

Advancements in online self-directed programs to reduce gambling harm

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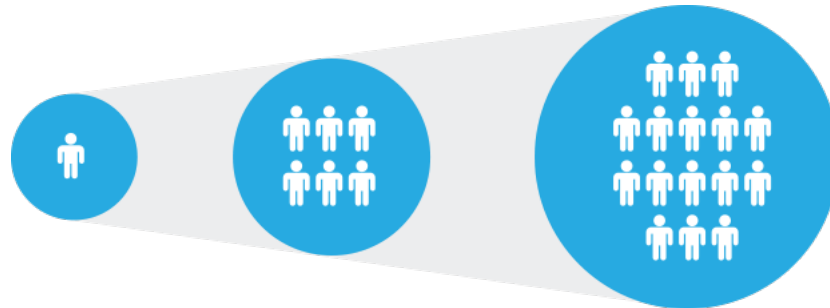
**MEDICAL AND
HEALTH SCIENCES**
SCHOOL OF OPTOMETRY
AND VISION SCIENCE

The presentation today will focus on:

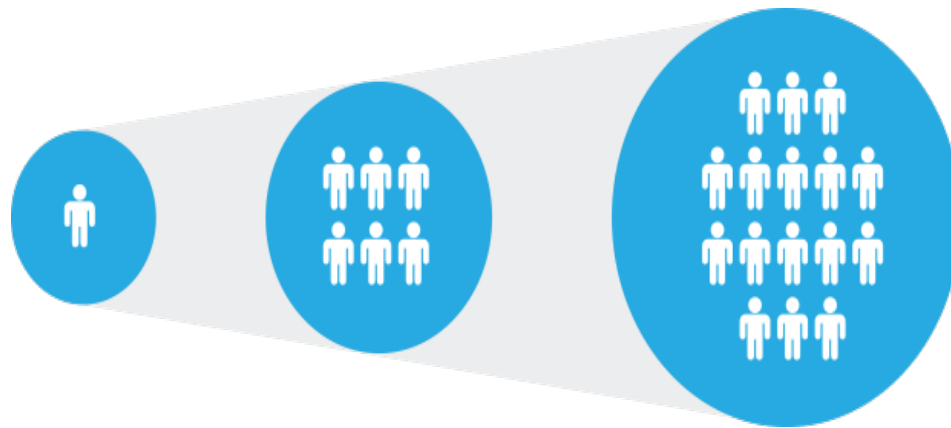
- 1. Information on the current state of knowledge in the development of online self-directed programs to reduce gambling harm**
- 2. The topline findings from a project funded by the VRGF at developing and evaluating an online self-directed behavioural program for gambling (GamblingLess. For**
- 3. The translation of GamblingLess for the VRGF website redevelopment and the adaptation of this program into a cutting-edge “just-in-time” intervention.**
- 4. A discussion of the integration of online self-directed interventions into existing service systems and in e-therapy**

1. Information on the current state of knowledge in the development of online self-directed programs to reduce gambling harm

**To implement and disseminate Internet
interventions to anyone, anywhere**

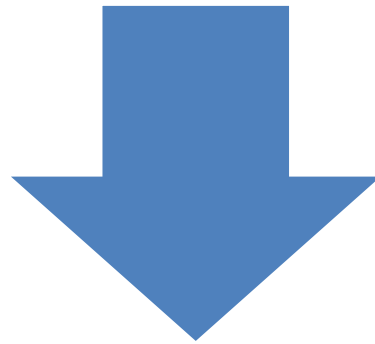


Ritterband et al., (2006) Directions for the
International Society for Research on Internet
Interventions (ISRII)



Type of person involvement

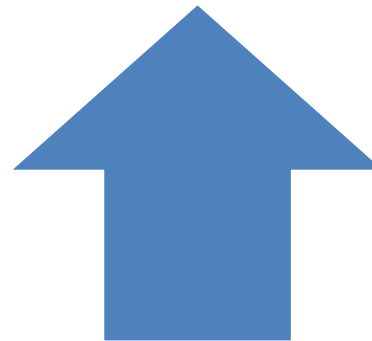
(e.g., guidance, clinician, coach, peer-to-peer)

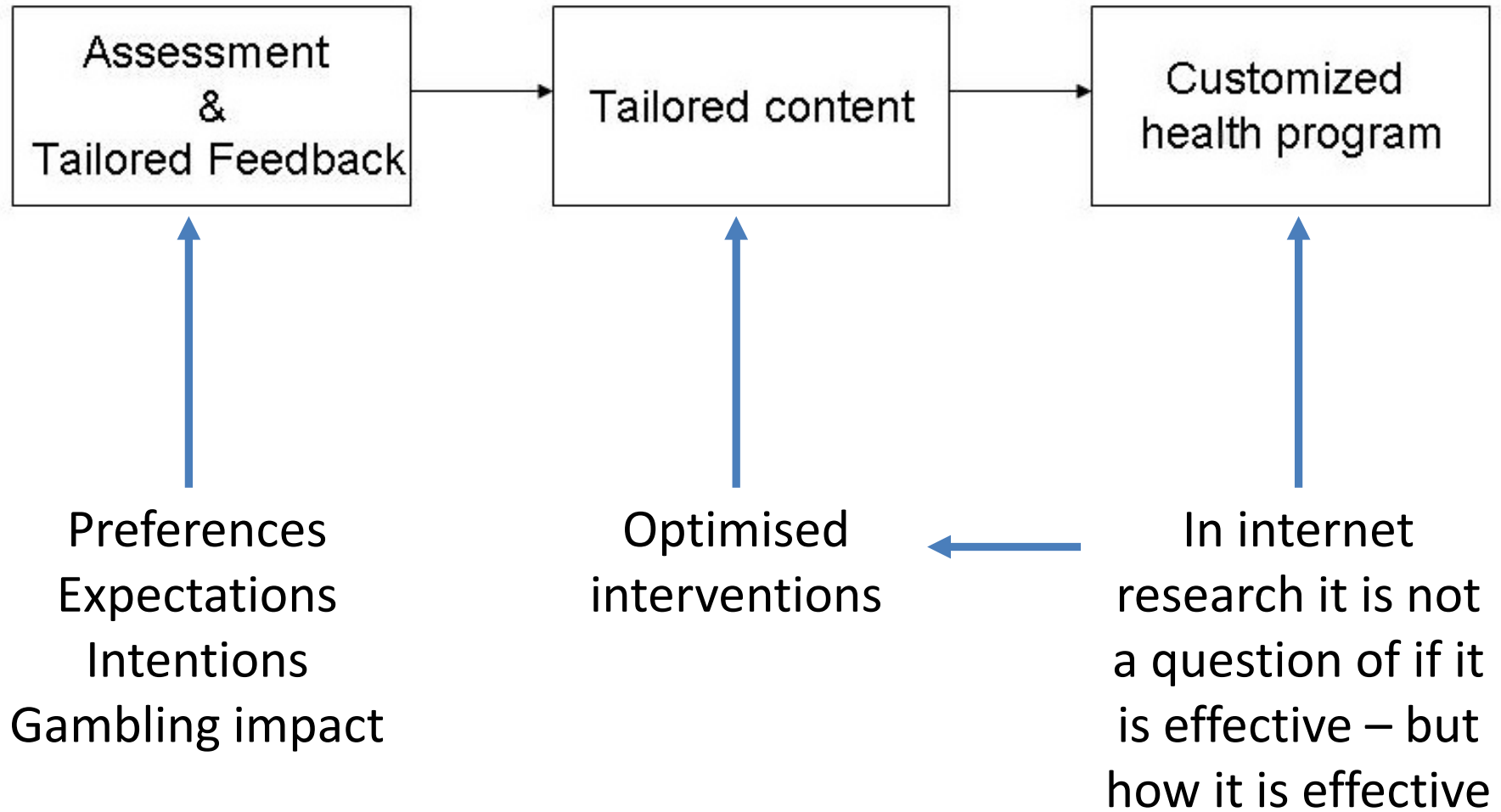


Evaluation
Attrition



Barriers





Therapist-delivered and self-help interventions for gambling problems: A review of contents

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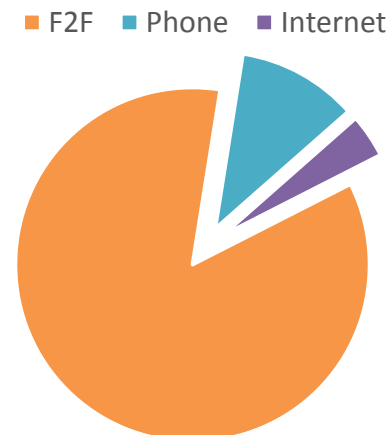
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Background and aims: To date, no systematic approach to identifying the content and characteristics of psychological interventions used to reduce gambling or problem gambling has been developed. This study aimed to develop a reliable classification system capable of identifying intervention characteristics that could, potentially, account for greater or lesser effectiveness. **Methods:** Intervention descriptions were content analyzed to identify common and differentiating characteristics. A coder manual was developed and applied by three independent coders to identify the presence or absence of defined characteristics in 46 psychological and self-help gambling interventions. **Results:** The final classification taxonomy, entitled Gambling Intervention System of CharacTerization (GIST), included 35 categories of intervention characteristics. These were assigned to four groups: (a) types of change techniques (18 categories; e.g., cognitive restructuring and relapse prevention), (b) participant and study characteristics (6 categories; e.g., recruitment strategy and remuneration policy), and (c) characteristics of the delivery and conduct of interventions (11 categories; e.g., modality of delivery and therapist involvement), and (d) evaluation characteristics (e.g., type of control group). Interrater reliability of identification of defined characteristics was high ($\kappa = 0.80$ – 1.00). **Discussion:** This research provides a tool that allows systematic identification of intervention characteristics, thereby enabling consideration, not only of whether interventions are effective or not, but also of which domain-relevant characteristics account for greater or lesser effectiveness. The taxonomy also facilitates standardized description of intervention content in a field in which many diverse interventions have been evaluated. **Conclusion:** Application of this coding tool has the potential to accelerate the development of more efficient and effective therapist-delivered and self-directed interventions to reduce gambling problems.

