

Online and on-demand support for people affected by problem gambling

The potential for e-mental health interventions

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This discussion paper is to inform on the evidence and use of e-mental health support and treatment options and ways these may be developed in the future.

KEY MESSAGES

- The majority of e-mental health interventions have scarcely been evaluated.
- E-mental health may provide an appropriate, cost-effective option for increasing the proportion of people seeking help with problem gambling.
- Program evaluations are required for different groups and situations, to demonstrate the efficacy and effectiveness of treatment options.
- Telephone-based treatments have accumulated the most comprehensive evidence base to date, but some other options also show promise.
- Combinations of e-mental health interventions, and integration of e-mental health with traditional supports, seem to have the greatest potential for intervention programs.

E-mental health broadly refers to digital platforms that support a therapeutic exchange, either one-to-one or one-to-many.

For the purposes of this paper, e-mental health is taken to mean help-seeking via:

- email;
- chat and instant messaging;
- video counselling;
- online information;
- online screening;
- forums and message boards;
- online self-directed programs; and
- talk-based telephony.

Background: Help-seeking and technology, a brief history

The first 24-hour suicide prevention telephone hotline began operating in the United States in 1958. Australia soon followed with the establishment of Lifeline in 1963.

In the late 1980s, personal computers became widely available. Self-help materials were often distributed via CD-ROM, with people working through the materials at their own pace.

Handheld mobile phones became widely available in the 1990s. At around the same time, interventions delivered by telephone were recommended as stand-alone treatments (Reese, Conoley, & Brossart, 2006). Mobile phones made it possible to deliver messages via SMS, which is increasingly being used as early intervention and treatment options due, in most part, to the low costs of text messaging (Krishna, Boren, & Balas, 2009).

Since the late 1990s, information technology has greatly expanded the possible ways for people to access health information and support.

Help-seeking and technology today: E-mental health

Today the online and telephone delivery of mental health interventions is referred to as e-mental health (Christenson et al., 2014). Access to e-mental health interventions has grown rapidly over recent years as the internet increasingly is viewed as a primary source of health information—especially among adolescents (Fox & Jones, 2009a; Vance, Howe, & Dellavalle, 2009).

There is evidence to suggest that e-mental health assists people experiencing issues with depression and anxiety, excessive weight, alcohol abuse, smoking and problem gambling (Gainsbury & Blaszczynski, 2011b; Neve, 2010; Reger & Gahm, 2009; Rooke, Thorsteinsson, Karpin, Copeland, & Allsop, 2010; Shahab & McEwen, 2009; Van't Hof, Cuijpers, & Stein, 2009).

Help-seeking behaviours of people experiencing gambling problems

Based on a comparison of prevalence estimates and numbers of people seeking help from gambling help services, the Productivity Commission (2010) estimated that only 8 to 17 per cent of people with gambling problems seek professional help.

The most commonly reported reasons people do not seek help for gambling problems include:

- a desire to self-manage recovery;
- feelings of shame and stigma; and
- a lack of readiness to change or access to professional help (Evans & Delfabbro, 2005; Gainsbury, Hing, & Suhonen, 2013).

Face-to-face interventions are effective in treating problem gambling (Cowlshaw et al., 2012; Thomas et al., 2011), but their high cost and low uptake suggests that they may be having a limited impact in reducing gambling problems across the population.

Against this, people with gambling problems report a strong preference for e-mental health over direct contact with a treatment agency (Cunningham, Hodgins, & Toneatto, 2008), and report that they are more likely to seek help over the telephone or the internet than to attend face-to-face treatment (Hing, Russell, Gainsbury, & Blaszczynski, 2015).

Accordingly, e-mental health may provide an appropriate, cost-effective option for increasing the proportion of people seeking help with problem gambling, offering support and treatment services that are:

- easy to access;
- responsive;
- able to be self-managed; and that
- minimise feelings of shame and stigma.

