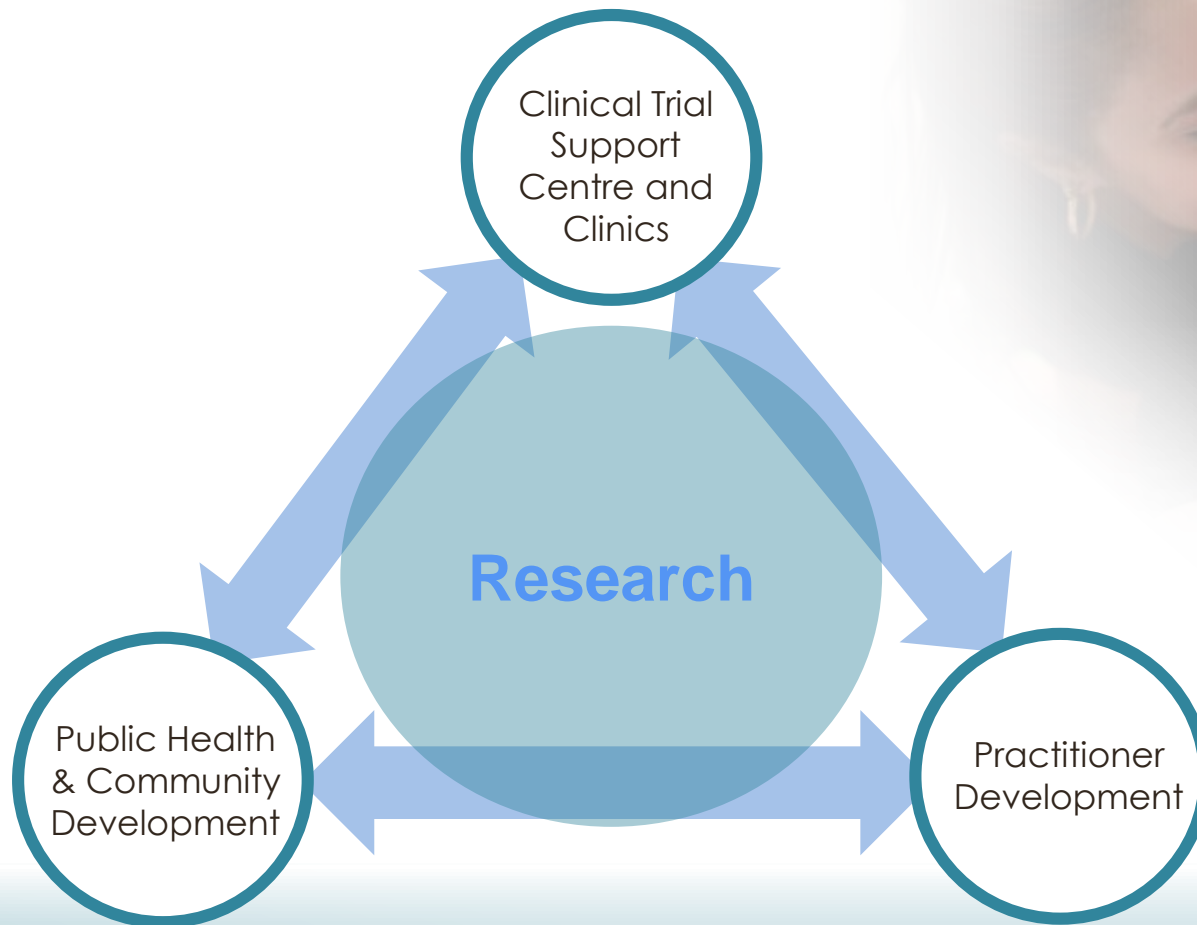
We have developed interventions for mothers, fathers and babies using a range of delivery modes (individual, group, telephone, self-help, e-health) with training for GPs and maternal and child health nurses.

We have been involved in major national screening programs.

Our Mission

Original research into understanding, preventing and alleviating the consequences of perinatal mental health difficulties.

Investing in the earliest years to build a brighter future



PIRI conducts basic and applied research. A major focus is to develop and rollout evidence based parent and infant interventions.



Evidence-based Interventions for Perinatal Mental Health Care

MumMoodBooster (MMB and M2BMB) | online program for perinatal depression and anxiety [1] based on our Getting Ahead of Postnatal Depression CBT program [2]

Beating the Blues Before Birth (BBB) | Antenatal CBT treatment to protect maternal mental health and the neurodevelopment of unborn children and infants [3]

Getting Ahead of Postnatal Depression Group Program® | highly successful 12-week CBT group program designed specifically for postnatal women to learn coping strategies to help manage their moods. Includes three couple sessions[4]. Evaluated as effective in multiple randomized trials.

- [1] Milgrom, J. et al. (2016). Internet Cognitive Behavioural Therapy for Women with Postnatal Depression: a randomised controlled trial of MumMoodBooster. *Journal of Medical Internet Research*, 18(3), e54.
- [2] Milgrom, J., Ericksen, J.E., Negri, L., & Gemmill, A.W. (2005). Screening for Postnatal Depression in Routine Primary Care: Properties of the Edinburgh Postnatal Depression Scale in an Australian Sample. *Australian and New Zealand Journal of Psychiatry*, 39(8), 745-751.
- [3] Milgrom, J. et al. (2015). Feasibility study and pilot randomised trial of an antenatal depression treatment with infant follow-up. *Archives of Women's Mental Health*, 18, 717-730.
- [4] Milgrom, J., Martin, P. R., & Negri, L. M. (1999). *Treating postnatal depression: A psychological approach for health care practitioners*. Chichester: Wiley.



Our online treatments have been carefully developed and evaluated through an international collaboration spanning over 10 years. **MumMoodBooster** is unique in that it is as close to face-to-face CBT as possible.

Developed and trialled by the Parent-Infant Research Institute (Australia) and the Oregon Research Institute (United States) with support from the NIH, NHMRC, The Windemere Foundation, Beyond Blue and The Ian Potter Foundation.



Rationale for eMental Health Programs

Approximately **13% of women** suffer postnatal depression (PND) at 3 months postpartum ¹

Left untreated, it has **significant deleterious effects** on the **mother, her family and her child's development** ²⁻⁵

Yet despite effective treatments existing, **fewer than 50% of postnatal women seek or accept help, even when identified** ⁶⁻⁷

[1] Gavin, Gaynes et al. 2005; [2] Beck 1998; [3] Kaplan, Dungan et al. 2004; [4] Cornish et al. 2005; [5] Kaplan et al. 2011; [6] Cox and Holden 2003; [7] Austin, Frilingos et al. 2008



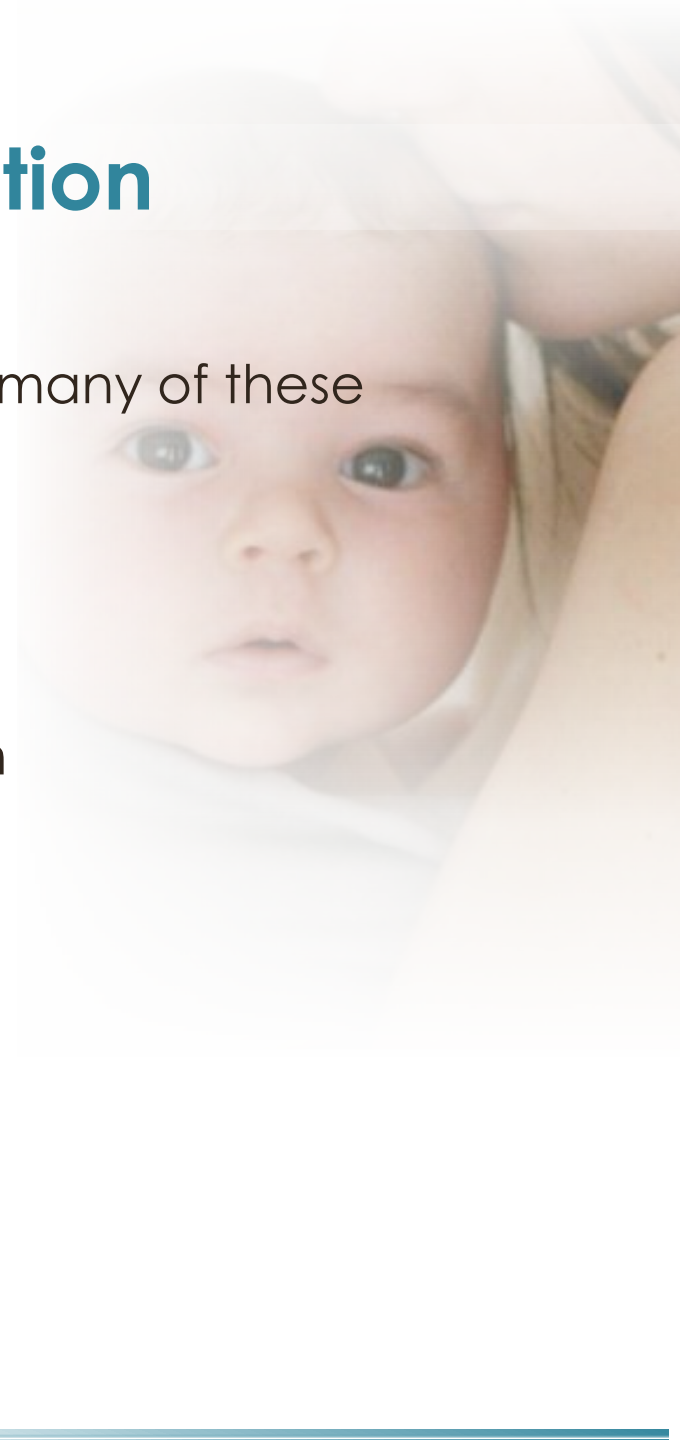
Barriers to help seeking & treatment

- Perceived **stigma**
- **Fear** of being judged a “bad mother”
- **Poor understanding** of depression or what help is available
- **Low motivation** toward help seeking due to mood symptoms
- Concerns about being prescribed **medication while breastfeeding**
- Difficulty **attending face-to-face clinic** counselling with a baby
- Lack of clinic-based services in **rural and remote areas**
- **Cost**

Benefits of eHealth Intervention

eHealth treatments can potentially reduce many of these barriers and improve treatment uptake:

- Perceived as **anonymous**
- **Accessible** to a larger number of women
- **Convenient**
- **Affordable**



Effectiveness of eHealth Intervention

Encouraging results have been established for

Depression

Spek, Cuijpers et al. 2007; Titov 2011; Anderson, Cuijpers 2009

Anxiety

Cuijpers, Marks et al. 2009

Panic disorder

Richards, Klein et al. 2006

Post-traumatic stress

Knaevelsrud & Maercker 2007



Is coaching helpful for eHealth Interventions?

Low intensity adjunctive **phone or email coaching** has been shown to

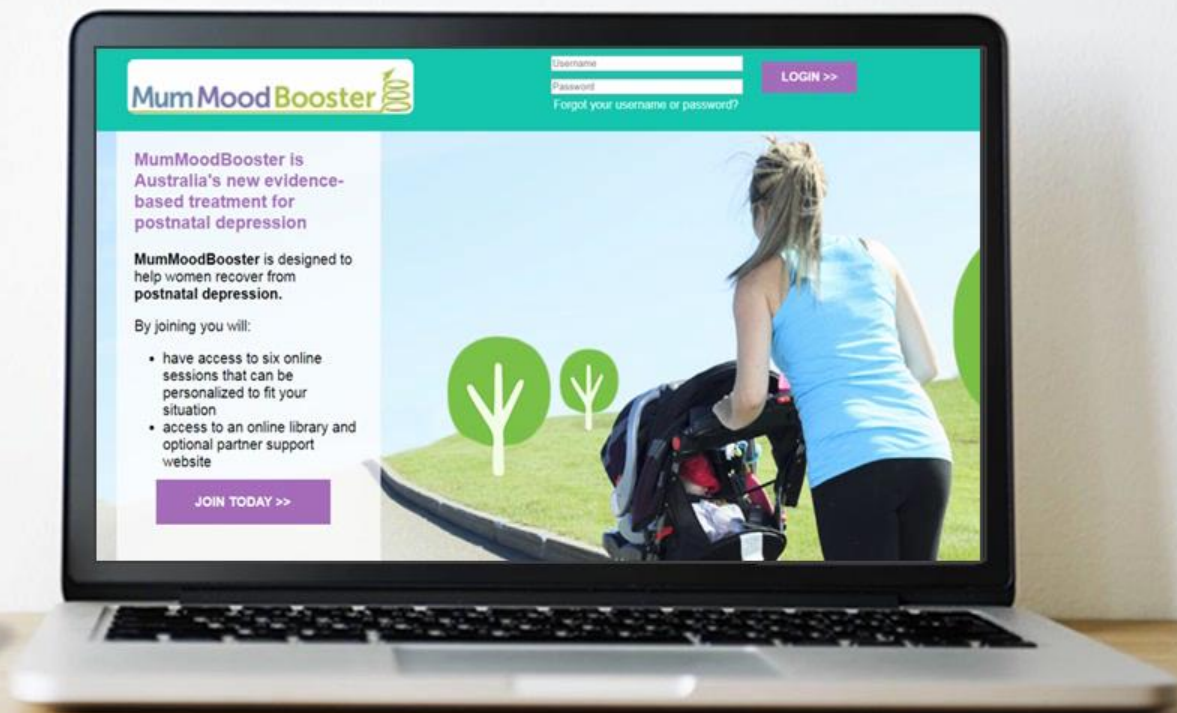
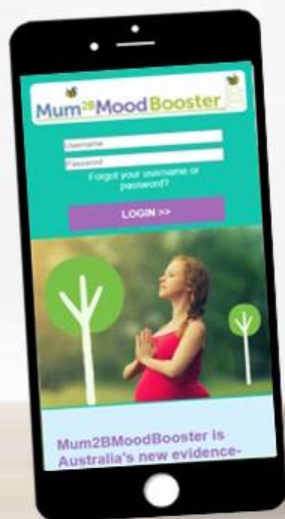
- **improve effect sizes**
- **treatment adherence**
- provides a secondary “**safety net**” for those who experience symptom worsening