Keywords: reporting guidelines, change techniques, self-help, treatment, taxonomy, personalized feedback

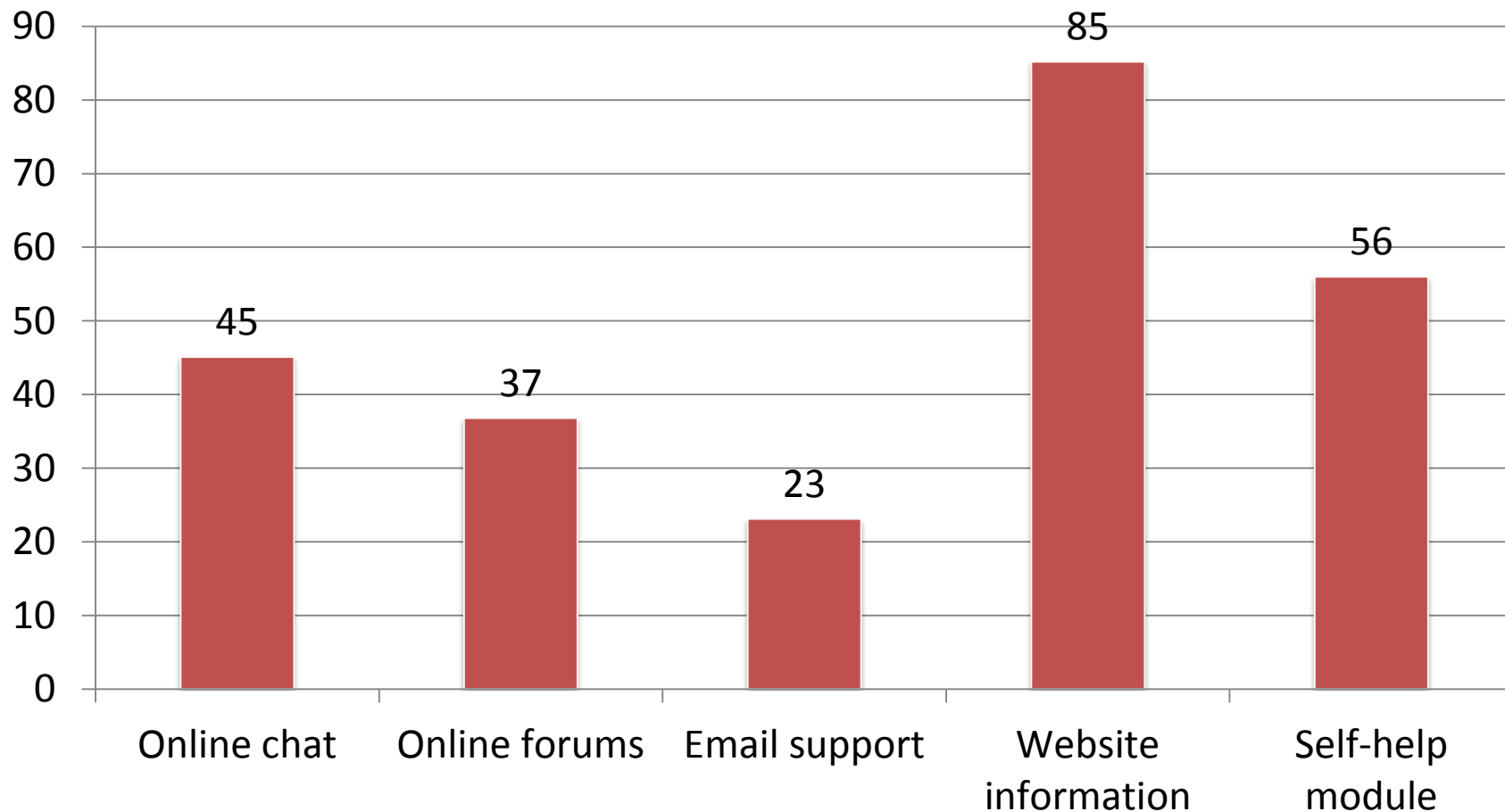
Table 1. Evidence for e-mental health interventions into problem gambling

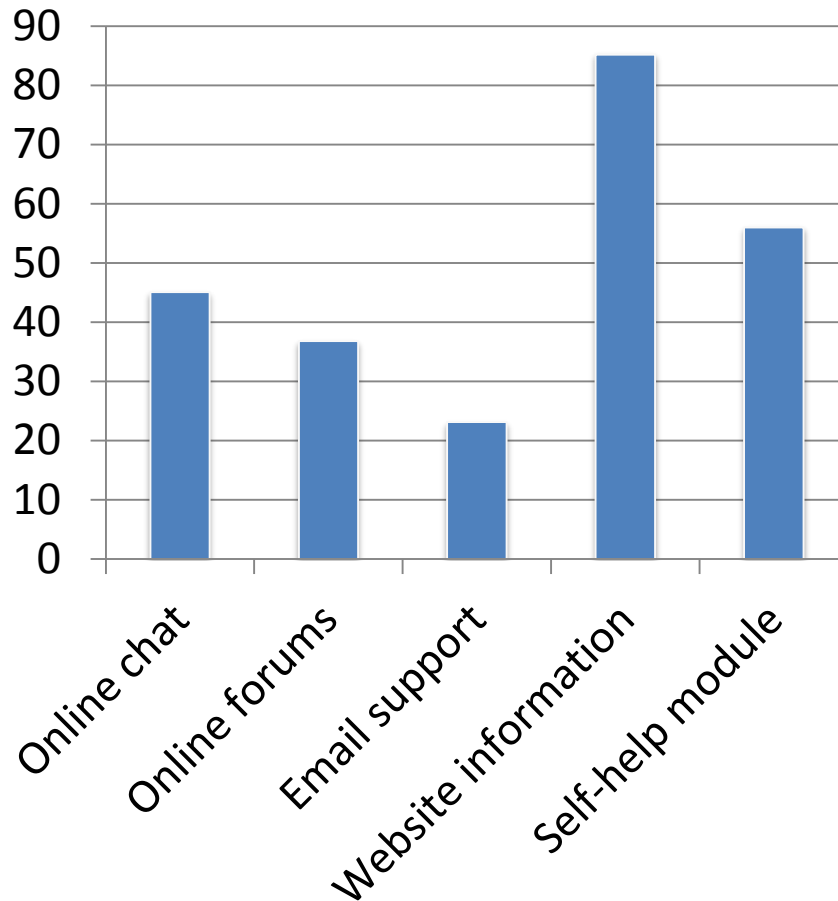
Method of delivery and/or content	Relevant study	Study aims/findings
Online information	None	None
Online screening	Griffiths, Wood, & Parke, 2009	Screening, as part of a suite of self-help options offered in an online responsible-gambling program, perceived as helpful by gamblers
	Cunningham, Hodgins, Toneatto, Rai, & Cordingley 2009; Cunningham, Hodgins, Toneatto, & Murphy, 2012	Personalised feedback effective in the short term
Forum or message board	Wood & Wood, 2009	Forums helped people cope better with gambling and were popular with online gamblers
	Cooper, 2004	Forums used to avoid stigma of face-to-face gambling counselling
Online self-directed program	Hodgins et al., 2013	Trial protocol for Canadian study comparing online self-directed behavioural and cognitive change strategies for problem gambling against a website offering self-screening
	Carlbring & Smit, 2008	8-week Swedish CBT program effective at reducing gambling when supported by phone/email
	Carlbring et al., 2012	3-year follow-up of CBT program (see no. 2) supported Carlbring and Smit's original findings
	Castrén et al., 2013	8-week CBT program with telephone support in Finland reported reductions in gambling, urges and alcohol consumption
	Myrseth et al., 2013	3-month CBT program with telephone guidance effective at reducing gambling at three months post treatment

Table 1. Evidence for e-mental health interventions into problem gambling

Method of delivery and/or content	Relevant study	Study aims/findings
Mobile application	Savic, Best, Rodda, & Lubman, 2013	Review of smart phone applications in 2012 found 87 apps related to recovery from addictive behaviours
SMS	None	None
Email	Rodda & Lubman, 2014	Older people are more likely to choose email over online counselling
Online synchronous counselling	Rodda & Lubman, 2014	Australian study: higher presentation of younger people, especially young men. High rates of online gamblers
	Wood & Griffiths, 2007	UK study: higher presentation of younger people, especially young women. High rates of online gamblers
	Rodda, Lubman, Dowling, Bough, & Jackson, 2013; Wood & Griffiths, 2007	Synchronous counselling used for anonymity, convenience and easy access. Overall positive experience and high satisfaction
	Rodda, Lubman, Cheetham, Dowling, & Jackson, 2015	Presentations involve distress (49%) and requests for strategies and tips for change (51%)
	Dowling, Rodda, Lubman, & Jackson, 2014	Family members of problem gamblers are most often under 40 years and female
Video counselling	None	None

Types and number of services accessed (n=277)





Services access: 26 combinations

Most frequent combinations: Website, forum, module (14%)
Chat and website (11%)
Website and module (11%)
Chat, website, module (9%)
Website only (7%)
Chat only (6%)

The evidence: Talking to someone online is better than a self-directed option (n=277)