E-mental health: benefits and drawbacks

Compared with face-to-face counselling, e-mental health provides gamblers with an opportunity to self-manage their gambling in a setting that can be anonymous, private, convenient and immediate.

Self-reliance

Gamblers can access information, self-assessments and self-directed programs without requiring contact with a health professional. This is important, as self-reliance and a desire to self-manage are often reported as reasons why gamblers do not seek help (e.g., Gainsbury et al., 2013). Face-to-face settings also have limited capacity to provide lower-intensity options, while these can be easily provided by e-mental health, either as a stand-alone service or as an adjunct to face-to-face treatment.

Anonymity and privacy

E-mental health can provide people with anonymous access to help due to the lack of physical presence combined with the use of a non-identifying email address, pseudonym or nickname. Face-to-face services can only offer privacy after the client enters the clinician's office, and clients are typically required to provide identifying information when accessing services. However it is important to note that even though e-mental health promises total anonymity, internet and telephone location can be traced and there is a risk of a privacy breach if the browser or computer is not set to private, or if others witness the activity.

Convenience

Convenience—being able to access help, support, information or resources any time, anywhere—is the most commonly cited reason for choosing online over telephone or face-to-face counselling (Rodda, Lubman, Dowling, Bough, & Jackson, 2013). E-mental health services can be offered outside of traditional business hours, reducing the need to coordinate with other commitments (e.g., child minding and employment). They can be accessed from an individual's home, eliminating travel or transport requirements.

Convenience, however, can be a double-edged sword. Early attrition from online programs is significantly higher than from face-to-face treatments (Eysenbach, 2005). This is thought to be at least partly due to the ease of exiting.

Immediacy

Online support is predominantly delivered without an appointment, so there is minimal time delay between requesting and accessing screening and treatment options. This means that treatment and support can be offered at the time when the help-seeker is highly motivated. This contrasts to most face-to-face treatments, where a (sometimes extensive) time delay occurs between requests for service and an appointment. This is thought to lead to early attrition prior to treatment, which places the individual at risk of continued gambling related harm (Pascoe, Rush, & Rotondi, 2013).

Evidence base for e-mental health interventions

There is increasing evidence in favour of the efficacy of online self-help interventions across all addictive behaviours, including alcohol, drugs and gambling (Gainsbury & Blaszczynski, 2011a). Indeed, evaluations of self-directed programs have found improvements in levels of gambling, gambling urges, anxiety, depression and quality of life (Carlbring & Smit, 2008; Carlbring, Degerman, Jonsson, & Andersson, 2012; Castrén et al., 2013). There is further evidence for the effectiveness of combined internet–CBT programs for gambling which feature telephone support (Myrseth, Brunborg, Eidem, & Pallesen, 2013).

Overall, there is limited but promising evidence in favour of e-mental health interventions for problem gambling. (See Table 1, page 5, for a summary of individual study findings.) There are also many methods of delivery—including information websites, SMS and video counselling—for which there is virtually no research into their efficacy or effectiveness.¹ Where evidence exists, it is restricted to one or two supportive studies—an insufficient number of studies from which to draw firm conclusions.

The likely reasons for the lack of research are the delay between the introduction of new technology and research output, and the priorities of research funding bodies. This means that there is a risk of a continued proliferation of untried and untested interventions, which may dilute the effectiveness

¹ Efficacy refers to the extent that the intervention can bring about change in an ideal setting (e.g., randomised clinical trial) whereas effectiveness is the extent to which the intervention has an effect in a community or real life clinical setting.