PIRI has developed innovative online treatments

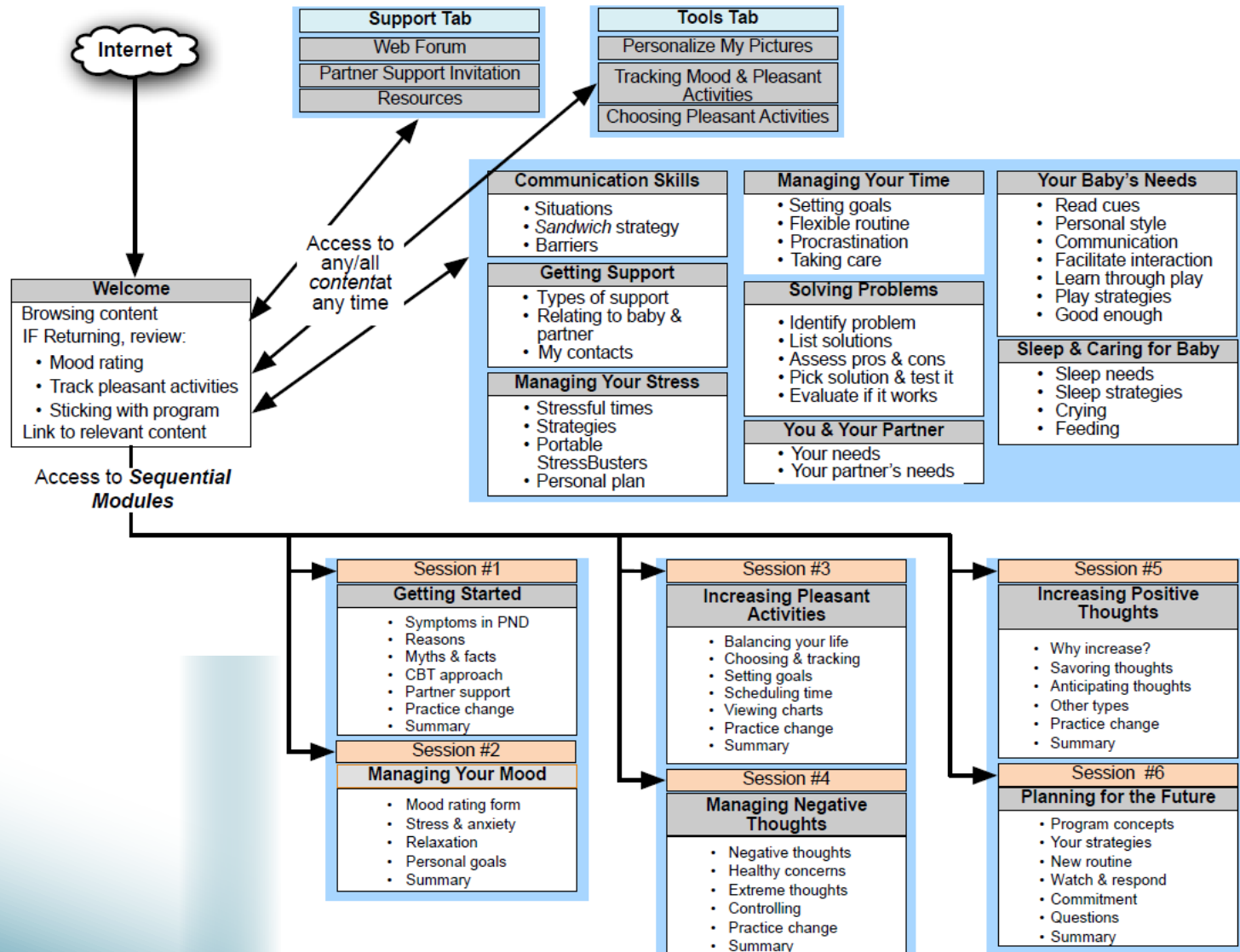
Mum Mood Booster 
for postnatal depression


Mum^{2B} Mood Booster
for depression in pregnancy

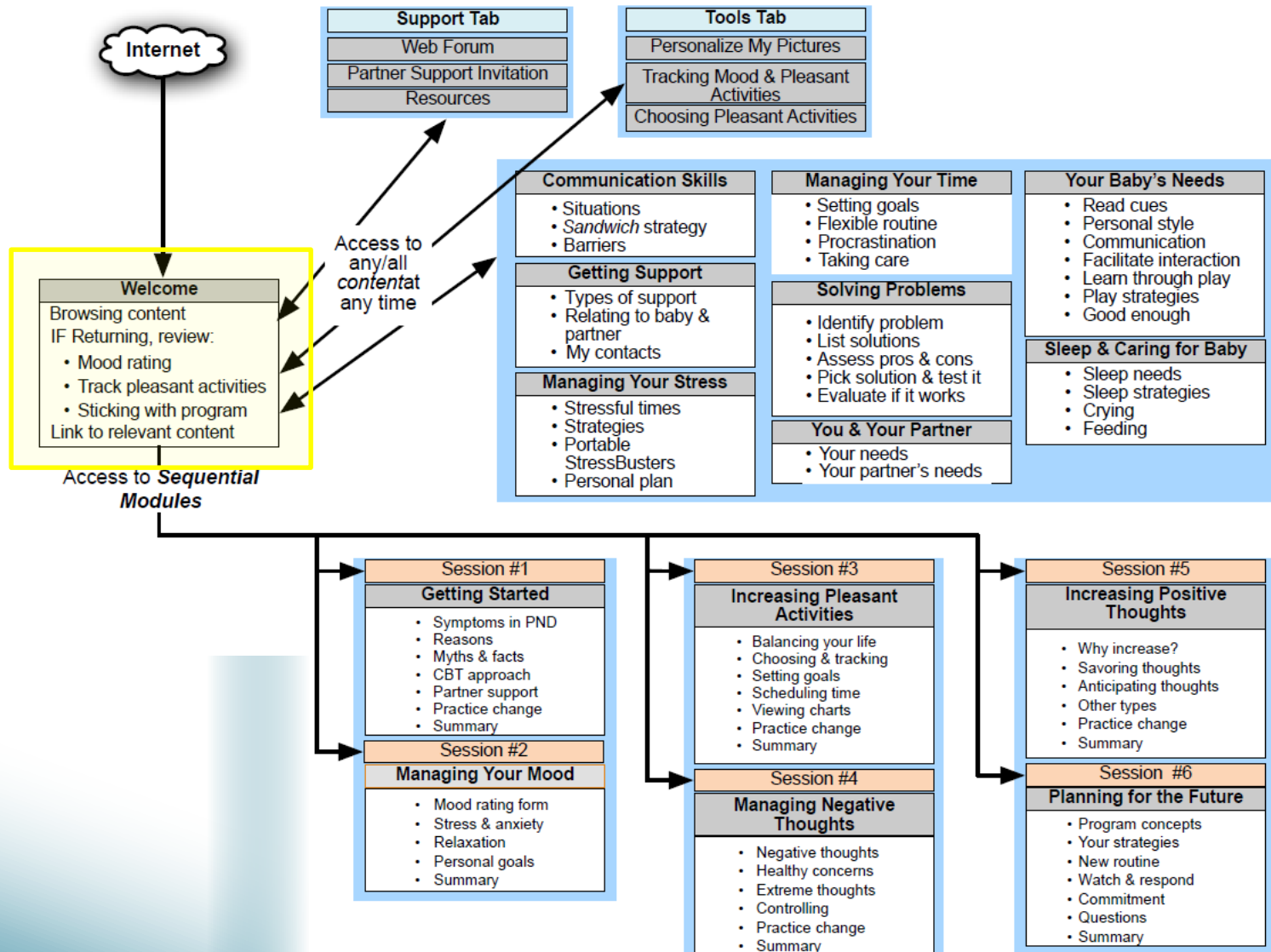
Videos | Interactive Exercises | Personalised Tailoring | Optional Telephone Coaching