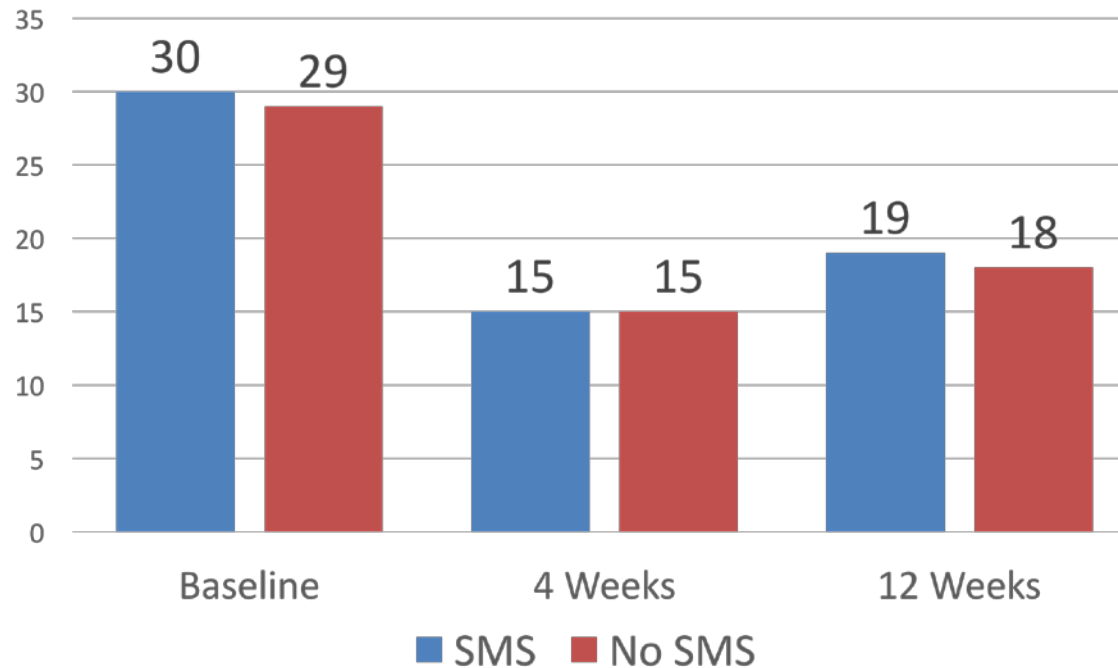
	Baseline M (SD)	4-weeks M (SD)	12 weeks M (SD)
Gambling Severity			
Low intensity e-therapy	30.8 (9.5)	13.9 (9.7)	14.7 (11.6)
Self-directed (websites, modules)	29.7 (5.7)	16.2 (8.7)	22.5 (11.2)
Frequency of gambling			
Low intensity e-therapy	18.9 (16.2)	6.7 (11.3)	4.5 (8.7)
Self-directed (websites, modules)	18.5 (13.2)	7.9 (9.4)	10.4 (11.6)
Money spent gambling			
Low intensity e-therapy	4334 (5151)	760 (1213)	753 (1461)
Self-directed (websites, modules)	3117 (3864)	952 (1429)	988 (1392)

Participants accessing a person-to person interaction reported greater reductions on all indicators than those that accessed an intervention without therapist involvement

Table 1. Evidence for e-mental health interventions into problem gambling

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Video counselling	None	None

Does providing text messaging in addition to e-health improve gambling outcomes? (n=199)



SMS versus treatment as usual on gambling severity at 4 and 12 week evaluation

Significant reductions from baseline to 12 week follow up.
Most gains made by 4 week follow-up

How often have you accessed support in the past?	Never	Once	> twice
Distance-based			
Talked to a gambling help counsellor online	166 (59.9)	94 (33.9)	17 (6.1)
Sent an email to a gambling help counsellor	222 (80.1)	46 (16.6)	9 (3.3)
Phoned a gambling helpline	170 (61.4)	64 (23.1)	33 (15.6)
Face-to-face			
Talked to a gambling counsellor face-to-face	211 (76.2)	25 (9.0)	41 (14.8)
Sought financial counselling by phone or face-to-face	229 (82.7)	34 (12.3)	16 (5.3)
Stayed in a residential facility for gambling	270 (97.5)	4 (1.4)	3 (1.1)
Talked to a psychologist, psychiatrist or GP about gambling	207 (74.7)	25 (9.0)	45 (16.3)
Attended a support group for gambling	242 (87.4)	13 (4.7)	22 (7.9)
Self-directed options			
Read or posted in the website online forum	182 (65.7)	54 (19.5)	41 (14.8)
Read information on the GHO website	64 (23.1)	83 (30.0)	130 (46.9)
Completed one of the self-help modules on GHO	159 (57.4)	80 (28.9)	38 (13.7)
Self-exclusion from a land based or online gaming venue	194 (70.0)	36 (13.0)	47 (16.9)
Talked to family members or friends about the gambling	75 (27.1)	58 (20.9)	144 (52.0)
Tried a self-help strategy (budgeting, avoidance)	93 (33.6)	40 (14.4)	144 (51.9)

Have you ever sought help for your gambling?
(yes/no).

20%

50%

70%

Attrition

Intervention
optimisation

Tailored
content

Scalability

Engagement

Blended
interventions

2. The topline findings from a project funded by the VRGF aimed at developing and evaluating an online self-directed cognitive behavioural program for gambling (GAMBLINGLESS. For Life.)

PROJECT OVERVIEW

PHASE 1

DEVELOPMENT OF THE GAMBLINGLESS PROGRAM

Develop an online self-directed program for gambling that can be delivered across Victorian and other Australian services



PHASE 2

PILOT PRAGMATIC TRIAL OF THE GAMBLINGLESS PROGRAM



Compare the effectiveness of the program delivered under GSD and PSD conditions

PHASE 3

ACCEPTABILITY & FEASIBILITY OF THE GAMBLINGLESS PROGRAM

Explore the acceptability and feasibility by both users and guides; and the degree to which the program could be effectively integrated into clinical practice in existing Victorian gambling services

PHASE 1: DEVELOPMENT

Module 1: Getting Ready to Gamble Less

- Aims to help people understand their gambling, increase motivation to change and define their goals

Module 2: Taking Action to Gamble Less

- Aims to help people learn new skills to reduce and stabilise their gambling

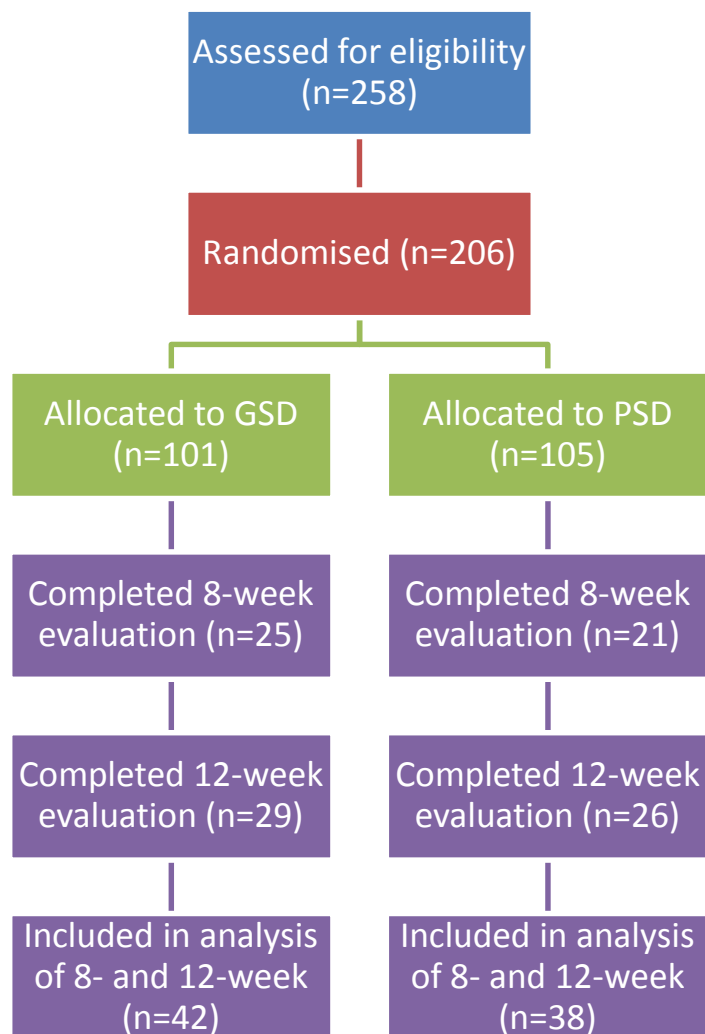
Module 3: Thinking Differently to Gamble Less