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
Talk-based telephony	Griffiths, Scarfe, & Bellringer, 1999	First years of the UK helpline were mostly male callers
	Barry, Steinberg, Wu, & Potenza, 2009	Cultural differences in call presentations
	Shandley & Moore, 2008	High uptake of referral and satisfaction with Victorian helpline
	Rodda, Lubman, Cheetham, Dowling, & Jackson, 2014	90% of callers accessed other help following contact with Australian helpline
	Ledgerwood, Wiedemann, Moore, & Arfken, 2012	Helpline contact led to increased readiness for treatment
	Weinstock et al., 2011	Males more likely than female callers to attend treatment following a helpline call
	Weinstock et al., 2014	High rates of suicidal ideation related to gambling severity
	Potenza, Steinberg, Wu, Rounsaville, & O'Malley, 2006	Older callers more likely to have gambled for less time and experienced fewer problems than younger callers
	Rodda et al., 2014	Telephone helplines increase numbers of people seeking help from professionals as well as from family and friends
	Petry, Weinstock, Ledgerwood, & Morasco, 2008; Petry, Weinstock, Morasco, & Ledgerwood, 2009	A single 10-minute brief advice effective in reducing gambling
	Hodgins, Currie, el-Guebaly, & Peden, 2004; Hodgins, Currie, Currie, & Fick, 2009	Telephone contact with workbook better outcomes than workbook only
Abbott et al., 2012	A single helpline contact can reduce gambling and this is sustained over a 12-month period	

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

of e-mental health as a mode of intervention. Table 1 highlights the gaps in research, and clearly demonstrates the need for research into the efficacy and effectiveness of all of current e-mental health options (in both community and treatment settings) for addressing problem gambling.

E-mental health modalities

Currently, individuals can access e-mental health through websites, telephones and mobile devices. This section outlines the range of options for e-mental health, alongside their features and characteristics. Each section concludes with a summary of research related specifically to problem gambling.

Websites

Almost all Australian government and not-for-profit organisations associated with gambling provision or gambling harm reduction operate a website. Websites are helpful in widely disseminating information and potentially creating a way in which help-seekers can avoid being or feeling stigmatised when seeking information or help for problem gambling.

Information and content from websites is often promoted via social media, with the websites providing links to social networking sites (e.g., Facebook and Twitter). Content may also be made available on other social media such as YouTube. Some gambling-related websites offer tools (e.g., self-monitoring apps) and strategies (e.g., self-help behaviours such as walking away when gambling is no longer enjoyable) aimed at preventing or reducing harm.

Unfortunately, not all content and tools have been subject to rigorous investigation. It is important that information provided has an evidence base. It is only recently that a thorough investigation of self-help strategies and actions, for example, has been commissioned (Lubman et al., 2015).

As well as providing static information, most gambling harm reduction sites also provide interactive tools such as screening instruments. Some sites provide visual or written feedback on completed

screening instruments and, based on individual scores, provide gamblers with options on what to do next—for example, modules to complete or options for treatment.

Some wagering and sports-betting sites also offer screening and self-assessments as a component of a responsible gambling program (see e.g., Griffiths, Wood, & Parke, 2009; Wood & Wohl, 2015). Again, evaluation of the efficacy of such screening instruments is rare. However the limited available evidence is promising. For example, an evaluation of a Canadian screening tool, “Check your Gambling”, which asks questions about gambling-related cognitions and gambling problem severity, in addition to questions about money spent gambling and demographics, found a reduction in days spent gambling at a six-month follow-up (Cunningham et al., 2012).

Gambling-related websites may also contain or link to forums for people affected by problem gambling to come together. In Australia these range from message boards to interactive discussion forums. Research involving two UK forums revealed that members felt they could cope better with their own or another person’s problem gambling after they accessed the forums, and that forums were most popular with people who gambled online (Wood & Wood, 2009).

Internet-delivered CBT programs

Most of the research focus in e-mental health has been on self-directed interventions (also called self-help or self-guided programs) hosted through websites. Self-directed interventions typically involve motivational interviewing and/or cognitive behavioural therapy (CBT) components that are delivered in up to eight sessions. In some programs, people have access to support by email or phone from counsellors or coaches. These guides offer encouragement and put a human face on the program, but they do not deliver any clinical content above that provided through the online program. Despite the proliferation of internet-delivered interventions without therapist involvement, research suggests people prefer to have support when using a website-hosted program (Klein et al., 2010) and there is some evidence that therapist involvement results in better outcomes (Richards & Richardson, 2012).

