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CHAPTER FIVE

Blended In-Person and e-Mental Health For The Treatment Of Gambling Disorder: A Method To Improve Engagement and Retention
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Gambling disorder (GD) is a recognised addictive behaviour in the DSM-5 alongside other addictive disorders (American Psychiatric Association, 2013). As of 2012, the standardised past-year prevalence rate of GD internationally was found to range from 0.5% to 7.6%, with an average rate across all countries of 2.3% (Williams, Volberg, & Stevens, 2012). Gambling disorder is associated with harm to both individuals and their families, as well as their broader communities (Abbott et al., 2017). These harms range from financial and social to loss of culture, employment, interpersonal relationships, and well-being (Browne et al., 2017; Williams, West, & Simpson, 2012).

There is a range of evidence-based treatments for GD. A Cochrane review indicated that the optimal face-to-face treatment is cognitive behavioural therapy (CBT) and motivational interviewing (Cowlishaw et al., 2012). Most countries that permit regulated gambling have support or treatment options including access to information, support through websites, telephone, and face-to-face options like counselling. But despite their widespread availability in many countries, offered at low or no cost by highly qualified experts, these services are underutilised. People with GD rarely seek face-to-face psychological treatment (Bijker, Booth, Merkouris, Dowling, & Rodda, 2022) due to individual barriers (e.g., a preference to self-manage, pride, shame), systemic

barriers (e.g., accessibility; (Suurvali, Cordingley, Hodgins, & Cunningham, 2009), and logistical issues like finding a mutually convenient times for sessions (Gainsbury, Hing, & Suhonen, 2014). The advent of online delivery methods presents an opportunity to help address all of these barriers.

This chapter aims to provide a brief introduction to e-mental health and its use in treating GD, and explores factors related to engagement and retention in this modality. The second aim is to provide information on the different approaches to treatments that blends in-person and e-mental health delivery and practical considerations when working with a blended model.

The Growth of E-Mental Health

E-mental health (also known as e-therapy or e-counselling) provides mental health services via digital-mediated communication (Riper et al., 2010), including options that range from email, chat, video, messaging, websites, SMS, internet applications and community forums that can support self-directed treatment with or without professional or peer support (e.g., counsellor or peer). E-mental health addresses psychological barriers to help-seeking such as wanting to self-manage, shame and more concrete barriers like transportation because it can be accessed anytime from any internet-connected device (i.e., computer, smartphone, or tablet). E-mental health interventions are also typically briefer and more cost-effective than face-to-face counselling for early intervention and treatment (Rodda, 2022; Rodda, Lubman, Dowling, & McCann, 2013b; Wilson & Zandberg, 2012). Furthermore, this modality is unique in that it can be tailored for the individual while at the same time being scalable, meaning that it can have widespread dissemination to gamblers without substantially increasing the cost per episode of care.

Studies have found four main reasons and motivations of gamblers and their families' for accessing e-mental health over in-person treatment (Rodda, Lubman, Dowling, Bough, & Jackson, 2013a; Rodda et al., 2013b). These include (i) ease of access and convenience, (ii) privacy and the

opportunity for anonymity, (iii) preference for typing over speaking, and (iv) wanting to try out counselling as part of a stepped approach to help-seeking.

E-Mental Health for Gambling Disorder

While more common now than ever, a range of e-health treatment services for GD have been provided for more than 20 years, and studies have accordingly evaluated its efficacy. This section provides an overview of the evidence to date as it relates to gambling problems and highlights the potential scope for further development.

Self-Assessment with Feedback

A common form of e-mental health is personalised feedback, which refers to completing a brief screen and getting immediate individualised feedback in the form of a report. Another form of this called personalised normative feedback includes individualised feedback based on a comparison with a relevant sample of other people. While personalised feedback can be delivered face-to-face, by phone, online delivery has recently become much more common as an early intervention due in part to public health measures associated with COVID-19 (Rodda et al., 2022). Multiple reviews have found favourable outcomes for personalised feedback interventions for gambling reduction (Marchica & Derevensky, 2016; Peter et al., 2019; Quilty, Wardell, Thiruchselvam, Keough, & Hendershot, 2019; Saxton, Rodda, Booth, Merkouris, & Dowling, 2021).