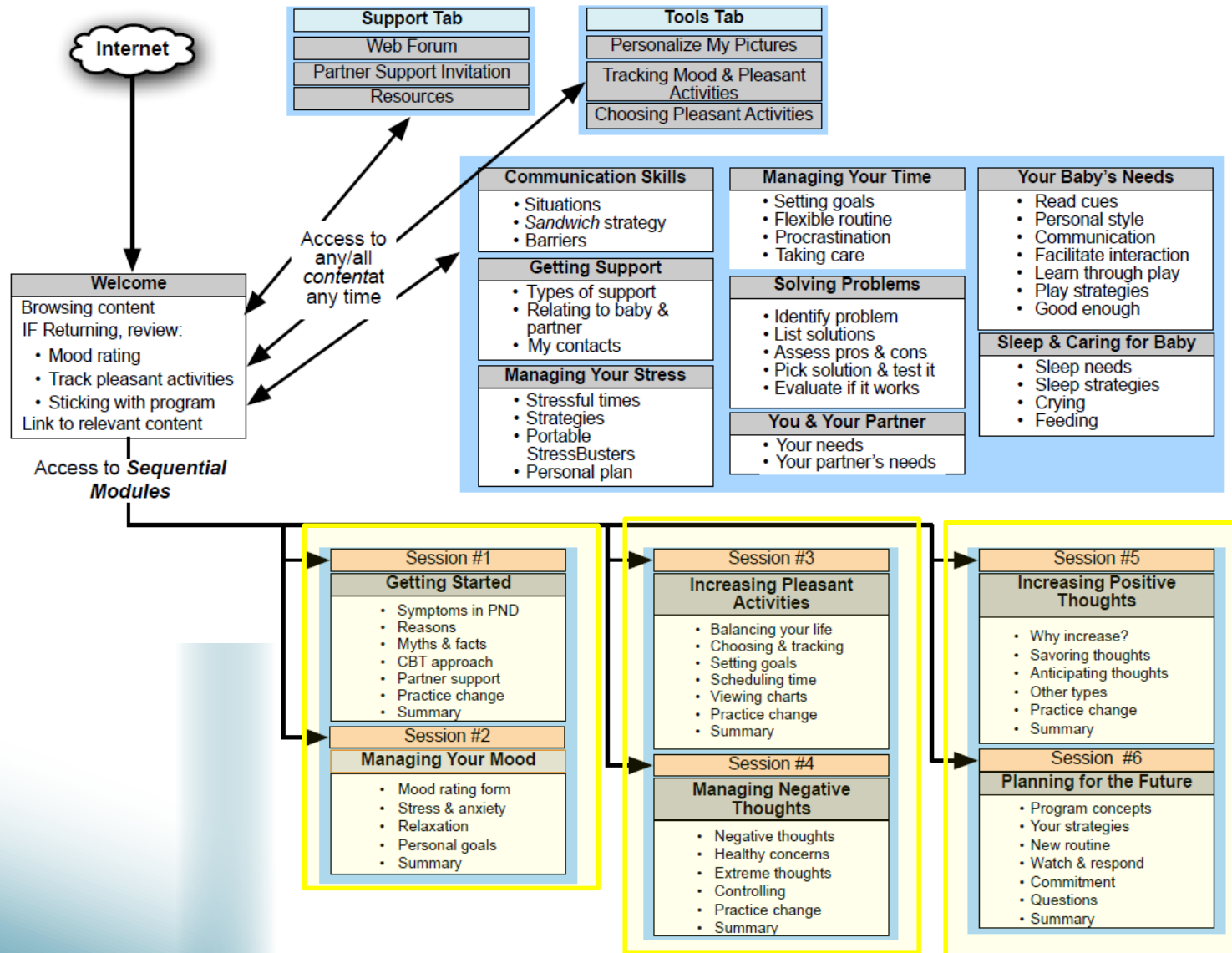
Mum Mood Booster



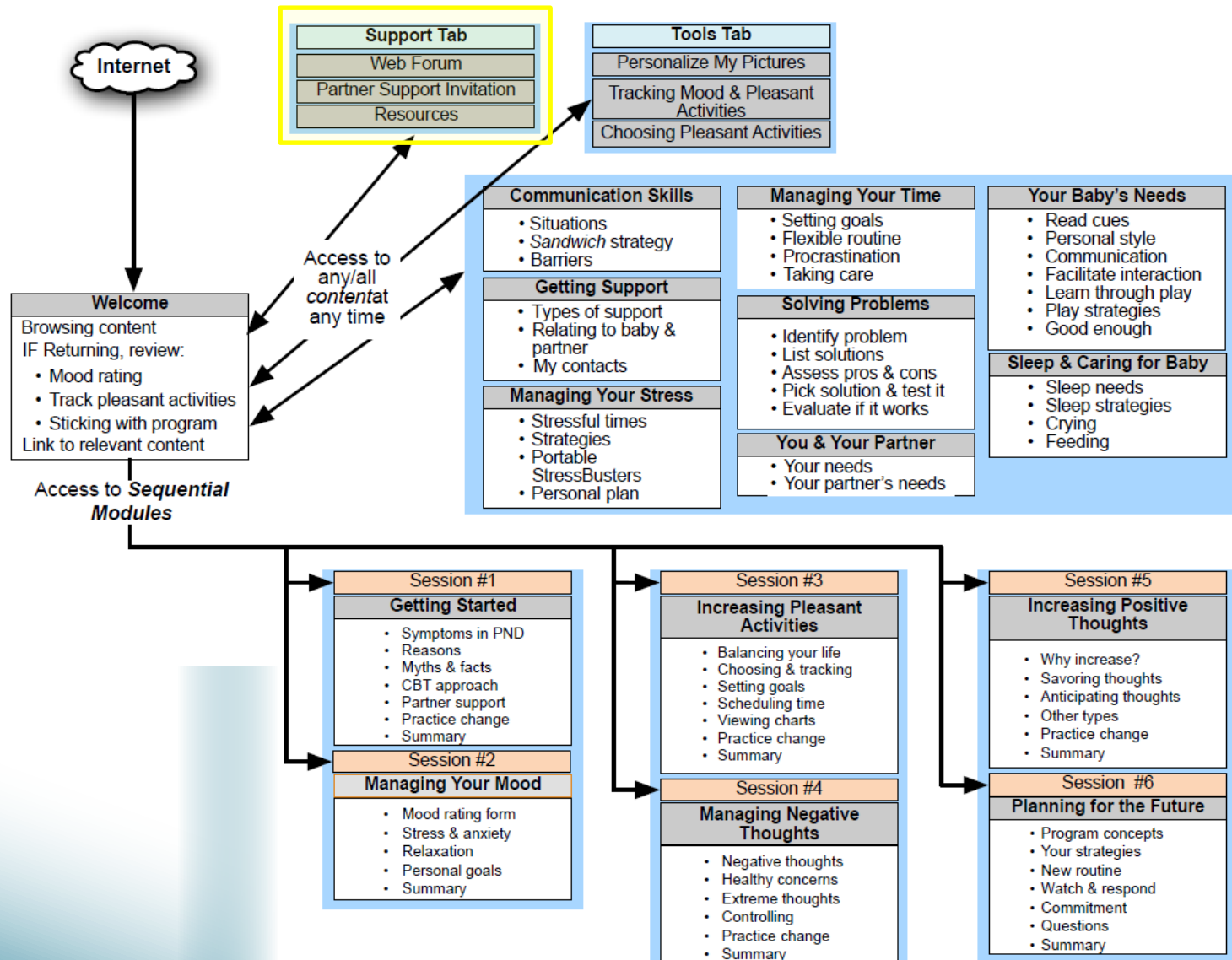
Mum Mood Booster



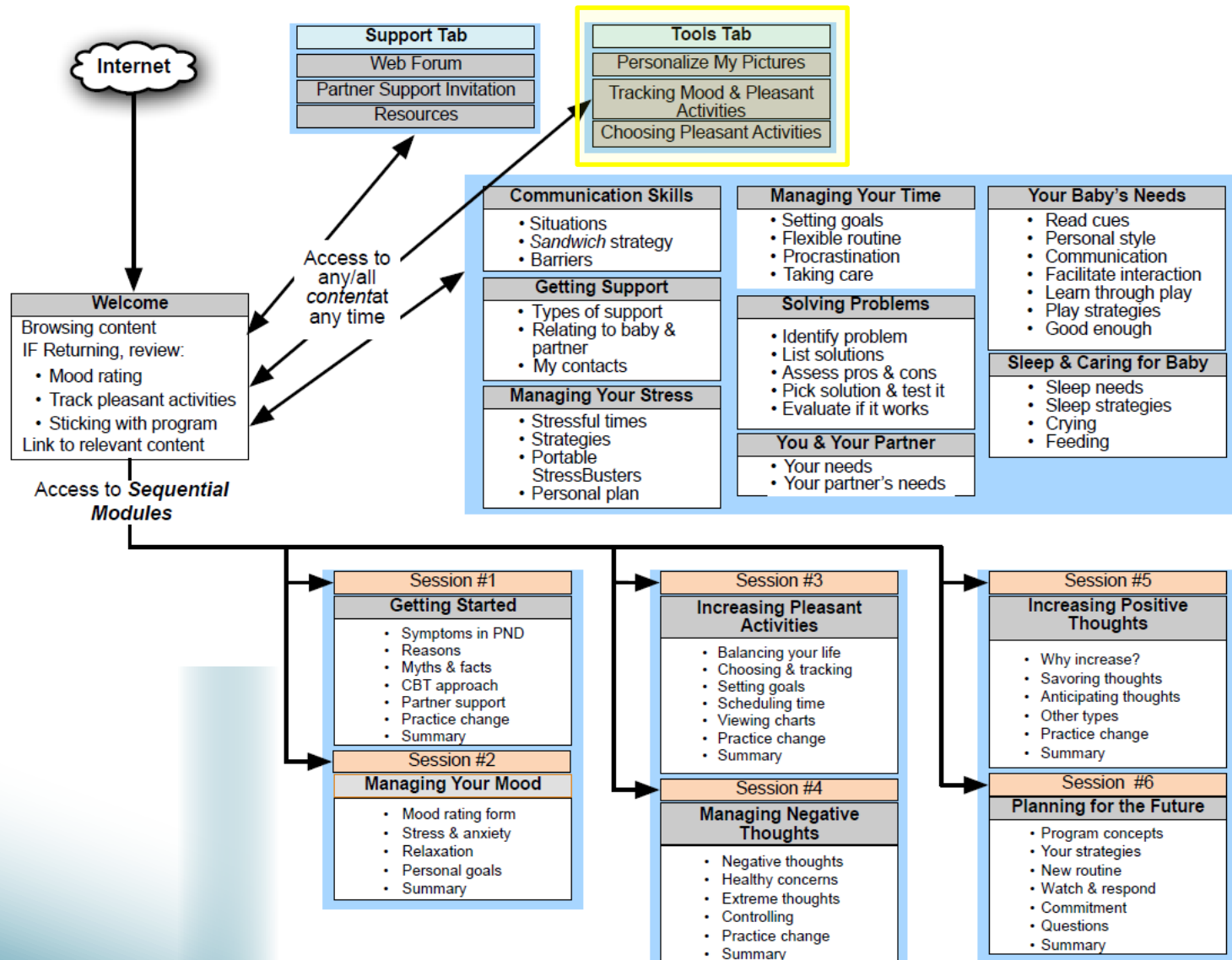
Mum Mood Booster



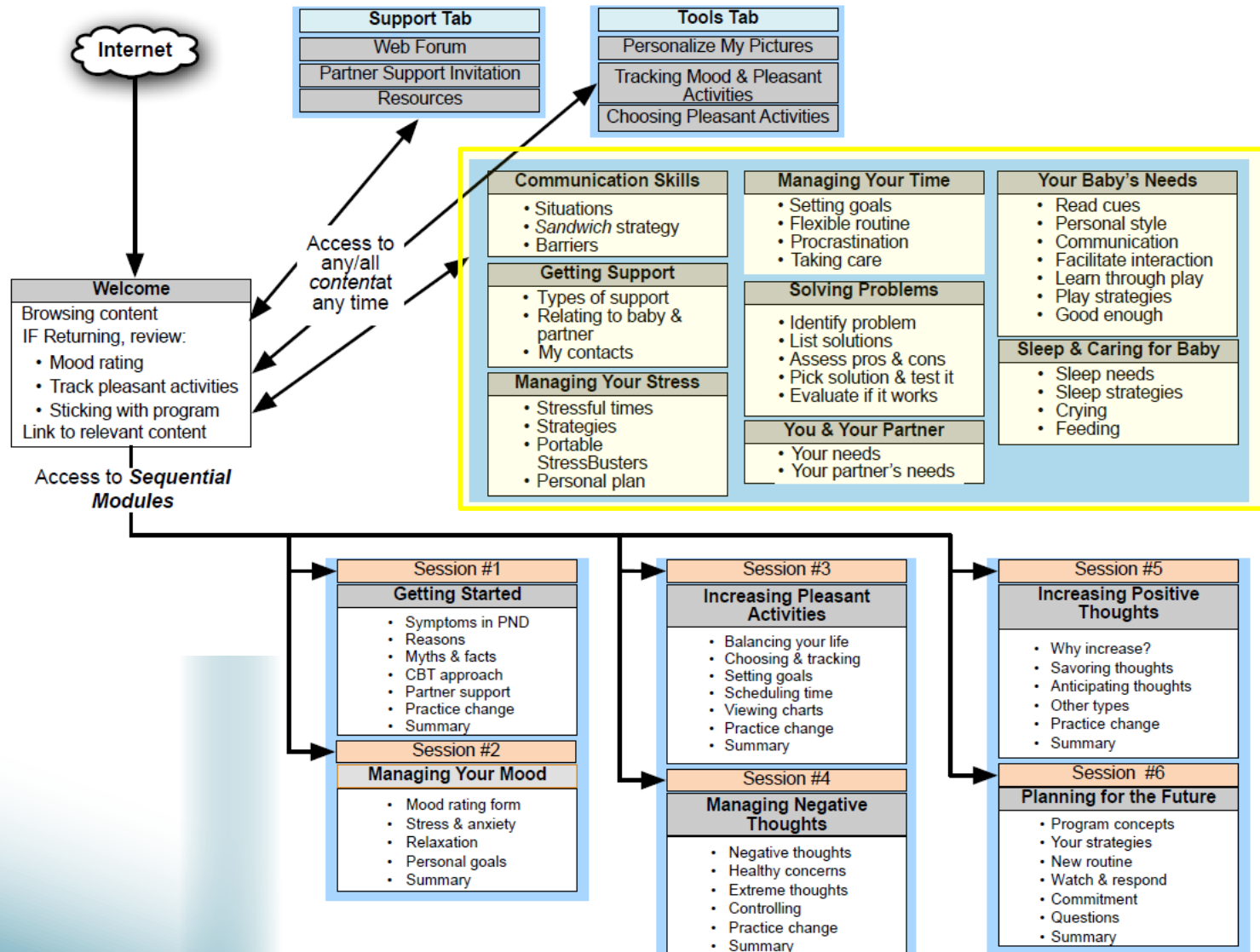
Mum Mood Booster



Mum Mood Booster



Mum Mood Booster



[Home](#)[Welcome](#)[My Status](#)[Go to Session 1](#)[My Workbook](#)

Home: Welcome

Welcome to the MumMoodBooster program!

You are about to begin the MumMoodBooster program designed for women who are experiencing postnatal depression. It is based on years of clinical experience and controlled research with hundreds of women with postnatal depression. The goal is to reduce moderate to severe symptoms of postnatal depression.

The program will give you tools that can help you identify both positive and challenging situations in order to take control of your feelings, mood and thinking. It aims to improve the quality and enjoyment you experience in your life. It gives you the chance to learn strategies that can reduce how often you feel depressed in the future, and you can learn how to shorten the time that your depression lasts.

It takes time

There are lots of good reasons to make spending time on this program one of your priorities. It can:

- Be practical for most women to use
- Help you manage your thoughts so that you will feel better
- Improve the quality of your life and relationships
- Help you make long-lasting improvements that become part of your normal routine

It's *Your* program

This program is divided into six sessions, each of which takes about a week to complete. The skills and strategies you learn build on each other. There are lists, plans, and forms that you can customize with your information – which is private so that nobody outside of you and the research team can see it.

Begin using the program by clicking the Go to Session 1 button on the left.





It seems that you may be having a very difficult time at the moment and therefore this program may not be sufficient for your needs. From our clinical experience it is important that you talk to a health professional. We strongly encourage you to talk to your GP or other health professional, or contact one of the telephone support services below.

We know that some women are reluctant to ask for help but most women are very relieved once they seek support and with the understanding they receive when they do. Unfortunately, we cannot provide intensive support and your answers indicate that you may require face-to-face support.

Telephone immediate support:

Lifeline on 13 11 14 (24hr)

Suicide Call Back Service on 1300 659 467

The Emergency Services on 000

PANDA National Helpline 1300 726 306 (Mon. – Fri, 10am-5pm AEDT)

The following websites, provide support and helpful information about what to do if you are feeling suicidal or thinking of harming yourself:

<http://www.lifeline.org.au/get-help>

<http://www.suicidecallbackservice.org.au>

<http://www.mindhealthconnect.org.au>

<http://www.beyondblue.org.au>

<http://www.parentline.com.au>

<http://www.panda.org.au>

The following websites provide helpful information and support for depression and postnatal depression:

<http://www.beyondblue.org.au>

Users identified at being high risk are notified and advised on next steps...

Coaching

- Women are offered telephone coaching to support them through the program
- There are six coach calls that occur after the completion of each session
- The role of the coach is:
 - Establish/maintain rapport
 - Check-in with mother
 - Engage mother in program content
 - Validate work completed in the program
 - Explore personal barriers that may be interfering with completing the program
 - Facilitate program completion

[Tools](#)[Personalise My Pictures](#)[Track My Mood and Pleasant Activities](#)[Choosing Pleasant Activities](#)[Symptom Check-In](#)[My Workbook](#)

Tracking My Mood & Pleasant Activities



March 2019						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Select a date from the calendar, then submit your information for that day. Dates displayed in red are missing information.

**Your tracking
is currently up to date.**

Thursday, 21 March 2019

My Mood Rating

Status: **Complete**



0

1

2

3

4

5

6

7

8

9

10

My Worst Day

My Average Day

My Best Day

My Pleasant Activities

Status: **Complete**

Enter the number of pleasant activities you did:

With Baby

My pleasant activities:

You have not yet provided information for this item.

Users can record their mood and number of pleasant activities with their babies, others or themselves each day.