One-to-one counselling

One-to-one counselling is synchronous (e.g., both parties are in a virtual room at the same time) and involves an exchange between a client and professional.

Internet-based counselling

For a number of years, the most commonly used platform for internet-based one-to-one therapeutic exchange was email, followed by online counselling (text-based conversations known as “chat” or instant messaging) and video counselling (Chester & Glass, 2006). Recent research, however, suggests this profile is changing and that people most often choose chat when they are offered the choice between email support and chat (BoysTown, 2015; Rodda & Lubman, 2014). Nevertheless, email is likely popular with clients and clinicians due to its familiarity and use in everyday life. It is used as a stand-alone treatment (i.e., registration and sessions are by email only), as a means of offering support to self-directed programs, or as an adjunct to telephone, face-to-face or online counselling (e.g., materials emailed after contact with a service).

Of the range of interventions delivered over the internet, online counselling (i.e., chat, instant messaging) and video counselling (e.g., Skype) most closely approximate a traditional therapeutic exchange. However online counselling differs from face-to-face and video counselling in that it is entirely text based and is often offered without appointment or waiting times. The client typically contacts a service when the need arises and can maintain contact with a counsellor for as short or as long as is helpful (i.e., the client decides the duration of individual sessions and also the number of sessions). Although the number of words that can be “spoken” in a set amount of time is around half that of an oral conversation, online counselling sessions are typically of a similar duration as traditional face-to-face sessions (around 50 minutes) (Rodda & Lubman, 2014). This means

that only about half the amount of content is likely to be covered in a session. The implications of this significant reduction in talk time on client outcomes are, as yet, unknown. Importantly though, a systematic review of email, online counselling and video counselling has shown that therapeutic characteristics such as conveying warmth, empathy and trust can be developed in an online environment (Sucala et al., 2012).

Telephone/mobile-based programs

E-mental health telephone and mobile options include talking, texting and access to online content via wireless access. Telephone-based services can be reactive (e.g., consumers call into helpline services) or proactive (e.g., appointment based). In addition to telephone calls, mobile phones can be used to relay text messages and access programs wirelessly. Smart phone applications are increasingly offered for self-monitoring of particular behaviours. Text messaging (SMS) can be one-directional (e.g., in relation to appointment attendance, medication compliance, information provision) or a two-way exchange of information (e.g., request for and supply of information).

Research in the allied area of tobacco cessation has examined the effectiveness of tailored messages about urge management, relaxation strategies and general health over a 26-week period. Participants who received weekly one-way messages recorded fewer lapses and a higher rate of quitting at the conclusion of the program compared to people who did not receive messages (Whittaker et al., 2011).

Very little research has been conducted, however, into the effectiveness of the recently developed mobile and wireless interventions. A review of apps available in the Google Play store in 2012 (Savic, Best, Rodda, & Lubman, 2013) identified 87 mobile apps related to recovery from a range of addictive behaviours. This review found apps typically provided information on recovery as well as content to promote social support, enhance motivation and as a means of self-monitoring. The review found there were virtually no apps related to recovery from problem gambling.

In terms of problem gambling, the most developed knowledge base concerns talk-based telephone interventions. An Australian study found that contact with gambling helplines resulted in greater contact with professional and non-professional supports following that contact (Rodda, Hing, & Lubman, 2014). Service users also reported high satisfaction with gambling helplines. Internationally, two large studies involving talk-based telephone interventions indicated telephone counselling can change gambling behaviour. A single call lasting just 10 minutes reduced the gambling of people recruited from substance abuse programs and medical clinics in the United States (Petry, Weinstock, Ledgerwood, & Morasco, 2008). Similarly, a large New Zealand study found a single helpline call led to reductions in gambling problem severity, time and money spent, and mental health symptoms (Abbott et al., 2012). These findings are important given that both international studies compared the single call with longer treatments (i.e., up to four sessions) and to treatments with more content (i.e., self-directed workbooks), finding them similarly effective for some people. Abbott et al. (2012) also found that people with more severe gambling problems appear to respond better to more intense treatment.