Self-assessment with feedback can be delivered with a range of brief screening tools, with feedback options including gambling symptom severity, gambling behaviour indices (e.g., frequency, expenditure, duration) and mental health and well-being. Feedback can be as simple as

providing the person with a statement of their responses to each question or providing total scores on each screening tool. To maximise impact, feedback on self-assessment should include guidance on how to interpret the results, such as the intended purpose of the scale and cut-off points.

There are a variety of ways to increase engagement with the feedback. Some studies have asked participants to indicate how the feedback reflects their situation, and others link feedback to specific actions that could improve symptoms (Saxton et al., 2021). One study examined the impact of feedback delivered as static or interactive elements within an MI-consistent framework versus messages with no motivational elements (Peter, Whelan, Pfund, & Meyers, 2021). Interactive MI-consistent messages that prompted participants to write a response resulted in higher rates of help-seeking than static MI messages or messages without motivational elements. These findings suggest self-assessment may be more effective when participants engage with the feedback.

Person-to-Person E-Mental Health

E-mental health also includes person-to-person counselling offered by chat, email, phone, and video conferencing. A recent scoping review by Van Der Maas and colleagues (van der Maas et al., 2019) identified 27 different studies that delivered online treatment for prevention, education, early intervention or treatment of GD. The most common form of intervention was one-on-one with a counsellor by chat, email, phone, or video conferencing. The most common therapeutic approach was CBT which was offered with or without therapeutic guidance. van der Maas et al. (2019) reported that email was the most common technology used in e-mental health treatment for gambling, providing feedback and guidance on assessments, self-help programs, and unstructured therapeutic interventions. A comprehensive study of chat and email counselling on

the Australian service Gambling Help Online reported that gamblers accessing email were more likely to be older. In contrast, younger people more frequently accessed chat-based synchronous counselling, especially young men and online gamblers (Rodda & Lubman, 2014). Another study by Rodda, Dowling, and Lubman (2018) conducted a follow-up evaluation with clients accessing one of five e-mental health services, including chat, email, self-help, peer forums, and website information. Participants reported a substantial reduction in gambling severity at four weeks as measured by the Gambling Symptom Assessment Scale, regardless of the type of service accessed, but with greater improvement at 12-weeks for those who talked to a counsellor by chat or email.

Online Self-Directed Interventions

Finally, e-mental health can also be delivered through self-directed interventions (also called self-help or self-guided programs), which can be purely independent without any professional involvement, or involve a minimal level of professional support and guidance. Self-directed interventions have the advantage of being cost-effective, immediate and highly accessible—especially for those living in remote locations (Wilson & Zandberg, 2012). They also allow individuals to progress at their own pace. When offered as a smartphone app, self-directed interventions can be delivered in the moment – at a time and place that the person needs support (Dowling et al., 2022; Rodda et al., 2022a)

Recent years have seen an exponential growth in the delivery of online self-directed interventions for addictive behaviours (Chebli, Blaszczynski, & Gainsbury, 2016; Gainsbury & Blaszczynski, 2011b). Internet-delivered CBT (i-CBT)—one of the most researched treatment approaches—has been found effective in the treatment of many psychological disorders, including depression and anxiety (Arnberg, Linton, Hultcrantz, Heintz, & Jonsson, 2014; Donovan & March,

2014; Richards & Richardson, 2012), substance abuse (Riper et al., 2011; Rooke, Thorsteinsson, Karpin, Copeland, & Allsop, 2010; Tait, Spijkerman, & Riper, 2013), chronic insomnia (Zachariae, Lyby, Ritterband, & O'Toole, 2016), and obsessive-compulsive disorder (Gainsbury & Blaszczynski, 2011a; Gainsbury & Blaszczynski, 2011b; Pearcy, Anderson, Egan, & Rees, 2016), and internet-enabled addictions such as online gambling (Park, King, Wilkinson-Meyers, & Rodda, 2022).