Mum

My Workbook



Strategies for Planning Areas

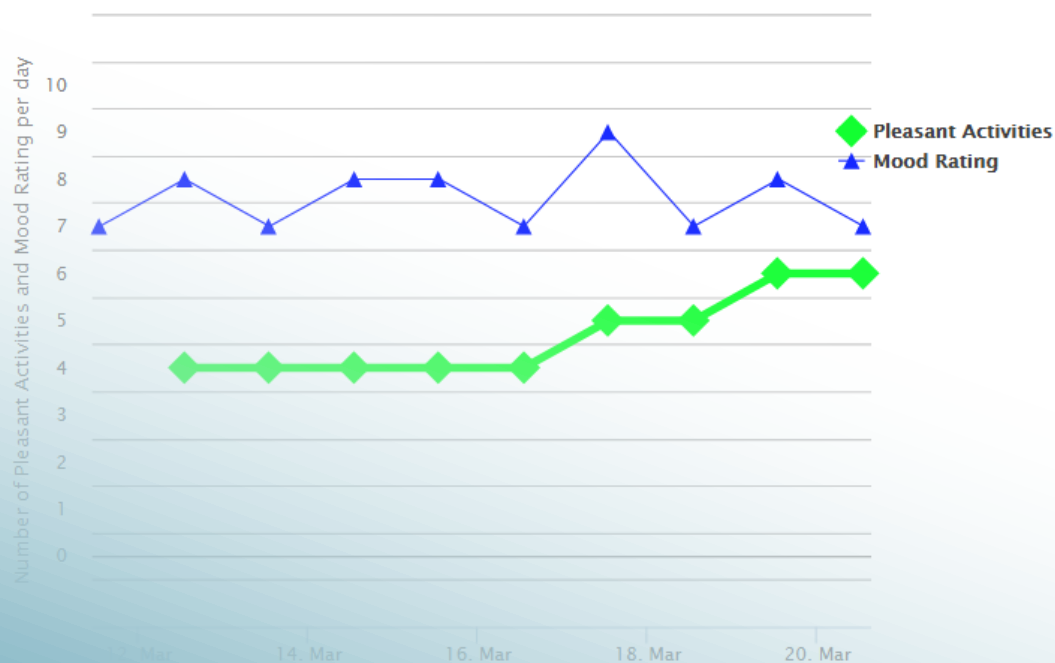
Personal Progress

It helps to see a picture of the difference in your Mood and Activities since starting the program.

Line graph:

on this graph, the blue line shows your daily mood ratings over time and the green line shows the number of Pleasant Activities you did each day.

Since start of program

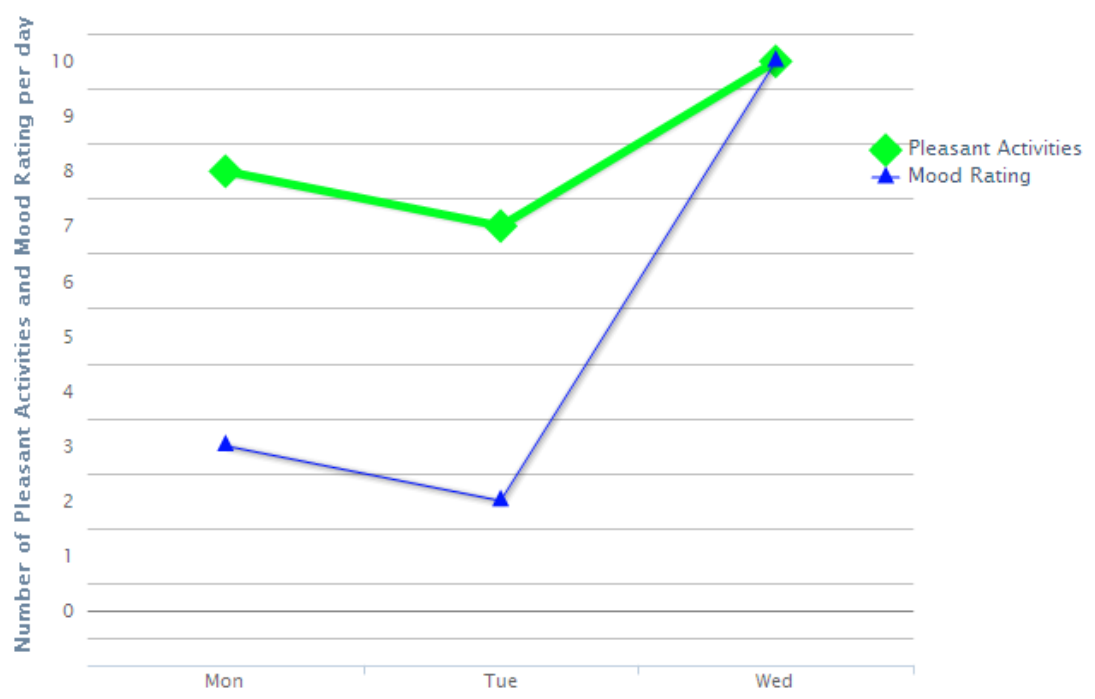


Users can keep track of their progress...

Close

Mood Rating and Pleasant Activities

Over the past 10 days



The Past 10 Days

Since Start of Program

Close

Pie chart



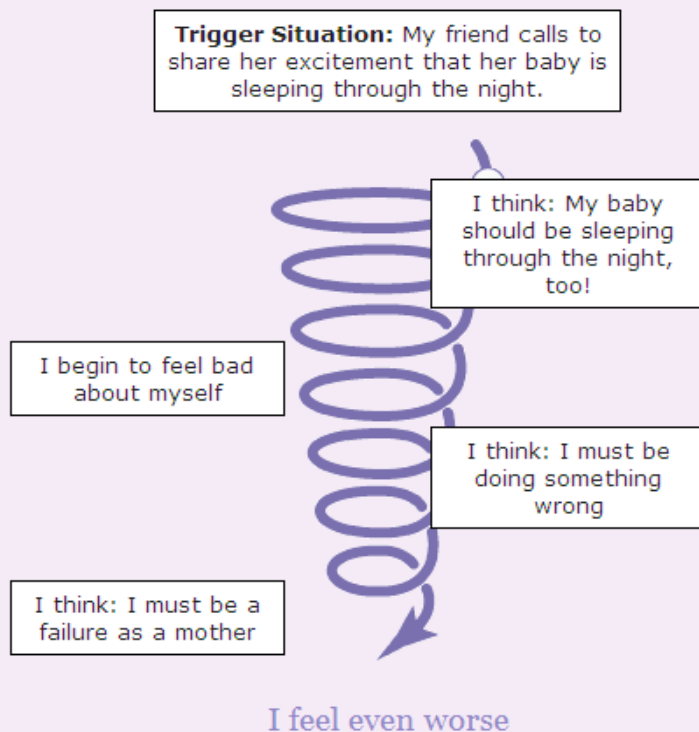
This chart uses the "slices" of the pie to show all of the pleasant activities you have done With Baby. With Partner. With Friends or



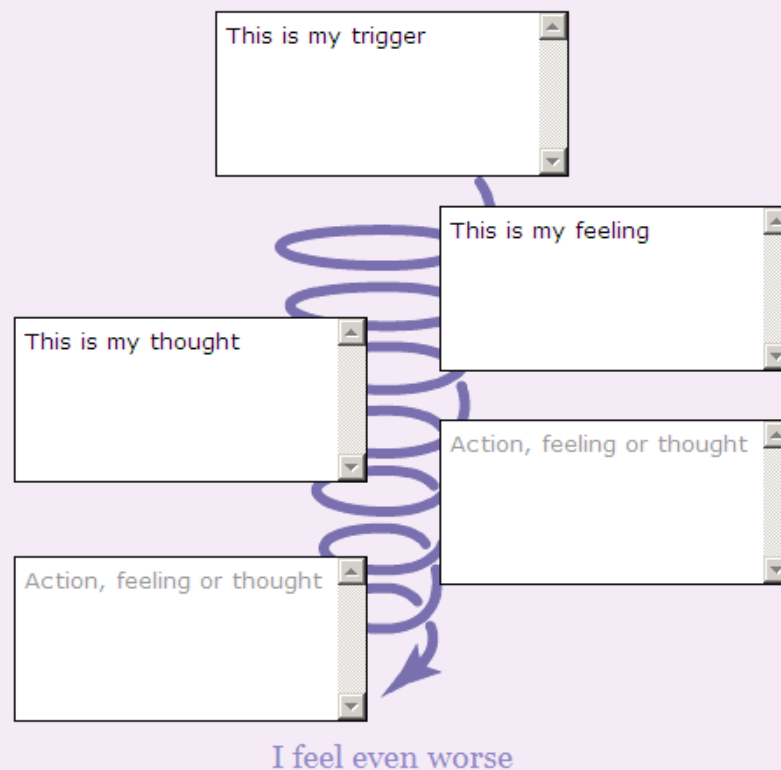
My Downward Spiral

Instructions: Think about a downward mood spiral you have experienced recently. Describe the situation that started the sequence of actions, feelings or thoughts. Type the details into the boxes on the right. You can also print a blank form to complete at your convenience. Be sure to enter your details into the Practise Change Activity in Session 1. This will make the next call from your Personal Coach as helpful as possible. And it will automatically make a copy in My Workbook for your future reference.

Example Downward Mood Spiral



My Downward Mood Spiral



Practise these strategies so that they become a part of your daily life.



Library

Communication Skills

Solving Problems

Getting Support

Sleep & Caring For Baby

Managing Your Stress

Your Baby's Needs

Managing Your Time

You & Your Partner

My Workbook

Library



Communication Skills

Moms can have difficulty expressing their true feelings...



Solving Problems

Identify options, try them out, and revise as needed...



Getting Support

A network of supporters who know and care for you can help...



Sleep & Caring for Baby

Tips for caring for and interacting with your baby...



Managing Your Stress

Reducing your stress levels and learning to cope better...



Your Baby's Needs

Babies thrive on attention that is in synch with their emotions...



Managing Your Time

Refresh your skills to regain more control of your time...



You & Your Partner

Strengthening your relationships is essential...

MumMoodBooster is **highly effective in RCTs**

- Only PND CBT program tested on women diagnosed for depression.
- Effective for both **treatment of major depressive** disorder and minor depressive disorder.
- Eighty percent of women completing the program are no longer depressed, and anxiety symptoms reduced.
- MumMoodBooster has a 95% completion rate.

4 x as effective as standard care, even for severe symptoms.

- 79% remission compared with 18% remission, based on DSM diagnostic interviews.
- Coached or SMS version

Milgrom, J. et al. (2016). Internet Cognitive Behavioural Therapy for Women with Postnatal Depression: a randomised controlled trial of MumMoodBooster. *Journal of Medical Internet Research*, 18(3), e54