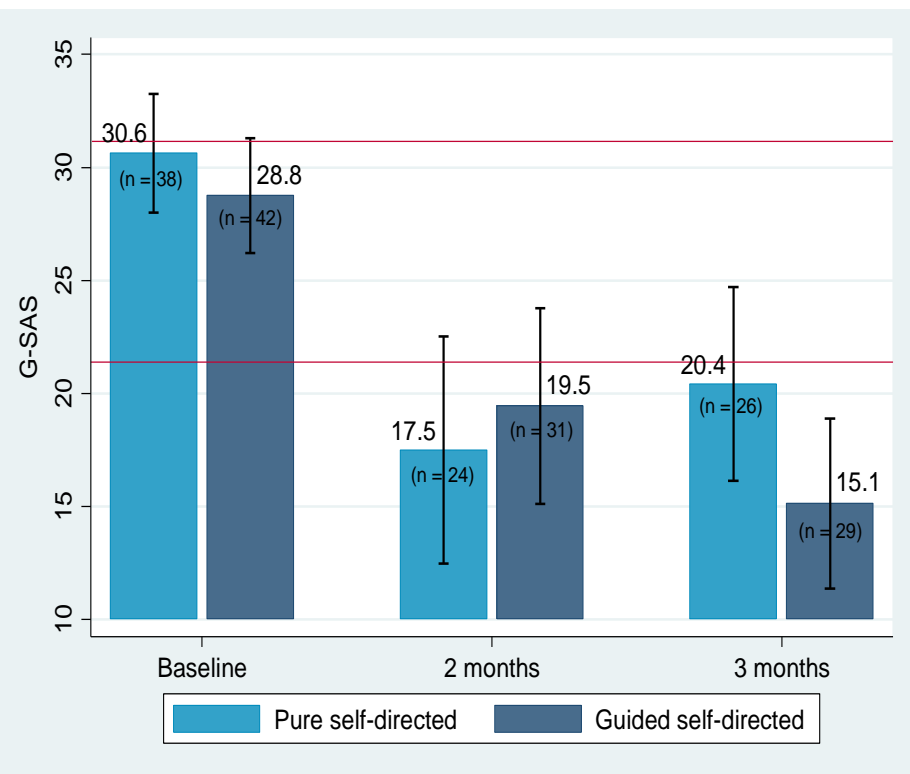
- Aims to help people learn about how gambling works and some of the tricks that are used to keep people gambling

Module 4: Gambling Less for Good

- Aims to help increase awareness of the chain of events and behaviours leading up to a relapse, so people can be prepared to maintain their goals.

PHASE 2: PILOT PRAGMATIC TRIAL





Observed mean G-SAS gambling symptom severity scores by time and treatment group

8- or 12-weeks	PSD (n=38)	GSD (n=42)	Total (n=80)
Recovered	42.1%	57.1%	50.0%
Improved	21.1%	7.1%	13.8%
Unchanged	34.2%	33.3%	33.8%
Deteriorated	2.6%	2.4%	2.5%

Clinically significant change for G-SAS gambling symptom severity by treatment group

Secondary Outcomes



Between PSD and GSD groups	Improvement across time
No differences on almost all secondary outcome measures at the 8- or 12-week evaluations	Significant improvements in gambling urges, gambling frequency, and psychological distress at the 8- and 12-week evaluations
GSD greater reduction in gambling frequency (12-week) and a higher rate of low-intensity help-seeking (8-week)	Significant improvements in gambling expenditure and quality of life at the 8-week, but not the 12-week, evaluation

PHASE 3: ACCEPTABILITY AND FEASIBILITY



Most helpful activities



Coping with lapses

The benefits of gambling less

Deciding to quit or cut back

Money I spend gambling

Internet Evaluation and Utility Questionnaire	Agreement
Comprehensive information	82
Good mode of delivery	78
Easy to use	76
Credible program	76
Would use again	74
Convenient	71
Useful information	70
Enjoyed the program	69
Satisfied with the program	68
Layout	65
Interesting	59
Good fit	58
Concerned about privacy	15

Additional Needs

I want to learn some skills to keep from returning to gambling

I would like to improve my physical health

I want to learn how to relax better

I want to find enjoyable ways to spend my free time

I want help in overcoming boredom

I want to have healthier relationships

I want to help to decrease my stress and tension

I want to learn how to solve problems in my life

I need help in getting motivated to change

I want help with feelings of loneliness

I want help with depression or moodiness

I want to learn how to express my feelings in a more healthy way

I would like to learn how to manage my time better

I want help in setting goals and priorities in my life

I want help with angry feelings and how I express them

I want to work on my spiritual growth

I want help with sleep problems

I want to talk about some personal problems

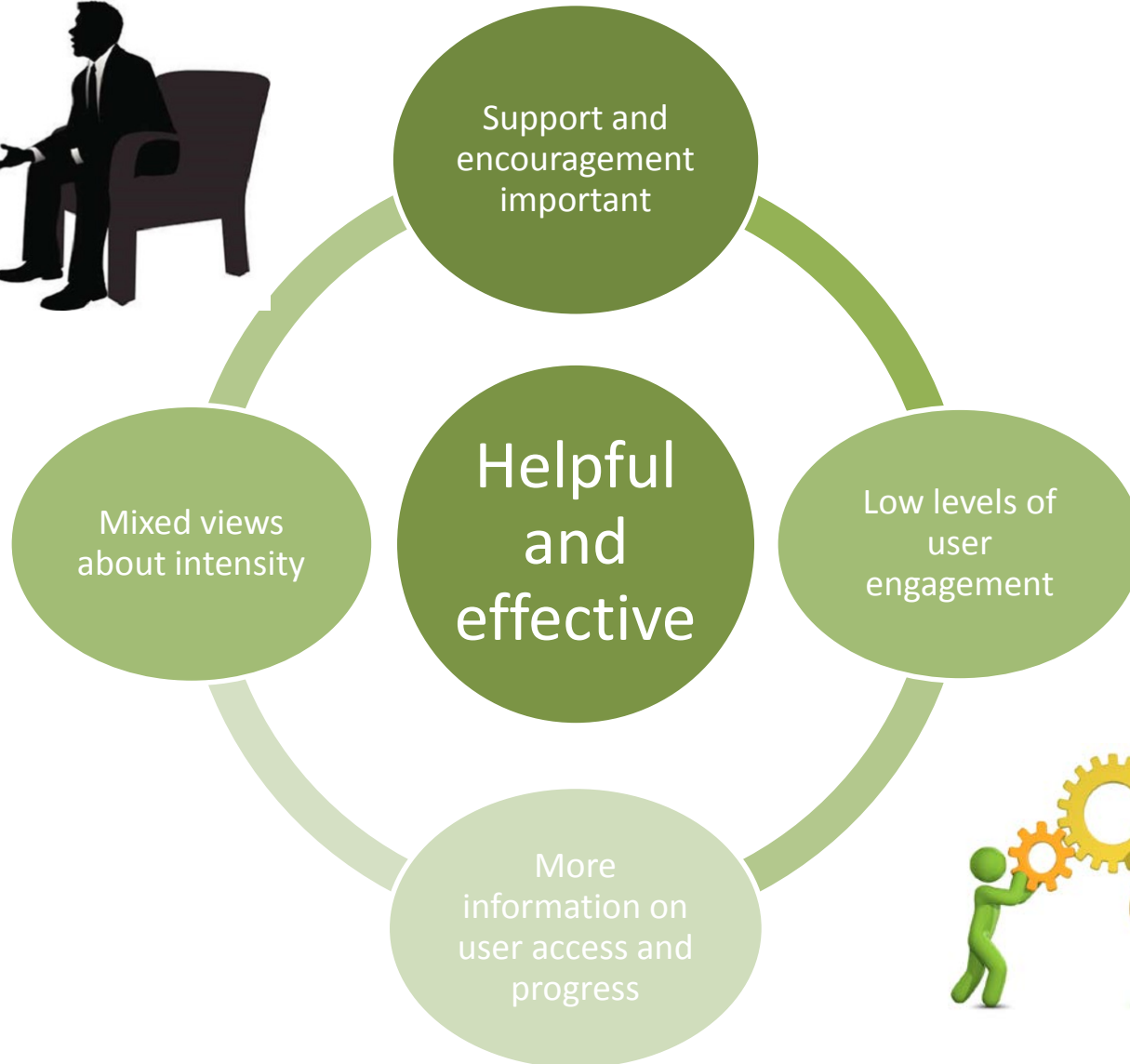
I want advice about financial problems

I want help to stop or decrease my use of alcohol, tobacco or other drugs

I want help with legal problems



User and Guide Interviews



Recommendations



The program
could be
developed into
more brief and
targeted
interventions



Users may
benefit from a
more
individualised
approach
according to
their needs



The program
may benefit
from additional
strategies to
enhance
motivation for
program
engagement

3. The translation of GamblingLess for the VRGF website redevelopment and the adaptation of this program into a cutting-edge “just-in-time” intervention.

VRGF: REDEVELOPMENT OF GAMBLINGLESS

- Redevelopment of GAMBLINGLESS for translation to VRGF website
- Target audience = people experiencing gambling-related harm
- Focus was on:
 - Brief intervention
 - Tailored to individual needs
 - Engagement and interactivity