Internet-delivered CBT is also an effective approach to changing gambling expenditure, frequency and GD symptoms (Danielsson, Eriksson, & Allebeck, 2014; Gainsbury & Blaszczynski, 2011b; Giroux, Goulet, Mercier, Jacques, & Bouchard, 2017; Rodda, 2021). It has also been found feasible for treating family and friends of people who gamble (Buchner, Koytek, Wodarz, & Wolstein, 2019). Reviews indicate i-CBT for gambling usually involves between four and eight modules/sessions delivered across four to twelve weeks (Danielsson et al., 2014; Gainsbury & Blaszczynski, 2011b; Giroux et al., 2017). The content can be written text, interactive activities, videos, and podcasts.

An Australian i-CBT called GAMBLINGLESS provides an excellent example of the content and functionality of i-CBT (Dowling et al., 2021). It consists of four modules made up of thirteen to fifteen 20-minute activities, with a combination of video, audio, questionnaires, interactive animations, and written activities. The content of the activities varies between each of the modules, which include:

(i) Motivational enhancement (e.g., negative consequences, values alignment, identification of triggers, goal setting)

(ii) Behaviour modification (e.g., limiting access to money, budgeting, problem-solving, relaxation skills, pleasurable activities)

(iii) Cognitive restructuring (e.g., gamblers fallacy, the illusion of control, positive expectancies, near misses)

(iv) Relapse prevention (e.g., urge management, high-risk situations, seemingly irrelevant decisions)

To track their progress throughout the intervention, participants complete a questionnaire after each module that asks about their gambling expenditure, treatment goals, and ability to resist gambling urges. There is also the capacity to save the results of each activity as a PDF for later review.

Engagement with E-Mental Health

A critical issue facing the e-mental health field is treatment engagement beyond initial registration. Easy accessibility means people can register online but immediately easily step away without interacting with anyone, leading to high attrition rates (Eysenbach, 2005; Mohr, Cuijpers, & Lehman, 2011). This chapter reviews the literature on e-mental health for gambling to identify engagement and attrition with i-CBT, including studies that reported the proportion of participants who started the treatment and their level of engagement (i.e., number of modules completed). Eligible studies also needed to include outcome evaluation of some kind, including randomised controlled trials and single-arm cohort studies.

Seven studies reported on rates of attrition and engagement with i-CBT for gambling. As indicated in Table 1, between 10% and 67% of participants who enrolled in the study did not access the gambling intervention at all ($M = 37\%$, $SD = 19.3$). Rates of initial engagement with the intervention were higher when there was therapist support (Carlbring, Degerman, Jonsson, & Andersson, 2012) or when there were multiple validation checks before randomisation, such as

postal address and a requirement to log into the treatment website (Cunningham et al., 2020). Few participants completed the treatment as per protocol, with completion rates ranging from 37% on a five-module program to 44% on an eight-module program (Carlbring et al., 2012). Two studies reported the proportions that only accessed one module, which were 31% (Hodgins, Cunningham, Murray, & Hagopian, 2019) and 68% (Buchner et al., 2019).

Rates of retention at follow-up evaluation varied across the seven studies. The average retention rate of post-treatment or short-term follow-up was 54% (*SD* = 21), ranging from 28% (Boughton, Jindani, & Turner, 2016) to 80% (Cunningham et al., 2020). Studies with higher retention had more person-to-person involvement either during initial assessment and registration (Cunningham et al., 2020; Hodgins et al., 2019) or during the intervention delivery (Carlbring et al., 2012). These findings suggest that having a person involved in the recruitment, delivery, or evaluation of e-mental health may bolster engagement and retention.