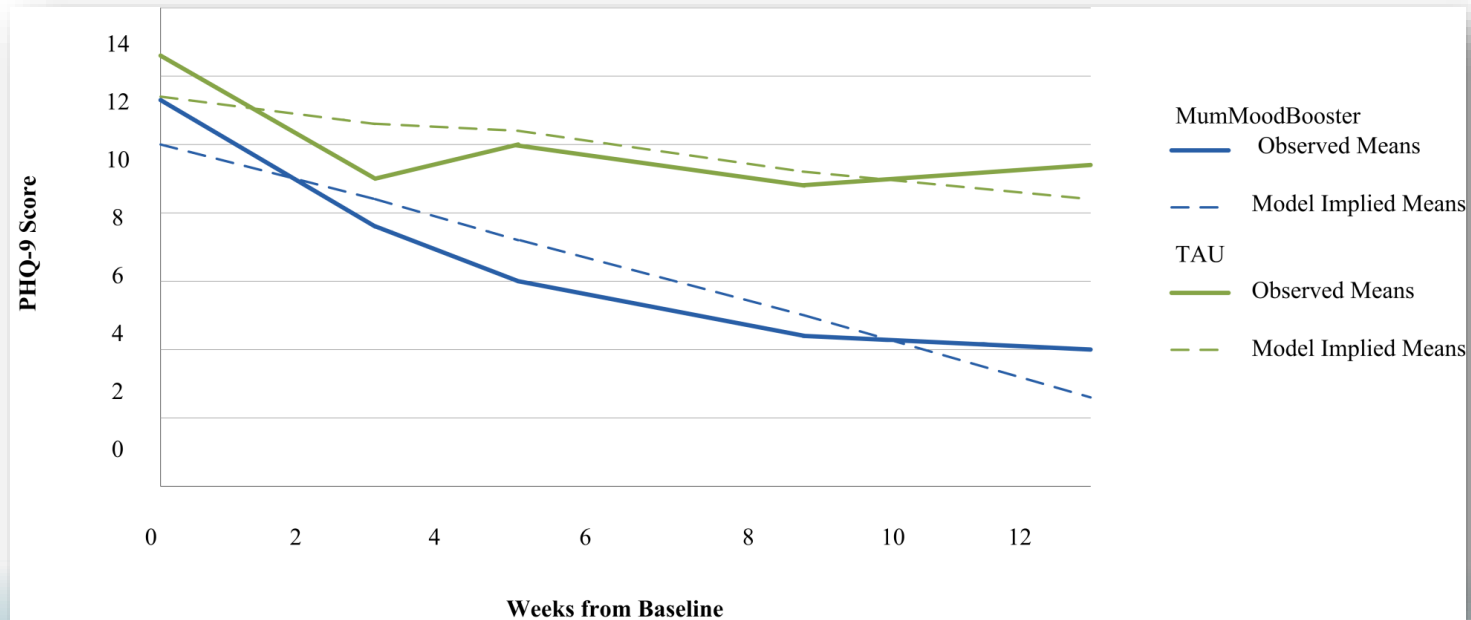


Summary of Baseline Characteristics

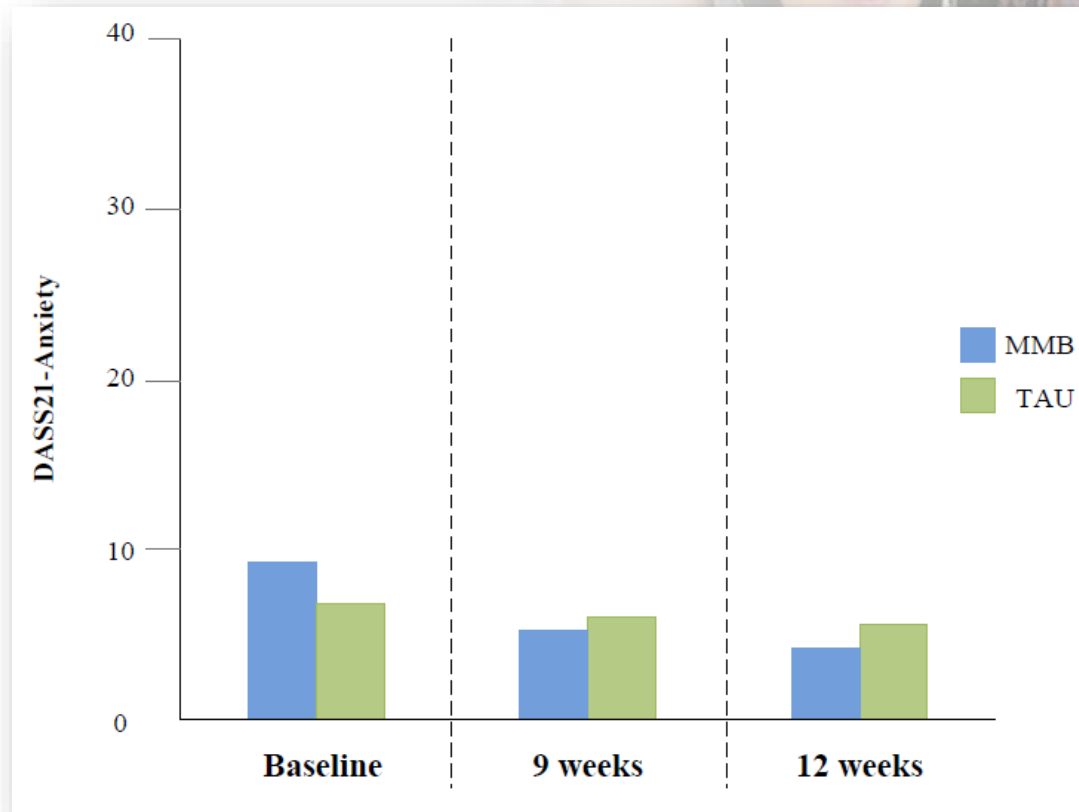
	MumMoodBooster	Treatment as usual
Mother's age, m (SD)	31.7 (4.6)	31.5 (4.3)
Baby's age (months), m (SD)	6.52 (2.8)	6.15 (3.1)
EPDS, m (SD)	16.6 (3.1)	15.8 (2.8)
Born in Australia, n (%)	18 (86)	21 (96)
Current major depression, n (%)	20 (95)	20 (91)
Current minor depression, n (%)	1 (5)	2 (9)
Past major depression, n (%)	14 (67)	15 (68)
Married/Living with partner, n (%)	18 (86)	20 (91)
Primiparous	7 (33%)	7 (32%)

Trajectory of Depressive Symptoms |

PHQ-9 scores from baseline to 12 weeks



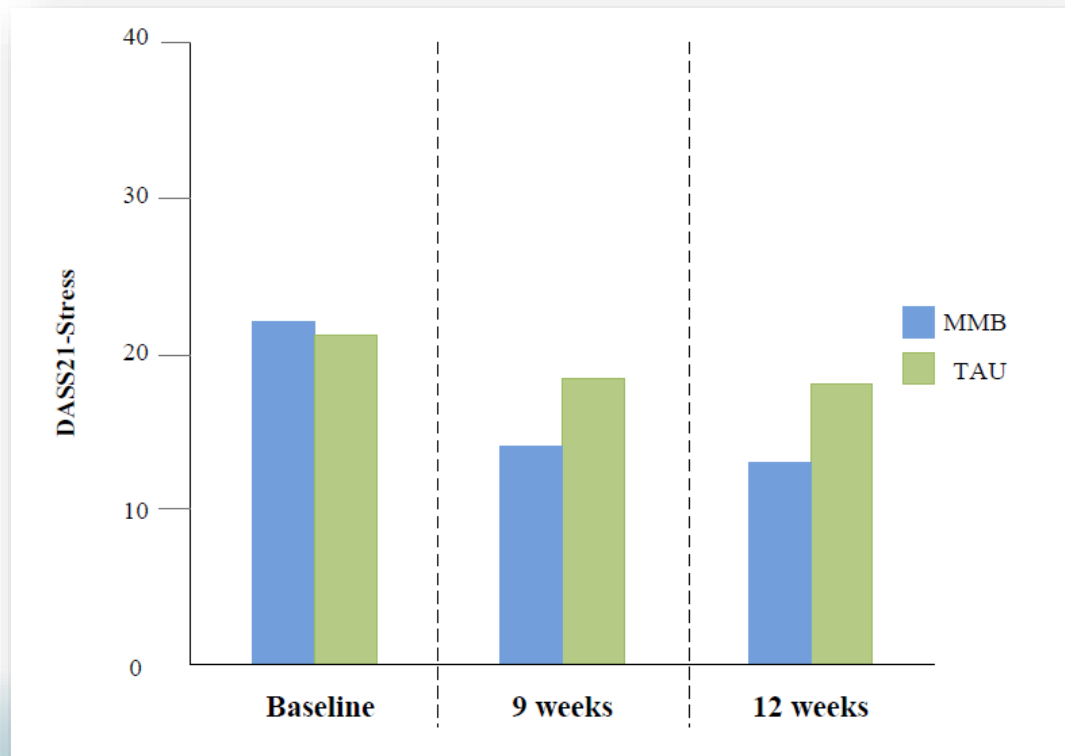
Anxiety Symptom Severity



At 9 weeks: $U = 176.0$, $p = .17$, $d = 0.18$ (95% CI: -0.42, 0.78).

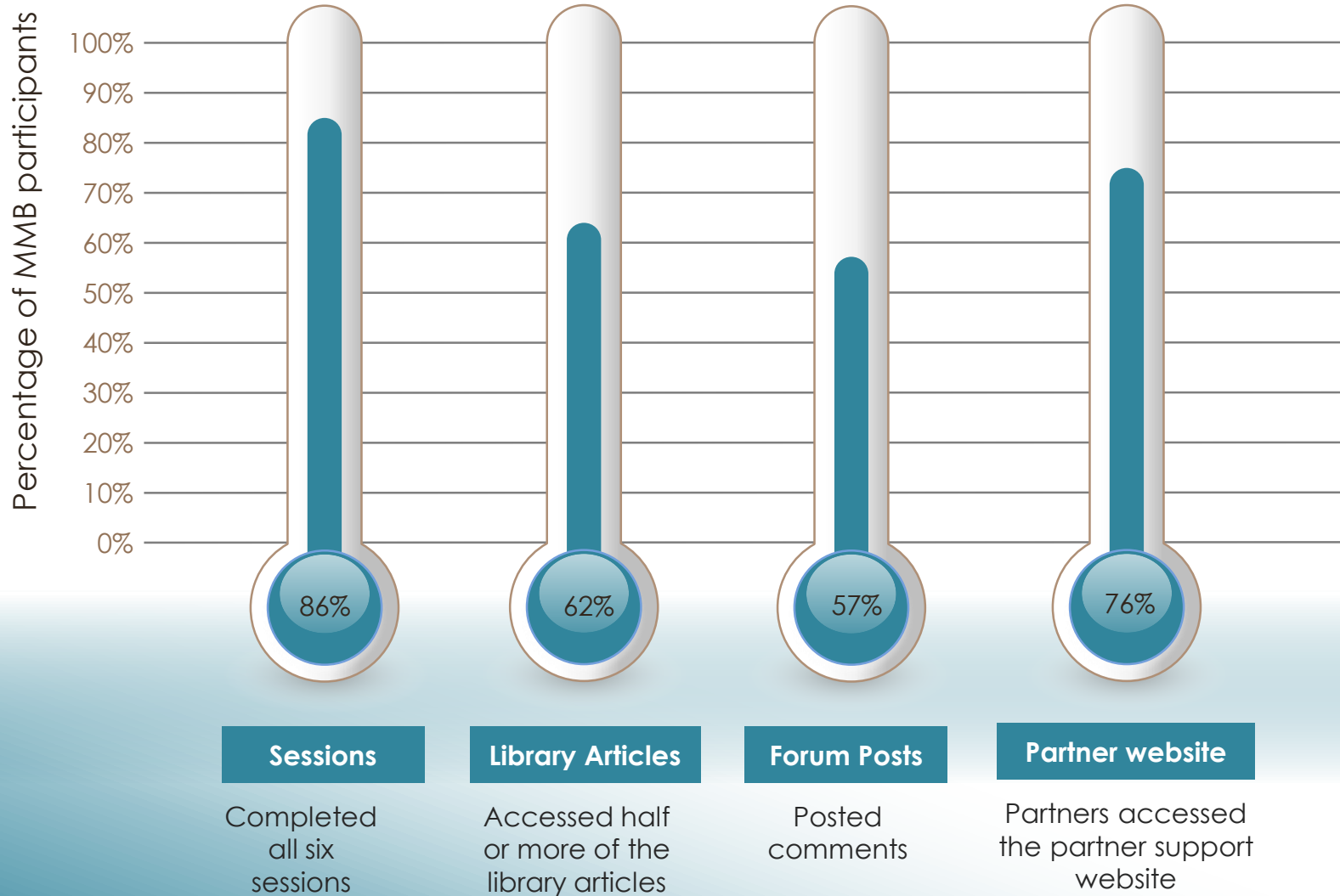
At 12 weeks: $U = 153.0$, $p = .05$, $d = 0.27$ (95% CI: -0.33, 0.87).

Stress Symptom Severity



At 9 weeks: $U = 142.5$, $p = .03$, $d = 0.54$ (95% CI: -0.07, 1.15).
At 12 weeks: $U = 153.5$, $p = .06$, $d = 0.53$ (95% CI: -0.08, 1.14).

Engagement



Satisfaction and Helpfulness

How satisfied were you with MumMoodBooster?

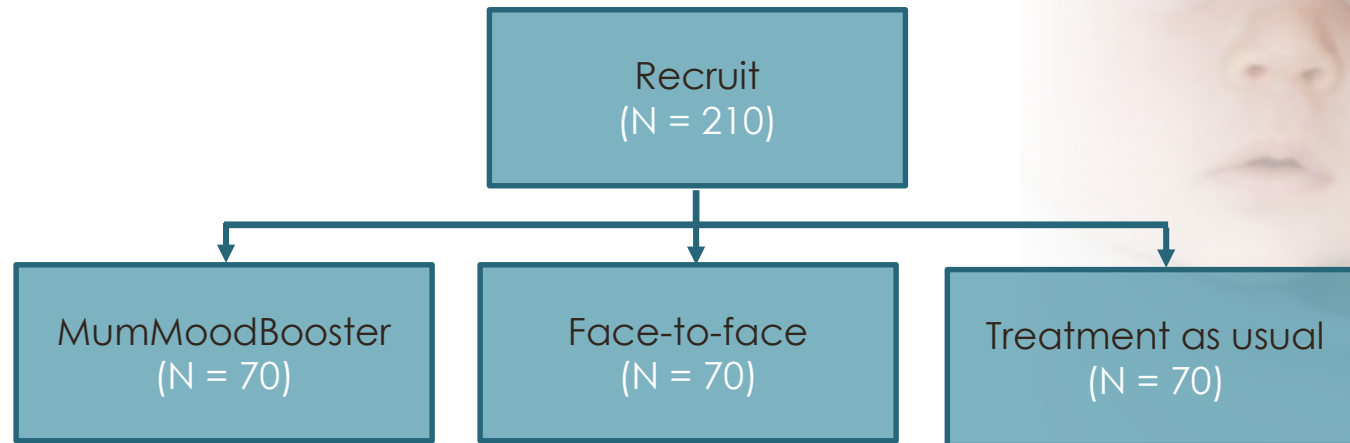


How helpful were the telephone coach calls?



JUST COMPLETED!

MumMoodBooster 3-arm RCT

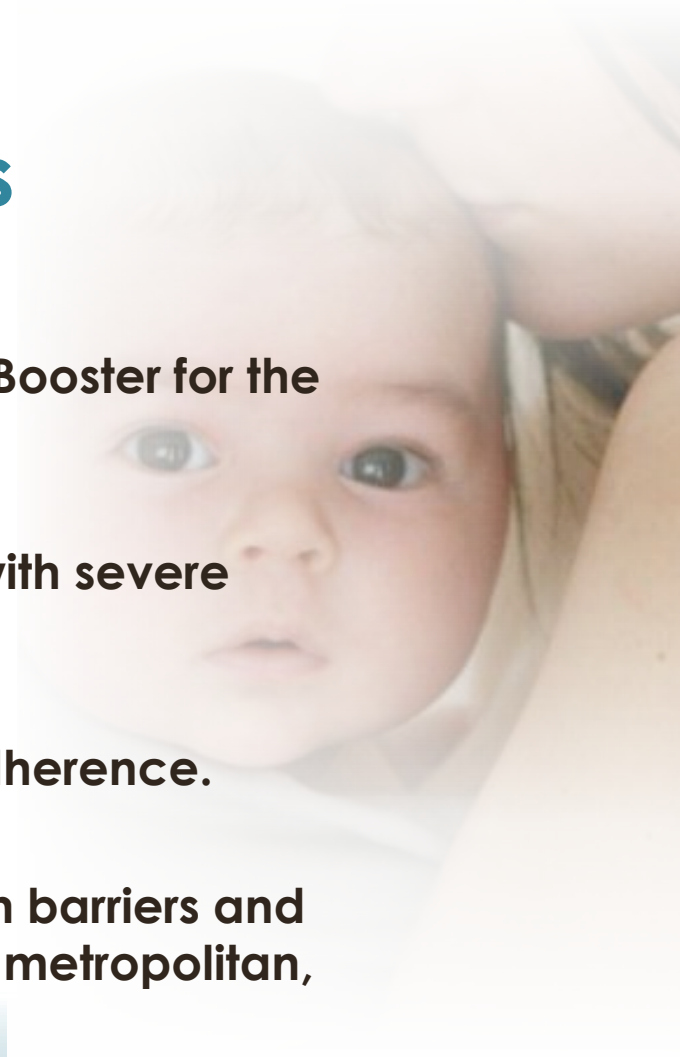


Comparability of Web-based and Face-to-face Cognitive Behavioural Therapy for Postnatal Depressive Disorders: Results of a Randomised Controlled Trial

- 116 women with a DSM-IV diagnosis of depression were randomised to MMB (n = 39), FTF-CBT (n = 39) or a control condition (treatment as usual: TAU, n = 38). 91% had Major Depression.
- Diagnostic status was determined at baseline and at a 21-week follow-up using the Structured Clinical Interview for Depression (SCID).
- Severity of anxious and depressive symptoms were evaluated with the Beck Anxiety Inventory (BAI) and the Beck Depression Inventory – Revised (BDI-II).
- **Rates of remission from the depressive episode at 21 weeks were closely comparable in the FTF-CBT and MMB groups and both represented large effects compared to TAU.**
- In terms of reduction in symptom severity, **MMB was statistically superior to FTF-CBT treatment on the BDI-II** (large effect size, $p < .05$). Both interventions were significantly better than TAU.