I want to understand
my gambling and how it
compares to other
people

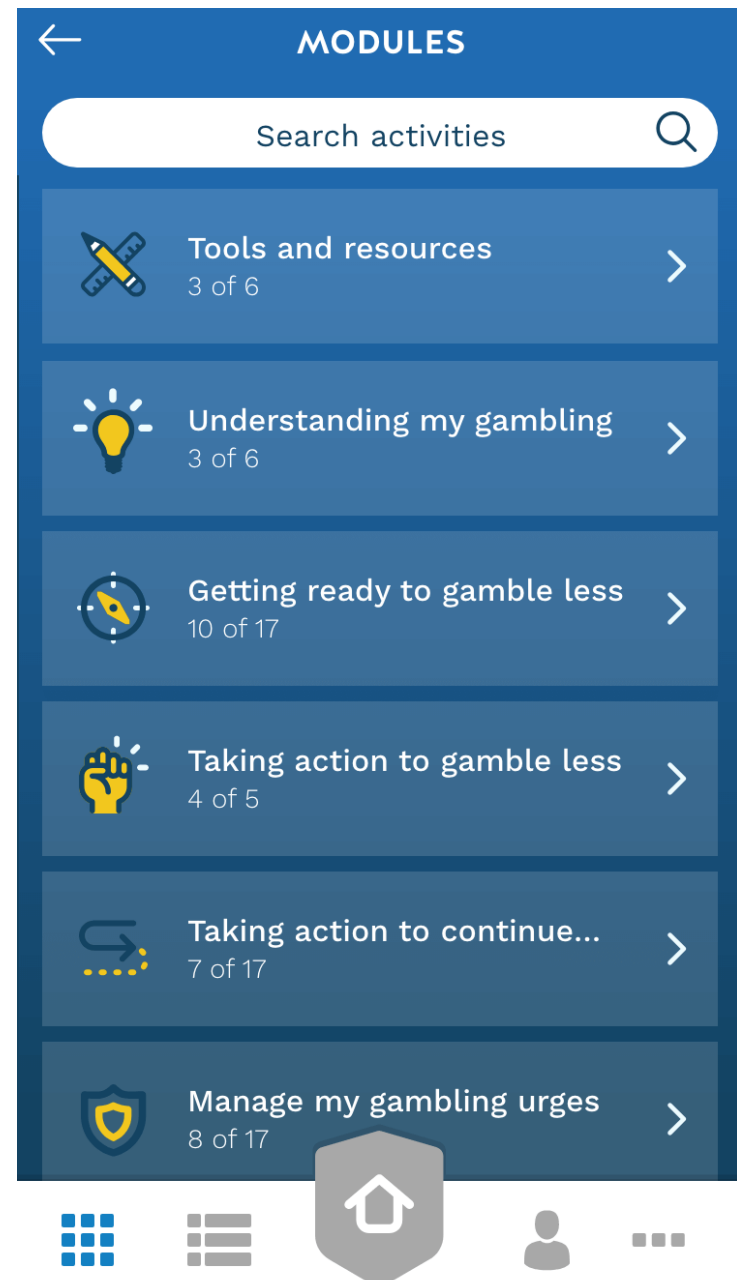
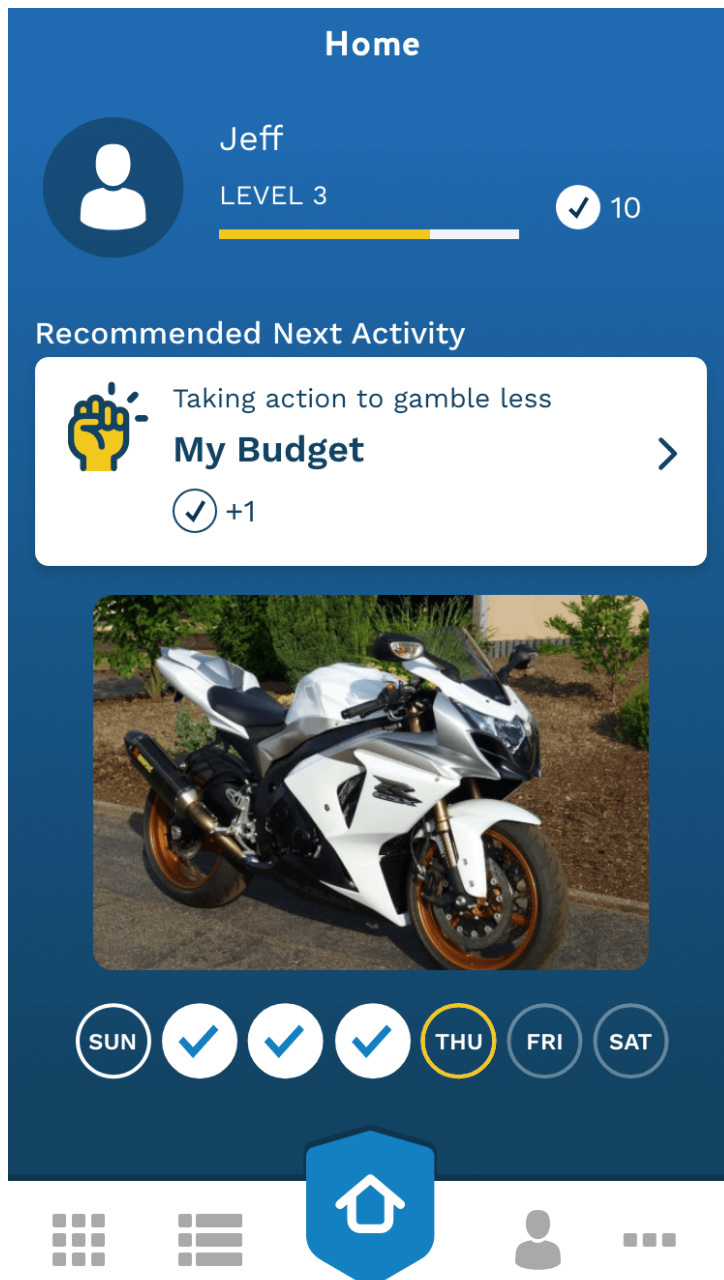
I am just starting to
think about the idea of
gambling less

I want to learn
strategies to help me
get immediate control
over my gambling

I only just have my
gambling under control
but want it to stay that
way

I want to learn how to
cope with my urges to
gamble

My gambling has
improved but I want to
avoid unplanned
gambling episodes in
the future



Understanding my Gambling

Assessing my
gambling

Money and
time I spend
gambling

My gambling
harms

My reasons
for gambling

My gambling
triggers

Getting Ready to Gamble Less

My readiness
to gamble less

The benefits
of gambling
less

Knowing my
values

My
confidence to
gamble less

Knowing my
strengths

Deciding to
quit or cut
back

Getting Immediate Control Over My Gambling

My previous
strategies to
gamble less

Limiting access
to gambling
venues

Limiting access
to money

Resisting social
pressures to
gamble

Guidelines to
gambling
safely

Taking Action to Gamble Less

My budget

My enjoyable activities

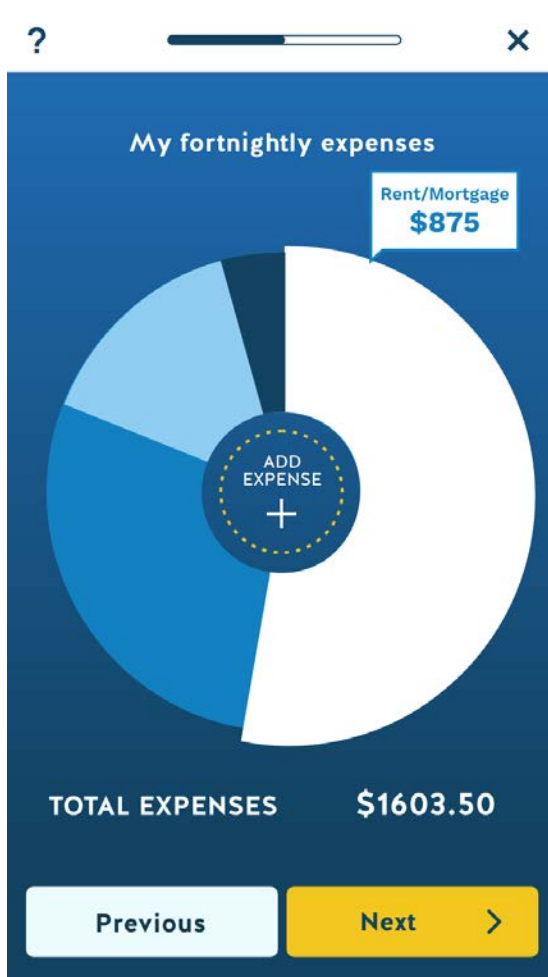
Learning to relax

The tricks that keep me gambling

My gambling thinking traps



My Budget: Prototype



←

Add fortnightly expense

Rent/Mortgage	\$	875
Bills (electricity, gas)	\$	1
Transport	\$	0.00
Food	\$	0.00
Entertainment	\$	200
Medical	\$	28.50
Loan/Credit repayments	\$	0.00
Child care	\$	500
Phone/internet etc.	\$	0.00
Other expenses	\$	0.00

Save

Your balance

My results

Your total fortnightly income

\$1500

\$1603.50

Your total expenses

You are spending **107%** of your fortnightly income

If you think it would be helpful to discuss your budget, you can speak to a [financial counsellor](#) for free. Financial counsellors can provide advice on consolidating debt or managing repayments.

Finish >

My Gambling Thinking Traps: Prototype

?  X

Question 5

If I lose money gambling, I should try to win it back

10  Strongly Agree

Strongly disagree

Previous Done >

My Enjoyable Activities: Prototype

?  X

List five activities that you've always wanted to do, activities that would make you feel good, or activities that you used to most like doing.