Blending Delivery Methods to Increase Engagement

Blended treatment is an intervention type carried out face-to-face but also including additional online resources (Erbe, Eichert, Riper, & Ebert, 2017). This multi-modal delivery does not require as frequent face-to-face sessions since part of the treatment can be done online, reducing therapist contact time while potentially increasing the therapeutic dosage to the client. Blended programs can mix e-mental health delivery modes in various ways, including with telephone, email, chat, or in-person support (Rodda et al., 2019). This flexibility allows unlimited access to treatment materials and exercises to facilitate learning and retention. When face-to-face treatment is included, the positive results appear stronger than e-mental health on their own. A variety of studies indicate blended treatment is associated with better outcomes because it has all

the active ingredients needed for change while also being more cost-effective (Erbe et al., 2017; Kenter et al., 2015; Romijn et al., 2015). A key reason blended treatment works is that it provides human support to instil accountability and adherence to intervention protocols (Mohr et al., 2011).

A fully blended model is where in-person and e-mental health work in tandem to deliver the active content. Blending may be concurrent, where treatment comes from both a clinician and an online program, each emphasising or going into more depth for different aspects of the treatment. For example, an online treatment may teach the underlying principles of CBT while the clinician focuses

Table 1

Summary of Engagement and Study Retention for Internet-Delivered CBT

Authors	Target and sample size	Allocation and treatment	Treatment initiation	Treatment engagement	Retention rate
Buchner et al. (2019)	Affected family members ($n = 126$)	Self-enrolment for five self-help modules.	32% completed baseline but no modules	68% completed 1 module, 37% completed all	35% completed post-treatment eval.
Boughton et al. (2016)	Women identifying problems with gambling ($n = 25$)	Online & phone assessment, and allocation to a series of group webinars facilitated by a clinician.	31% completed baseline, no webinars	61% completed 1+ webinar, 44% most	28% completed post-treatment eval.
Carlbring et al. (2012)	People w/ gambling disorder & gambled in past 30 days ($n = 316$)	Self-enrolment in 8 self-help modules & discussion group, weekly phone support w/ feedback & encouragement.	10% did not start the treatment	87% completed 1st module, 44% all eight	69% completed post-treatment eval.
Hodgins et al. (2019)	People with moderate risk of PG & gambled in past 30 days ($n = 187$)	Phone assessment and allocation to a self-assessment with personalised feedback or 6 self-help modules.	43% did not access the study website	31% completed 1 module, 31% completed most	76% completed 3-month follow-up
Cunningham et al. (2019)	People with moderate risk of PG & co-occurring mental health symptoms ($n = 214$)	Self-enrolment via online assessment, email validation, and website access. Allocation to four modules for gambling reduction with or without self-help for mood.	54% did not access self-help, 75% did not access mood treatment	43% completed 2+ modules, 7% used self-help for mood	39% completed 3-month follow-up
Cunningham et al. (2020)	People with moderate risk of problem gambling ($n = 282$)	Self-enrolment online assessment, postal verification and website access. Allocation to 4 gambling modules with or without alcohol feedback.	21% did not access self-help, 34% did not access alcohol feedback	80% completed 1+ module, 28% did 2 to 4	80% completed 3-month follow-up
Dowling et al. (2021)	People seeking help for their gambling ($n = 206$)	Self-enrolment and randomisation to 8 self-help modules with or without therapist guidance	67% did not access the program	33% completed 1+ activity	49% comp. 8/12 wk. / 24-mo. follow-up