Summary and Implications

- Our RCT's confirms the efficacy of MumMoodBooster for the treatment of PND.
- MMB rapidly improves symptoms in women with severe diagnosed depression.
- Appears highly acceptable and has good adherence.
- MumMoodBooster can help to address known barriers and potentially reach large numbers of women in metropolitan, rural, and remote areas.



Good adherence and efficacy in a RCT is one thing;

What happens when we take our e-mental health
treatments out of the laboratory into the real world?

Batterham, P. J., Neil, A. L., Bennett, K., Griffiths, K. M., & Christensen, H. (2008). Predictors of adherence among community users of a cognitive behavior therapy website. *Patient preference and adherence*, 2, 97-105.

Christensen, H., Griffiths, K., Groves, C., & Korten, A. (2006). Free range users and one hit wonders: community users of an Internet-based cognitive behaviour therapy program. *Australian and New Zealand Journal of Psychiatry*, 40(1), 59-62.

PIRI's innovative online treatments are now available freely to all Australian Women

Mum Mood Booster 

for postnatal depression



Mum^{2B} Mood Booster

for depression in pregnancy

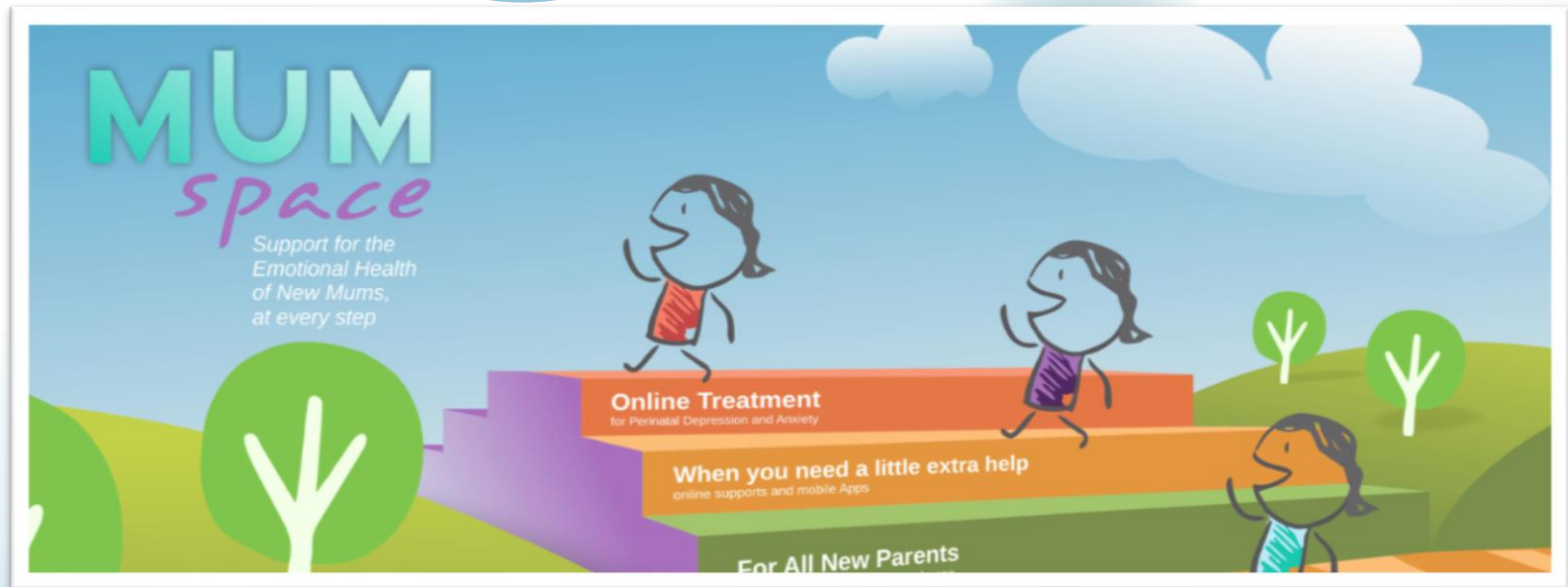
- Women who score 15 or more on the screening EPDS are offered telephone coaching to support them through the program. All women receive regular sms supportive messages.

What is

mumspace.com.au



?



MumSpace is a new Australian website that offers a one-stop shop for evidence-based e-mental health support for **FREE** access by mums and their healthcare professionals, and includes **MumMoodBooster**.

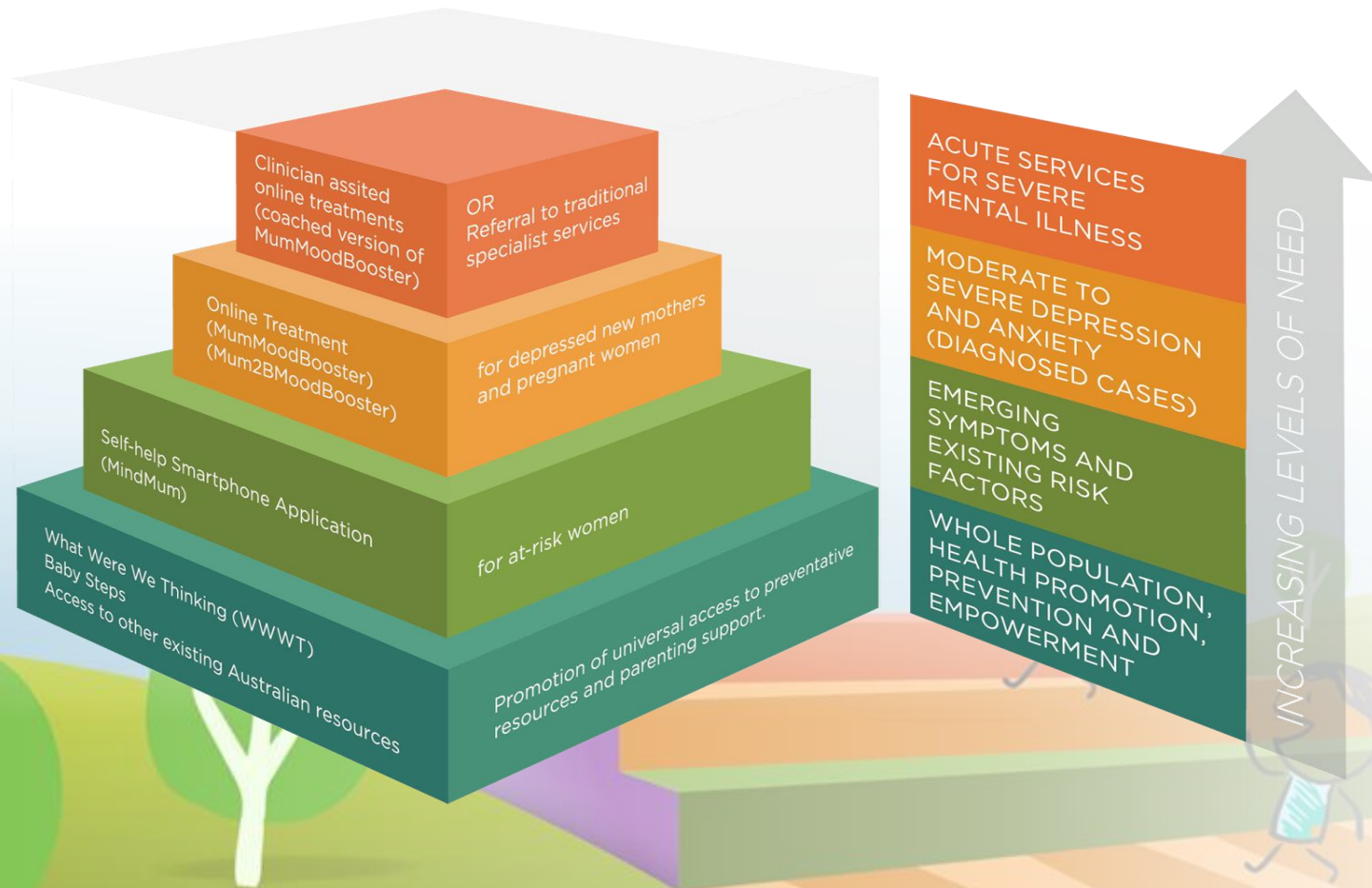
Who is Behind MumSpace?



MumSpace has been developed by the **Perinatal Depression e-Consortium (PDeC)**, a group of leading perinatal maternal health experts supported by funding from the Australian Government*. **Led by the Parent-Infant Research Institute (PIRI)**, PDeC partners include Perinatal Anxiety and Depression Australia (PANDA), Jean Hailes Research Unit at Monash University, ePsych research group Queensland University of Technology (QUT) and Jean Hailes for Women's Health.

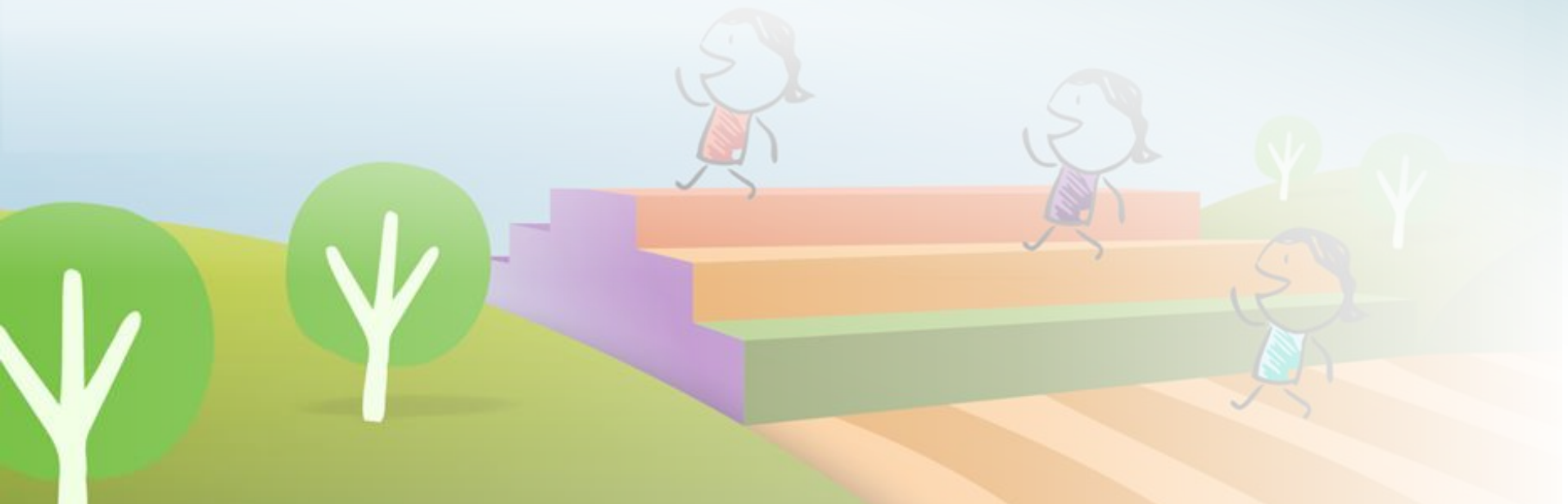
***Funded by the Department of Health, Australia** for the provision of an perinatal online support tool and smartphone application

A Stepped Care Approach



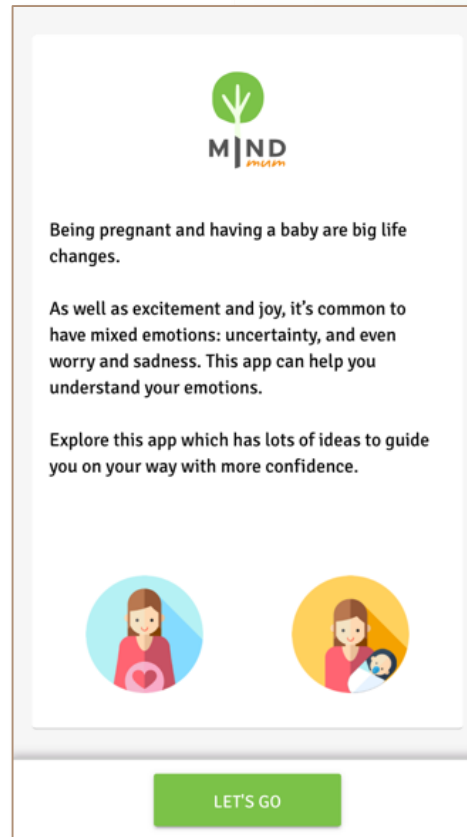
Prevention

In addition to MumMoodBooster programs, MumSpace provides access to evidence-based prevention tools

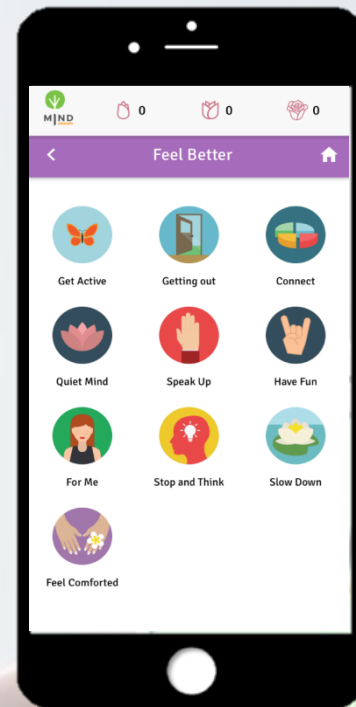
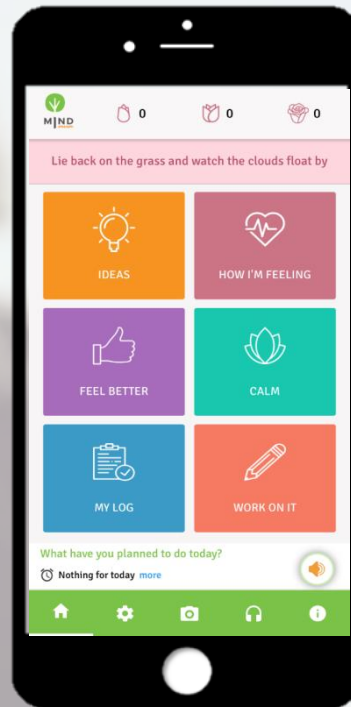


Brief Description of the *MindMum* App

MindMum has been designed and built to assist expectant and new mothers who are under stress but not necessarily experiencing a mental health disorder.