1

2

3

4

5

Having trouble? We've included an Activities List to give you some ideas

Previous Next >

Coping With Gambling Urges

My previous attempts to manage my gambling urges

The three D's:
delay, distract, and discuss

My brief relaxation strategies

My brief imagery strategies

How I rationalise my gambling

Urge surfing

My urge management reminder card

Gambling Less for Good

My high-risk
situations

My seemingly
irrelevant
decisions

My willpower
breakdown

My decision
consequences

Learning from
my lapses

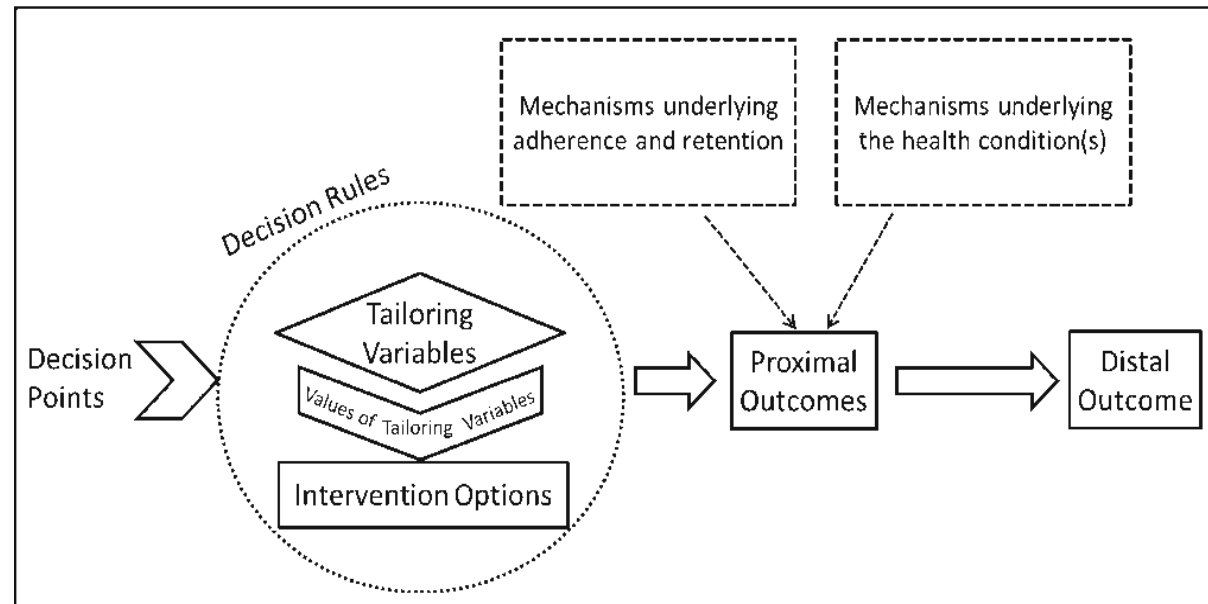
Just In Time Adaptive Interventions

The right amount of support
whenever and wherever it is needed

Target factors that can rapidly change over time, such as behavior, mood, thoughts, location and social context

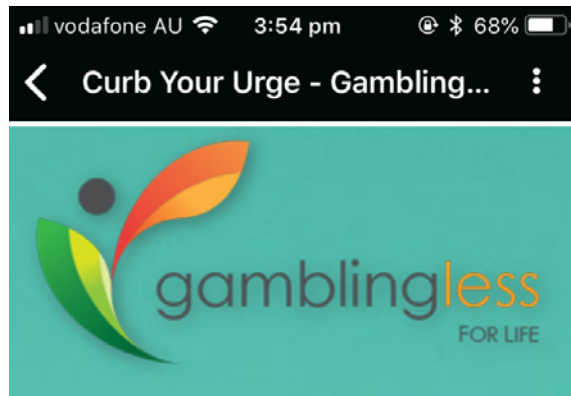
They can be tailored to individual needs via real-time assessment of these factors via mobile devices

At each assessment, a sequence of decision rules specify the intensity or type of real-time treatment that is administered according to the assessment results



Effective just-in-time interventions appear simple to the people receiving them even though they are based on a set of complex components

GAMBLINGLESS CURB YOUR URGE: A JITAI



Curb Your Urge - GamblingLe...

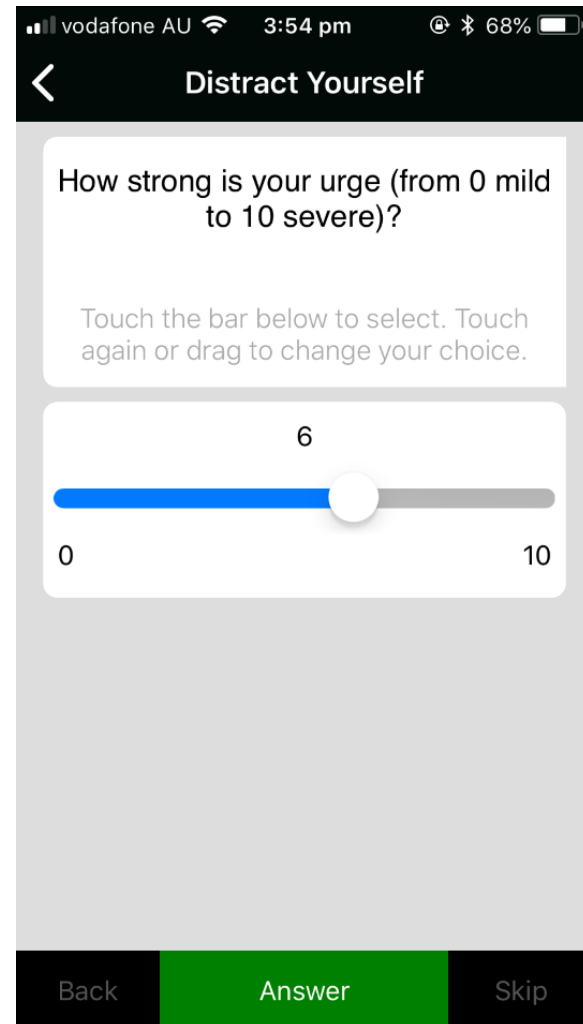
Chloe Hawker

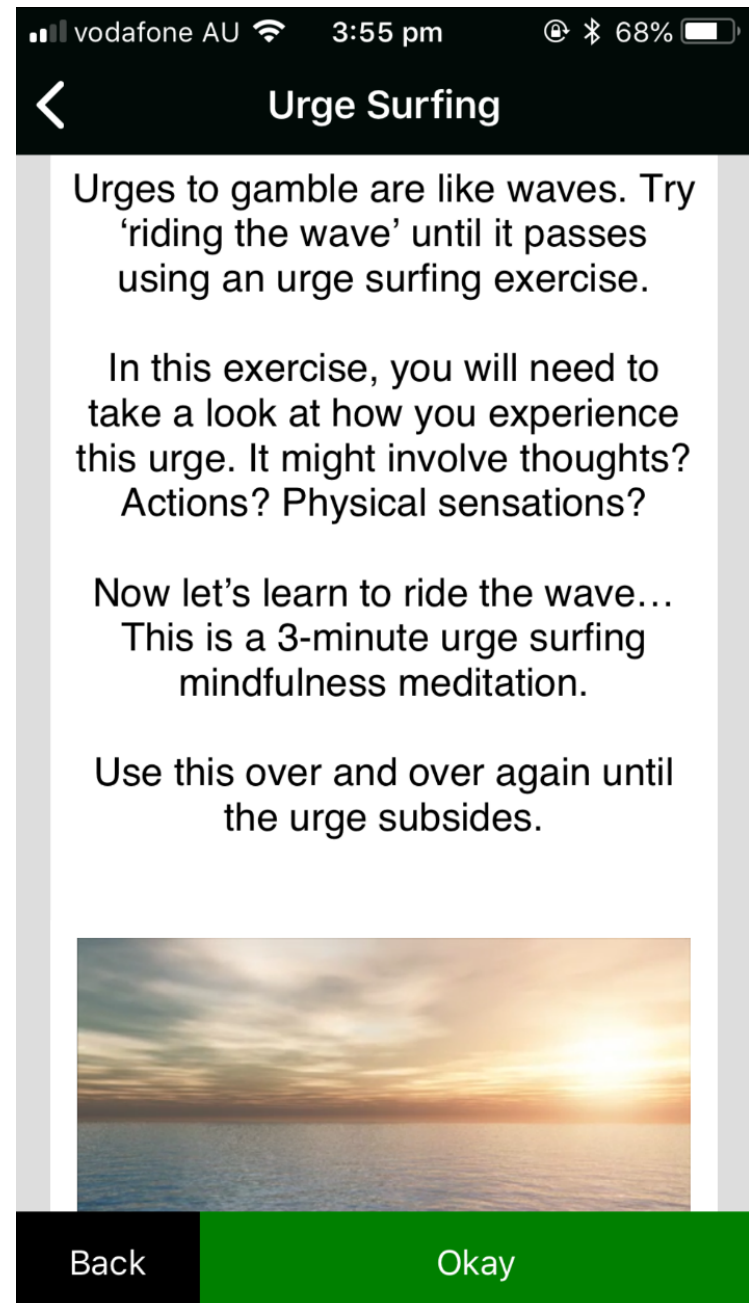
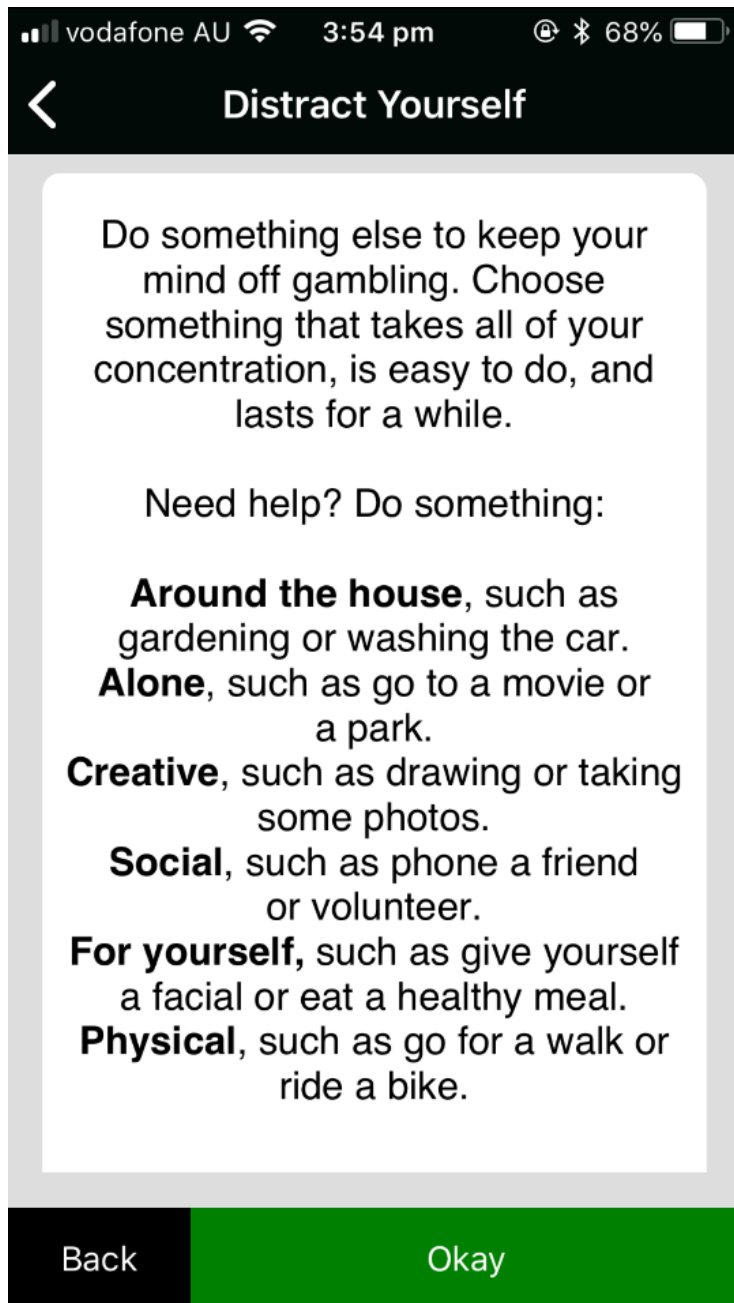
Welcome to Curb Your Urge –
GamblingLess by Deakin University!