Table 2

Blended Intervention Configuration

Model type	Components	Practice examples	Evaluation
Non-blended model with a gambling focus	In-person gambling treatment and e-mental health, delivered independently.	Clients presenting to gambling services with concurrent problems are referred to e-mental health for other issues (e.g., anxiety or alcohol use treatment).	Both in-person and e-mental health program delivers active ingredients, but each is related to different outcomes.
Non-blended model with a concurrent issue focus	In-person non-gambling treatment and e-mental health, delivered independently.	Clients seeking treatment for alcohol reduction may be provided with a referral to e-mental health for gambling treatment.	Both in-person and e-mental health program delivers active ingredients, but each is related to different outcomes.
Partial blend with a therapist focus	In-person treatment with a therapist, and e-mental health as an additional option.	Clients engage with the e-mental health resource independently and may report back to the therapist on their progress from time to time.	In-person treatment provides active ingredients of change, but some impact may be derived from e-mental health depending on the engagement.
Partial blend with an e-mental health focus	E-mental health focus, practical or therapeutic in-person support alongside the intervention.	Clients primarily engage with e-mental health and seek advice and support from a guide, coach, or therapist.	E-mental health delivers the active ingredients of change. Support may improve engagement.
Full blend concurrent	E-mental health and in-person treatment, delivered concurrently as part of a single treatment.	In-person treatment and e-mental health work in tandem, completed concurrently & delivering similar elements (e.g., cognitive correction).	E-mental health and in-person support work together to deliver the same active ingredients of change.
Full blend sequential	E-mental health offered as part of a stepped-care approach before and after in-person treatment.	Pre-treatment, clinicians help clients to engage with e-mental health focused on treatment readiness. After, clinician helps clients to engage with relapse prevention.	E-mental health & in-person deliver different, complementary mechanisms of change (e.g., readiness, coping, self-efficacy).

on how CBT relates to how the person thinks and responds to various gambling situations. Blending may also involve sequential delivery where e-mental health is part of a stepped model, such as improving readiness for treatment or providing aftercare or relapse prevention. The clinician is involved across the continuum of care from the initial engagement and preparing for change to longer-term maintenance.

Service and Practice Considerations for Blended Models

When setting up a blended treatment model, it is helpful to consider a range of development and delivery options. These span from knowing the target market to matching the measurement and content of the intervention.

Know the Prospective Service Users

The prospective service user is the specific cohort the service is attempting to attract. The target might be a new cohort such as youth, people in remote locations, or those who cannot access the service during business hours. Other cohorts might be those thinking about change but have not acted yet or existing clients whose retention and engagement needs improvement. The target might also be people who have engaged in an episode of care and are stepping down from treatment (i.e., relapse prevention). It may be helpful to identify the needs of the target market before developing the blended treatment so you can match the e-mental health option to their needs. For example, youth may prefer chat, text, or messaging, while older people or those in remote locations may prefer low-tech options due to discomfort with technology or bad internet connections. Email, screening, or i-CBT might be viable options for reaching those unable to use the service during business hours, as these can be accessed at any time.

Intake Procedures

Clients can find out about the service through the website, referral, word of mouth, or promotion. It is important for messaging on promotional materials to be consistent with the target group. For example, to attract people with lower-severity problems, focusing on less severe harm would be appropriate. Regardless of how they access the service, terms and conditions must be presented and consent obtained before providing any engagement or information about treatment options. To make the intake process as easy as possible for clients, ensure all information relating to the intake procedure is in plain language and has been tested with clients before release. The degree of anonymity given to the client is another crucial consideration that needs to be decided on at the outset. While anonymous access is likely to attract people concerned about their privacy, it can also make it challenging to conduct client or service evaluations.

Client Suitability

Not all potential clients are suited to face-to-face treatments, and likewise for online delivery (Rodda, Abbott, Dowling, & Lubman, 2021). E-mental health programs have the potential to reach subgroups of people who would otherwise not receive psychological interventions, therefore expanding access to evidence-based treatment options. Factors that can determine client include access to in-person treatment, comfort with technology, age, location, literacy levels, degree of case complexity, isolation or connections with others, and/or level of motivation or readiness. Assessing client suitability for e-mental health programs can be part of screening and risk assessment. If a client does not meet specific inclusion criteria, they must be provided with a clear pathway and recommendation for other treatment.

Tailoring Content

A key reason for client attrition is that content in treatment programs is not tailored to individual needs, which has been found to be effective and have higher retention in e-mental health (Andersson, Carlbring, Berger, Almlöv, & Cuijpers, 2009). Tailoring occurs through screening, such as determining the motivation for gambling, and modules can be selected that address specific motivations. Options include asking about: (i) access to the internet and devices; (ii) preferences for e-mental health, (iii) technological competence and confidence; and (iv) treatment needs. For example, if the person is motivated by the potential for financial gain from gambling, then it is recommended that they complete modules such as erroneous cognitions and facts about gambling to dispel the belief that this is a realistic outcome.