Ideas | **How I'm Feeling** | Feel Better | **Work on It** | Calm



A smartphone app designed by the Perinatal Depression eConsortium – for women who may not have a depressive diagnosis but need help with sub-clinical symptoms and dealing with life's ups and downs in the perinatal period.

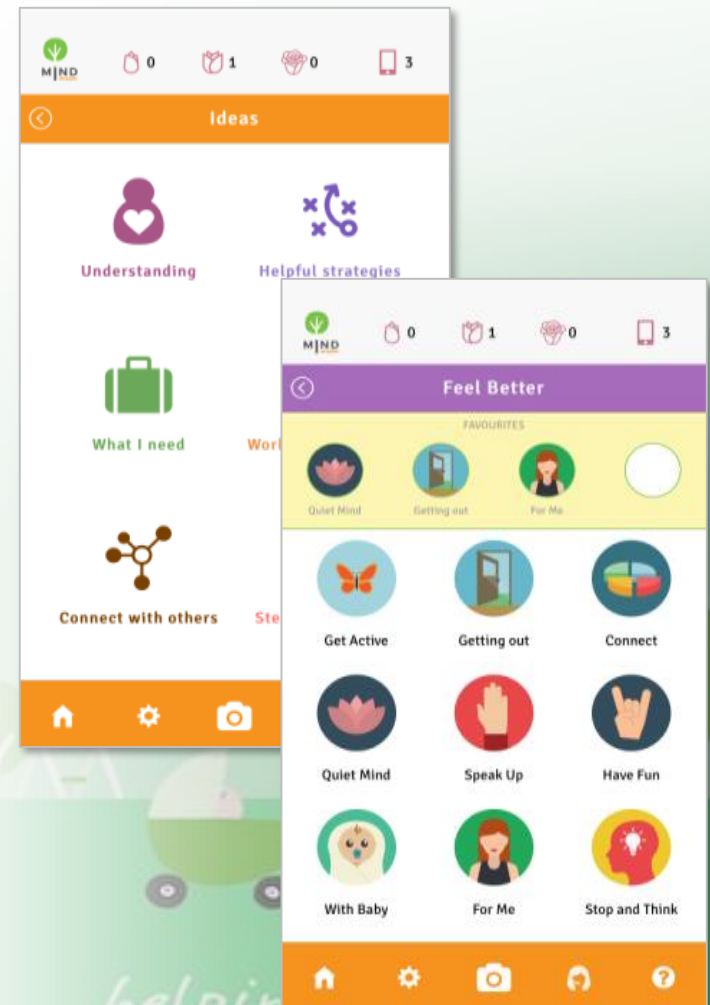
Summary of *MindMum* App Components

The App has an integrated reward system that encourages users' App usage and their efforts to plan and achieve activities using the App.

Additionally, the bottom task bar that appears on all screens provides users with quick access to **Support** (links to support resources; e.g., Lifeline, PANDA), Good Times (to record good memories), About (FAQs, tutorials, etc.), Settings and the ability to 'step up' to MumMoodBooster.

Other features

random affirmative message popup appearing at each log-in; tip sheets, mood ratings; activities that can be selected and scheduled to improve wellbeing, mindfulness audios; a place to record positive experiences and browse planned activities and a problem solving tool.



helping you
life's ups and downs



What Were We Thinking! offers new parents the evidence-based *What Were We Thinking! Program* and a professionally moderated *parenting blog* and a free *mobile app*.

This Australian program helps new mums and dads learn practical skills for settling babies and adjusting to changes in their relationship with each other.

Developed by PDeC partners the Jean Hailes Research Unit at Monash University and Jean Hailes for Women's Health

Baby Steps is a free online program that aims to enhance the wellbeing of new mums and dads. Baby Steps was written for people having their first baby, but can be used by anyone with a young baby who wants to learn more about caring for their baby or themselves.

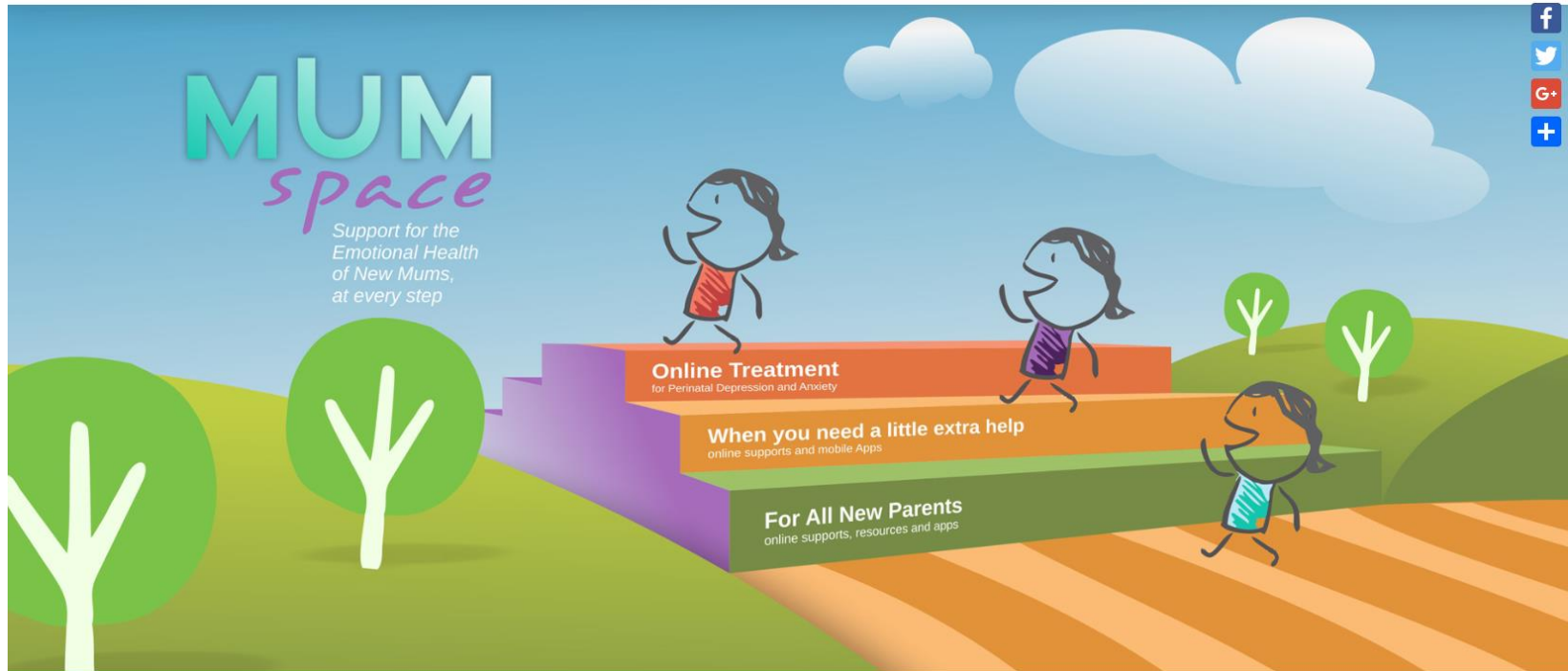
Developed by PDeC partner, Queensland Institute of Technology



How professionals can use MumMoodBooster and other products?



[Home](#) [About MumSpace](#) [Self Assessment](#) [For All New Parents](#) [When You Need Extra Help](#) [Online Treatments](#) [Urgent Help](#) [Q](#)