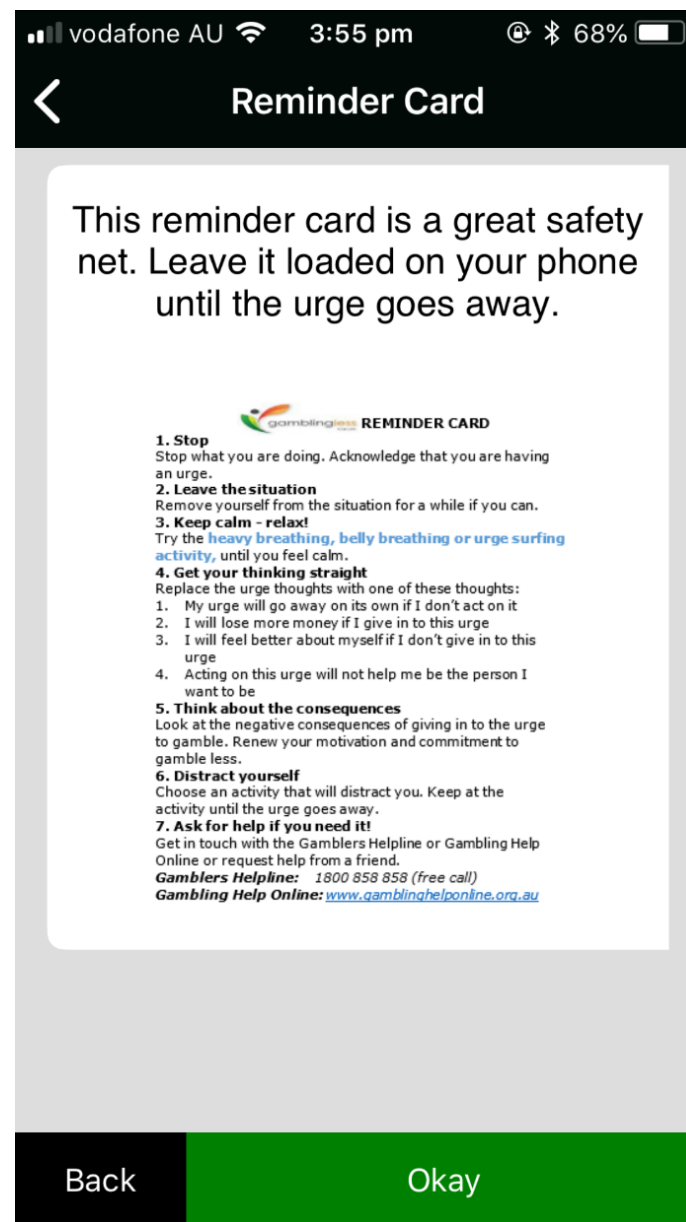
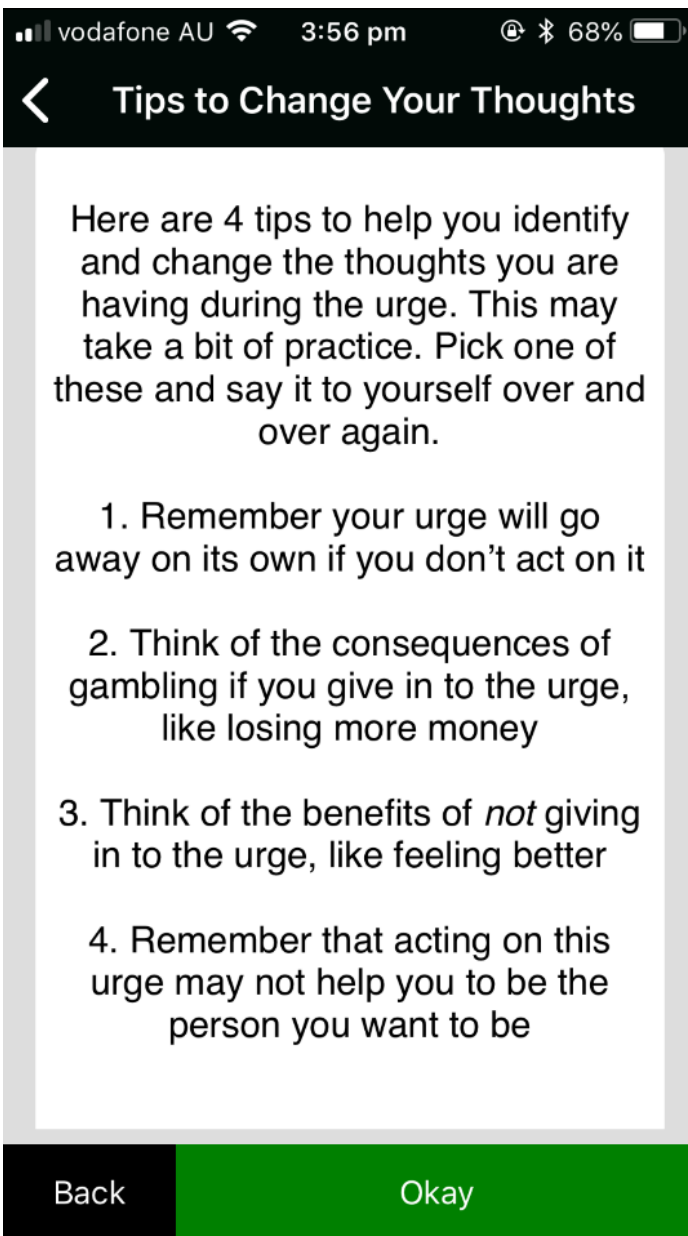
This app is designed to deliver an intervention for urge management for people experiencing issues with their gambling. The app provides 24/7 access to 10 activities that can help curb gambling urges, such as distraction techniques and breathing exercises. The app can be used as a standalone urge curbing activity or as an adjunct to a formal