Information and Resources

Even though e-mental health has been around for 20 years, there is still a need to demonstrate its effectiveness to the client as well as treatment providers. It may be helpful to provide information and resources that outline the optimal conditions for the treatment to be effective—for example, detailing the evidence for the frequency or dose of e-mental health that is required for change. Moreover, information and resources on navigating a blended approach can help set and clarify expectations right from the start.

When developing programs, it is helpful to source and adapt interventions that have already been subject to evaluation and proven effective. Intervention developers will often share their programs on the proviso that there is an evaluation conducted. There are also published treatment manuals that outline the content of interventions and can inform development. These existing resources can be leveraged to inform to clients and counsellors

about the effectiveness of the intervention.

Know What the Program is Trying to Change

Knowing in advance what the program is trying to change is vital for client outcomes. Perhaps the program targets GD symptoms, or gambling expenditure, or other mental health issues. Matching the delivered content to the outcomes measured helps to ensure appropriate evaluation. If the program targets motivation to change, then the content and outcome measurement should focus on readiness, importance, and self-efficacy. If the program targets gambling reduction, then the content and outcome measurement should relate to expenditure and frequency of gambling. Often program evaluation includes changes to mental health such as depression and anxiety or substance use, but this may not be appropriate if the content of the intervention does not treat these issues.

Consider Fit with Stepped-Care

Blended treatment fits well with a stepped-care model, which moves away from a one-size-fits-all approach and towards a more flexible and responsive model in which clients can increase or decrease the intensity of their treatment as needed. The client starts with the service that best meets their needs while being the least intensive option, then "steps" up or down in treatment intensity based on their individual needs. Individuals are supported in stepping step up from their first point of help-seeking, and each step of the way can include clinical support, treatment, and oversight.

Clinical Role

Decide the amount of clinical involvement there will be and how it will be provided. The clinician's role may vary from guidance (i.e., providing encouragement or advice on

completing a self-help program) to counselling and support. To support clinicians, provide protocols, workforce training and develop an appropriate clinical governance model. Ensure the clinician has sufficient technical support to fulfill their role, such as a client management system that can report client activity within the program.

Feedback and Evaluation

Determine when and how to conduct client assessments and what feedback to provide. One way to do this is during a face-to-face treatment session. Explaining the benefits of frequent assessment can get a buy-in from the client. Having an assessment as part of a treatment session can also provide an opportunity to give feedback and recommendations on changes in the type and intensity of treatment.

Conclusion

There is growing recognition—especially since the COVID-19 pandemic—that e-mental health is a necessary modality for treatment delivery (Rodda, Park, Wilkinson-Meyers, & King, 2022b), offering a broad array of benefits including extended reach, clinical efficacy, and cost-effectiveness. Blended treatment links in-person and e-mental health treatment and can broaden the chances of connecting clients with expert gambling counsellors.

Service providers are a critical bridge between clients and access to evidence-based care with high engagement, yet their vital role is frequently overlooked. The traditional approach to incorporating technology into routine care has been simply to adapt a program, app, or intervention developed in a clinical trial and providing links from the services to the website. But these interventions were often not tested in real-world settings, requiring significant redevelopment to fit with the service. Studies like pragmatic trials are conducted in

real-world settings, but the development focus is usually on the trial rather than integration of the intervention with the service. This approach to blending in-person and e-mental health interventions can fail if service provider needs and experiences are not properly considered. A one-size-fits-all approach appears limiting, whereby academic researchers independently develop technical solutions and then offer service providers minimal opportunity to influence the design.

There are various models for integrating online and in-person treatment, from no blend to full blend, depending on service delivery goals. Purpose-built programs should reflect the needs of clinicians and ensure they are easy to use and integrate into existing services. Clinicians are the central bridge between evidence-based treatment and people with gambling disorder. And blended treatments are essential for increasing client engagement with internet-delivered programs such as i-CBT.

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