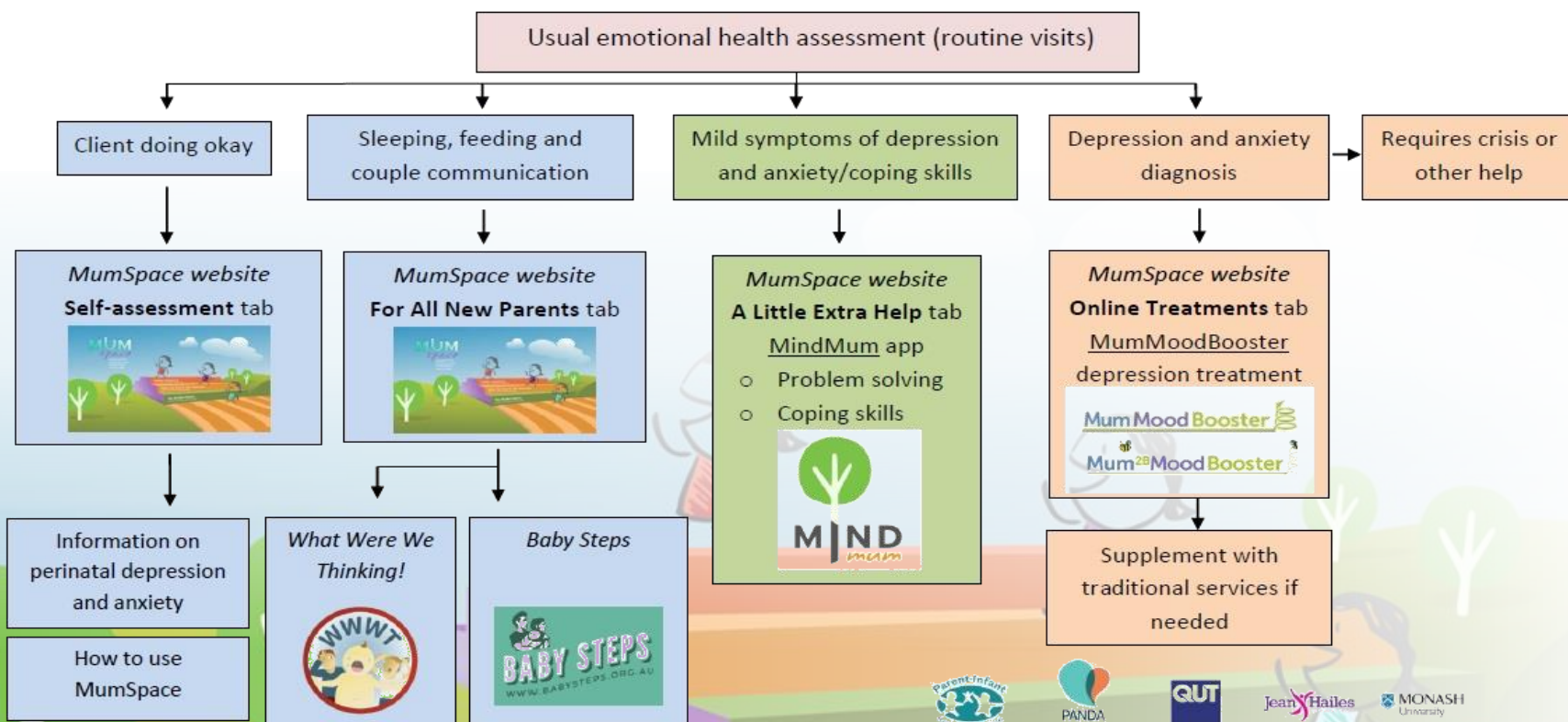


MumSpace Digital Resources

MumSpace

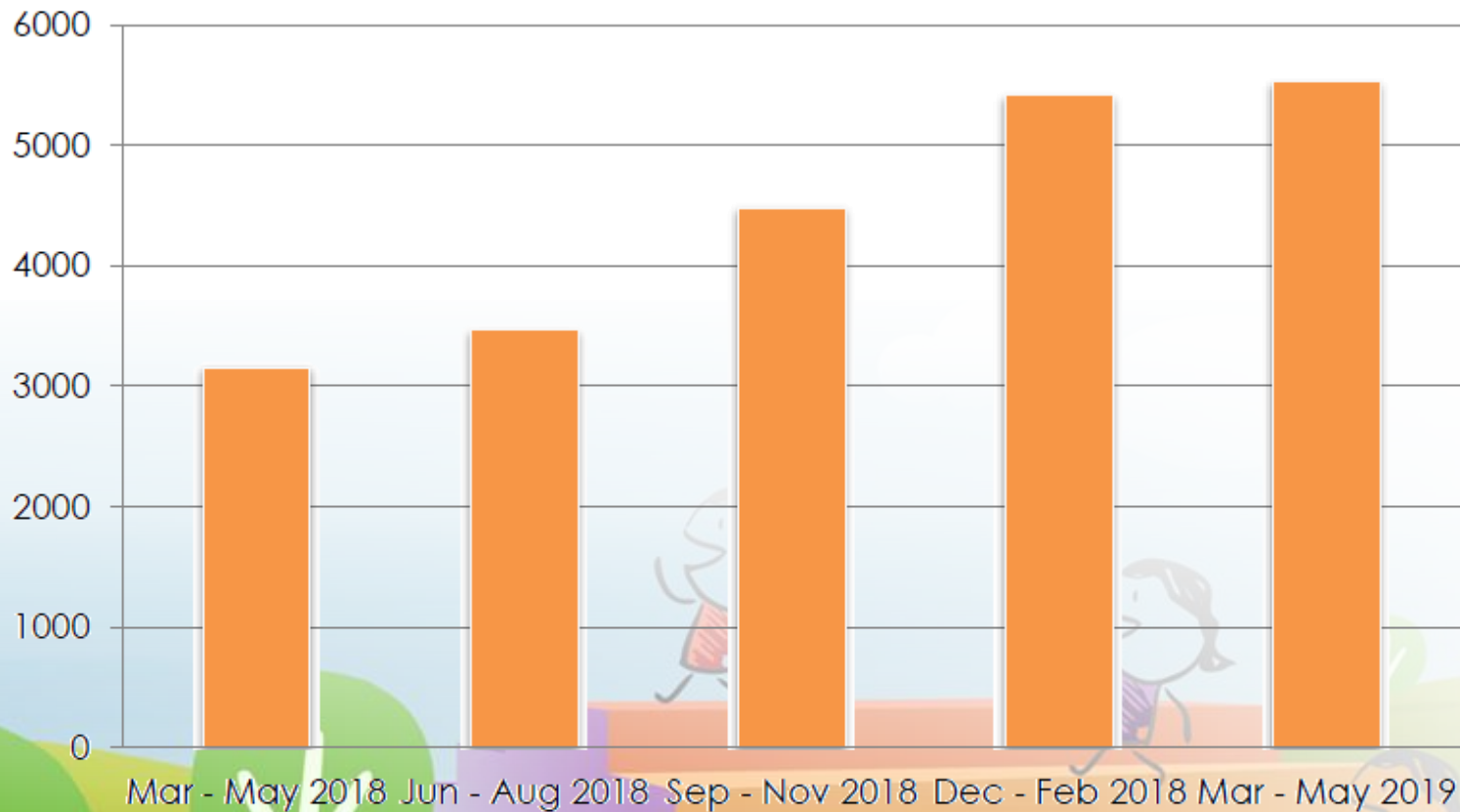
Delivering leading online perinatal mental health resources in one place

A Guide for Health Professionals



For further information and to access [MumMoodBooster](https://mumspace.com.au) and [MindMum](https://mumspace.com.au) visit mumspace.com.au or email piri@austin.org.au

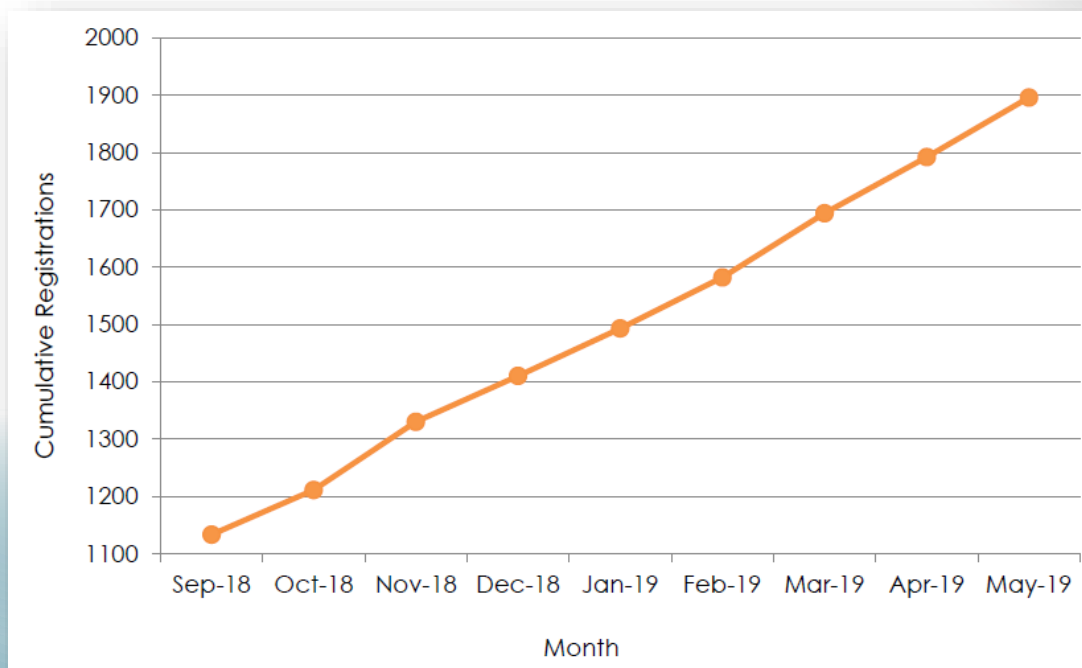
Visits to MumSpace are increasing...



> 40,000 visits to MumSpace since Launch in October 2017

MumMoodBooster | Uptake in the real world

Almost 2000 women across Australia have now used the free public version of MumMoodBooster.

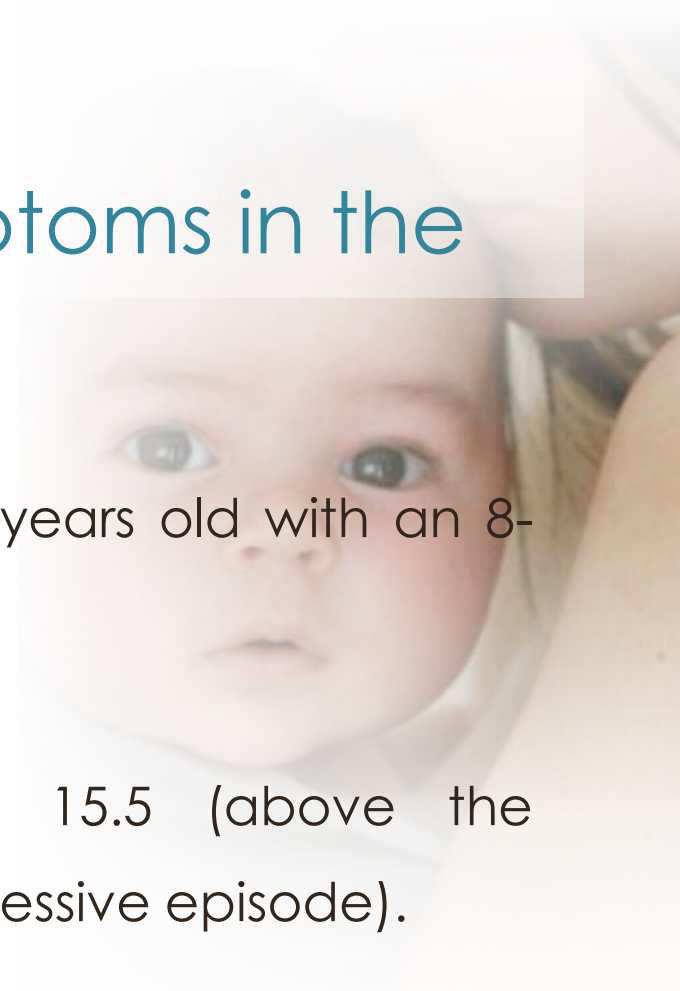


MumMoodBooster |

Impact on depression symptoms in the real world

The average MumMoodBooster user is 32 years old with an 8-month old baby

The average EPDS screening score is 15.5 (above the recommended cut-off for detecting a depressive episode).



Phone coaching

Women with an EPDS score ≥ 15 are offered telephone coaching

Majority of users say No to the offer of regular telephone coaching.

Of those who say Yes, many then change their mind.

Women who register receive ongoing SMS messages of support and encouragement.



Phone coaching

Nonetheless, session attendance by those who do take up the coach calls is substantially higher than among un-coached users.

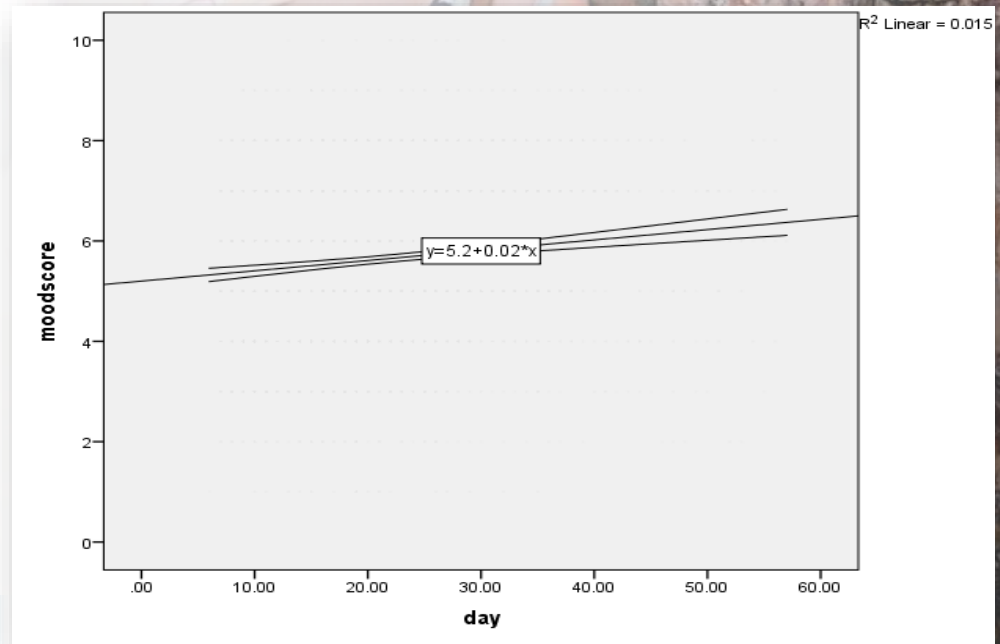
	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Coached users access of online sessions	24 (96%)	23 (92%)	22 (88%)	19 (76%)	13 (52%)	10 (40%)

Despite modest session attendance, mood-tracking is popular...

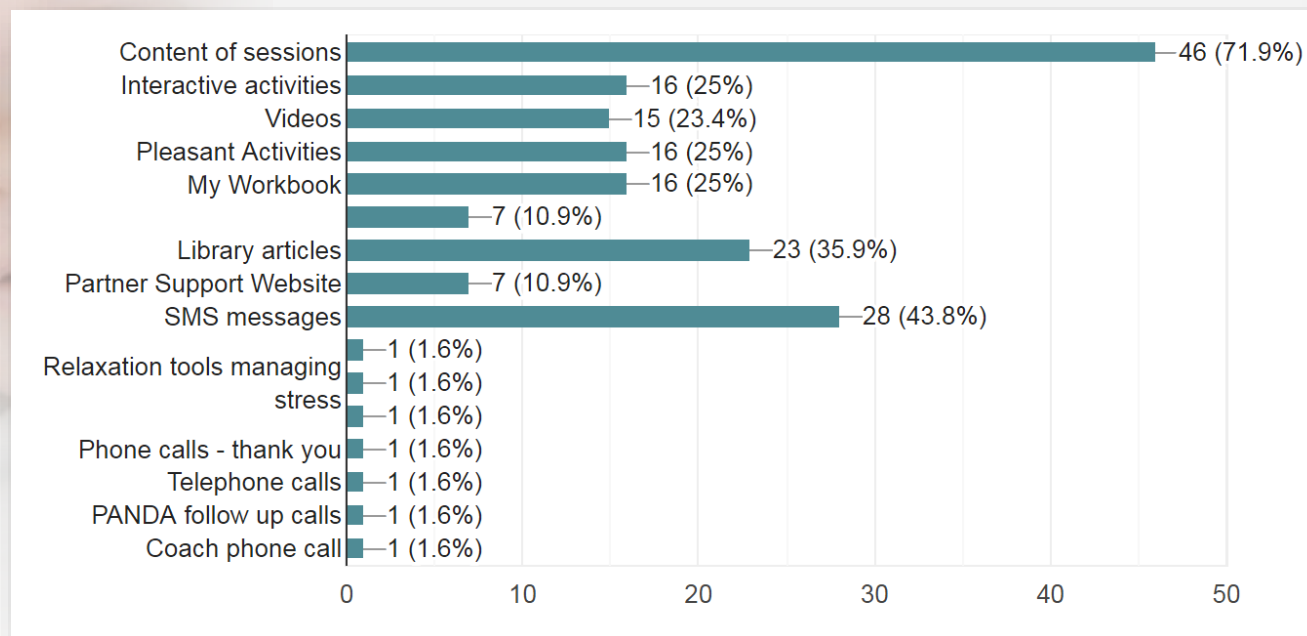
206 users have used the mood-tracking function

2,193 separate mood tracking events over first 8 weeks of use

Mood improves over time ($p < .05$) but the slope is gentle



MumMoodBooster | impact in the real world



The vast majority of user reports (92%) rate the program as helpful. The features endorsed as being the most beneficial are the content of the sessions and the encouraging SMS messages that users receive weekly.

Summary and Future Directions

- MumMoodBooster remains effective when translated into real-world practice
- Currently rolling out across Australia, free at the point of use
- Development of a male version
- Antenatal version



Mum^{2B}MoodBooster

Mum Mood Booster

If you think that this program might benefit someone you know, please direct them to www.mummoodbooster.com



www.mumspace.com.au

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