Surveys

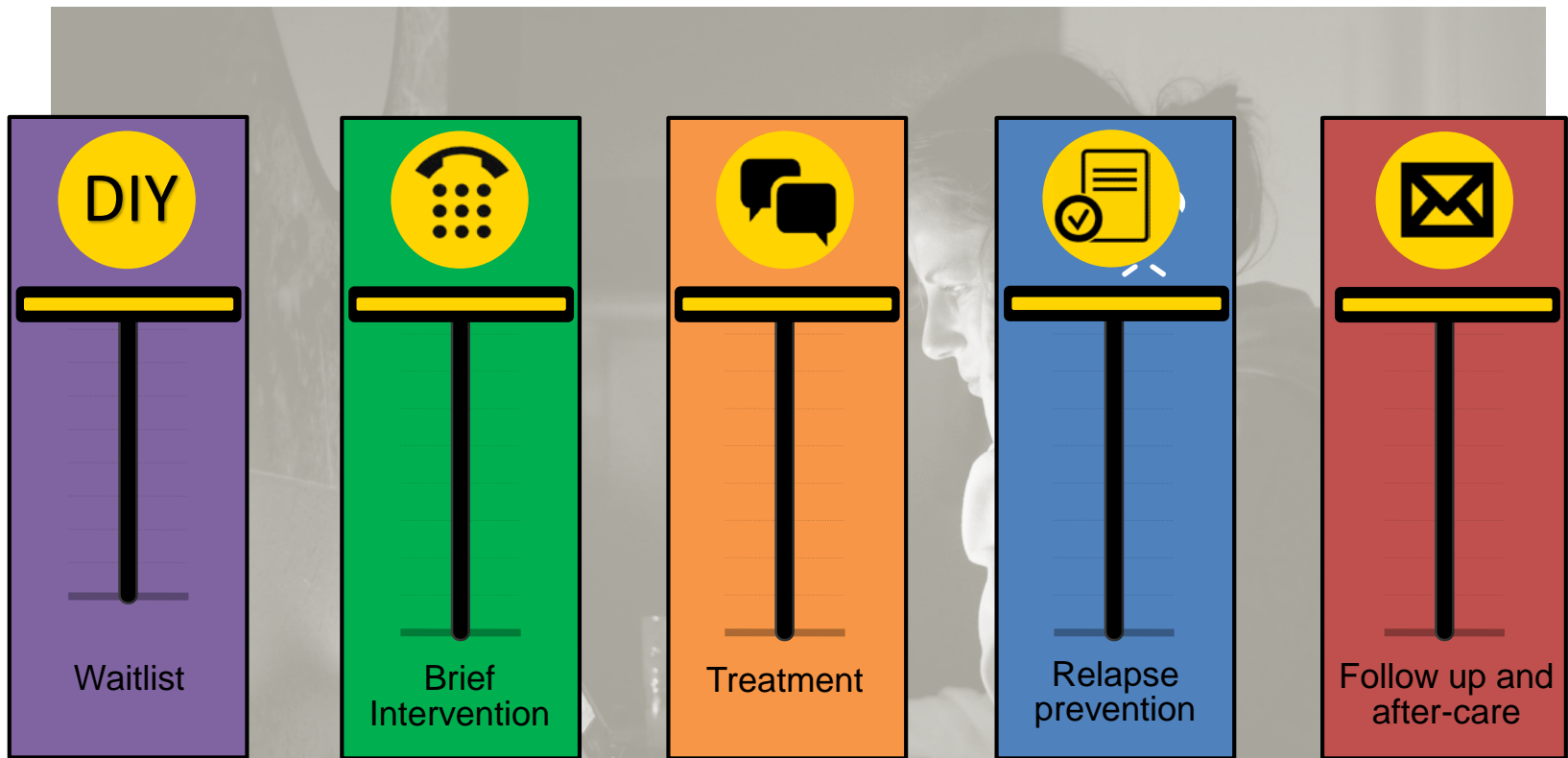
Information







4. A discussion of the integration of online self-directed interventions into existing service systems and developments in e-therapy

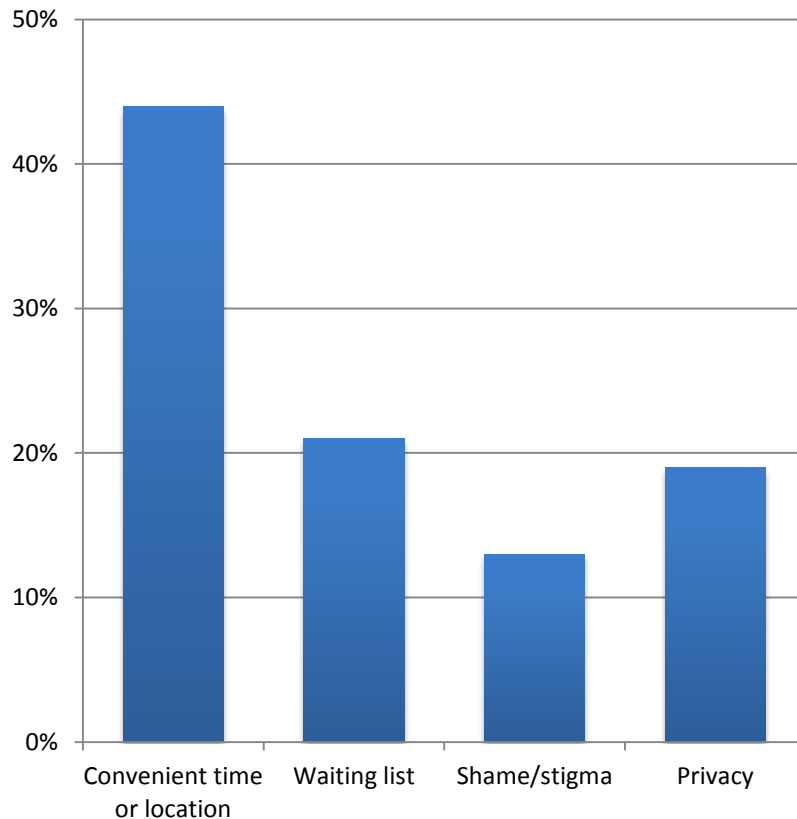


Clinical use of internet options

The aims of your intervention drive the technology. Know the aim and then add technology.

The aims of your intervention drive the technology.

Know the aim and then add technology



Why access during business hours?

- Privacy issues (e.g. they knew the local service provider), geographic location or child minding issues

Why after-hours?

- Unable to attend face-to-face services at a mutually convenient time

Number of sessions?

- Participants completed an average of five sessions, with 129 (56%) completing four or more sessions, 61 completing 2–3 sessions (26%), and 40 completing one session (18%).

Your potential role with Internet therapy

- **As a source of information (referral to relevant & reliable materials)**
- **Guidance and instruction (identification of key problems areas to work on)**
- **Support and encourage change**
- **Review of progress (outcome measures, more help)**

Considerations for setting up a new service

WHO

Decide the target market:
Youth, remote, isolated, outside business hours?



WHAT

TECHNOLOGY

Chat, email, telephone,
Video-conference,
SMS, website or self-help?

WHAT

INTERVENTION

Waitlist, BI, Treatment, RP, after-care?
Duration of each session? Duration of episode of care?



HOW

PROMOTION

How do clients find out about the service?
How are they referred to the service?



HOW

TERMS AND CONDITIONS

How do clients consent?
When?

HOW

CLIENT ACCESS

Anonymous vs Appointment

Are there limits to who can use the service: suicidal ideation or ability to read and write in English language?

WHEN

SCREENING & ASSESSMENT

1. When is screening undertaken?
2. Will screening be conducted to ensure the program fits the client preferences and expectations?
3. Will brief measures be used that are relevant to the client and to the service provider?



WHY

1. Deliver services to a greater number of clients at a time they need them and at an appropriate amount.
2. Make it easier to overcome barriers to treatment such as shame, embarrassment and logistics.
3. Use evidence based approaches that we know work.
4. Clients expect to access at least some of their treatment online.
5. Because it can make a difference.

New frontiers in e-mental health



Blended interventions: Treatment programs that use elements of both face-to-face and Internet-based interventions (Erbe et al., 2017)

Integrated blended interventions

- **With face-to-face focus:** Based on an face-to-face intervention that is complemented or partly replaced by Internet intervention; face-to-face and Internet-based elements are provided within the same period.
- **With Internet focus:** Based on Internet interventions that partly replaced or complemented by face-to-face sessions; face-to-face and Internet-based elements are provided the same period.

Integrated blended interventions

- **Sequential blended interventions with Internet, then face-to-face:** Arrange the Internet intervention part before the face-to-face treatment, such as within stepped care.
- **Sequential blended interventions with face-to-face, then Internet:** Arrange the Internet intervention part after the face-to-face treatment as in an aftercare program.

The evidence: Integrated blended interventions

- Compared with stand-alone face-to-face therapy, blended therapy may:
 - save clinician time,
 - lead to lower dropout rates and greater improvement of symptoms
 - help maintain initially achieved changes within treatment over the long-term
- However, whether this approach is superior to face-to-face or internet alone needs to be investigated.

Resources

- Abbott et al., (2018). Brief telephone interventions for problem gambling: a randomized controlled trial. *Addiction*, 113(5), 883-895.
- Chebli, et al., (2016). Internet-based interventions for addictive behaviours: a systematic review. *Journal of gambling studies*, 32(4), 1279-1304.
- Erbe, et al., (2017). Blending Face-to-Face and Internet-Based Interventions for the Treatment of Mental Disorders in Adults: Systematic Review. *Journal of Medical Internet Research*, 19(9).
- Gainsbury, & Blaszczynski, (2011). A systematic review of Internet-based therapy for the treatment of addictions. *Clinical psychology review*, 31(3), 490-498.
- Hoermann., et al., (2017). Application of Synchronous Text-Based Dialogue Systems in Mental Health Interventions: Systematic Review. *Journal of Medical Internet Research*, 19(8).
- Rodda, & Lubman, (2012). Ready to change: A scheduled telephone-counselling program for problem gambling. *Australasian psychiatry*, 20(4), 338-342.
- Rodda, & Lubman, (2014). Characteristics of gamblers using a national online counselling service for problem gambling. *Journal of gambling studies*, 30(2), 277-289.
- Rodda, et al., (2017). Does SMS improve gambling outcomes over and above access to other e-mental health supports? A feasibility study. *International Gambling Studies*, 1-15.
- Rodda, et al., (2018). Gamblers seeking online help are active help-seekers: Time to support autonomy and competence. *Addictive Behaviors*.
- Savic, et al., (2018). Making multiple 'online counsellings' through policy practice: an evidence-making intervention approach. *International Journal of Drug Policy*, 53, 73-82.
- Sucala, et al., (2012). The therapeutic relationship in e-therapy for mental health: a systematic review. *Journal of Medical Internet Research*, 14(4).
- Wilson, et al., (2018). The personal impacts of having a partner with problematic alcohol or other drug use: descriptions from online counselling sessions. *Addiction Research & Theory*, 26(4), 315-322.

Resources

Merkouris, et al., (2017). GAMBLINGLESS: FOR LIFE study protocol: a pragmatic randomised trial of an online cognitive-behavioural programme for disordered gambling. BMJ open, 7(2), e014226.

Rodda, S. N., Abbott, M. W., Dowling, N. A., & Lubman, D. I. (2017). Workforce Development and E-Competency in Mental Health Services. In Workforce Development Theory and Practice in the Mental Health Sector (pp. 284-301). IGI Global.

Two publications on the Australian Gambling Research Centre Site:

<https://aifs.gov.au/agrc/publications/online-and-demand-support-people-affected-problem-gambling>

<https://aifs.gov.au/agrc/publications/online-counselling-problem-gambling>