Integration of modalities and future innovation

E-mental health works well when delivered as part of an integrated service option. Integration can include multiple online options. It can also involve blending online options into current offline service systems within gambling help and allied services (e.g., helplines, health service providers, GP practices) (Christenson et al., 2014).

Brendryen et al. (2013) give an example from alcohol support services where several online options were combined into one alcohol reduction program. Specifically, a self-directed online program was combined with automated emails (prompts to complete daily activities) and SMS (messages to reinforce content). Participants were encouraged to complete a brief survey each day of the program-relevant information from the survey that was then used to provide immediate

personalised feedback (e.g., comparisons with recommended drinking limits). If consumption increases were reported, the participant received a brief video of a counselling session related to their current concern. Evaluation of this program reported a significant reduction in average alcohol consumption of participants at six months compared with people using an online self-help booklet (Brendryen et al., 2014).

E-mental health has also been proposed as a viable first step to help-seeking within a stepped-care model. A stepped-care approach in this context offers minimal or brief interventions initially, allowing clients to choose to “step up” to more intensive interventions if they feel it is required (Hodgins, 2004). More intensive options incur higher costs and traditionally have been delivered in a face-to-face setting.

Rodda et al. (2013), however, found that only a quarter of people stated that they were accessing online counselling as a means of proceeding to face-to-face services. It is important then to consider the development of a stepped-care model within a purely online environment. This could involve the development and implementation of programs that are brief (e.g., forums and self-assessments), through to programs that are deep, complex and integrate multiple online options (e.g., chat and email counselling).

E-mental health can also be incorporated into existing services. A model tested with people undertaking a Methadone treatment program involved allocation to standard therapy or standard therapy plus a self-directed program (Acosta, Marsch, Xie, Guarino, & Aponte-Melendez, 2012). In this study, participants undertook a standard session (60 minutes), or 30 minutes of standard therapy then 30 minutes of self-directed work online at the clinic. The program lasted 26 hours in total. This study reported much better outcomes for those who accessed the combined program. This was despite the fact that those in the combined program had lower levels of cognitive functioning (e.g., non-verbal learning and memory, ability to plan or problem solve, and processing speed) at the start of the trial compared to those accessing standard care. The authors argued that a self-directed program may, in fact, be a preferable option for some people with lower functioning because they can do it at their own pace and can go back over content as needed.

Another program provided integrated multiple online options as a follow-up to an eight-month alcohol treatment in a residential facility (Gustafson et al., 2014). A smartphone was provided to participants that included a suite of apps aimed at providing post-care support and maintaining reduced alcohol use. The program offered a range of options including: GPS and self-monitoring; motivational text messages; information (e.g., “instant library” of articles and fact sheets); email and forums; and a ‘panic button’ to notify professionals and family and friends if help was required. Gustafson and colleagues found that people who received the smartphone after-care program reported significantly reduced alcohol use compared to those who did not receive any after-care support.

Expanded access to e-mental health interventions

It is not expected that online or telephone options could, or indeed should, replace face-to-face treatment, but as the number and breadth of service options grow it is important to provide people impacted by problem gambling with a range of options and to inform them as to the relative strengths and weaknesses of those options. Although there is increasing evidence that online treatment can be effective, we are still learning about when, where and for whom it is most effective and suitable. For example, older people tend to prefer telephone counselling to online options. Telephone may therefore be more efficacious for that cohort (Rooke, Gates, Norberg, & Copeland, 2014).

Further, a recent national Australian study on help-seeking found that gamblers and their family members and friends did not know much about online help-seeking options, despite their rapid increase in availability and accessibility (Gainsbury et al., 2013). This speaks to the importance of promoting and advertising e-mental health services, especially if they are to attract a new cohort

of help-seekers. Promotion of services needs to be in line with preferences (for example, directing telephone counselling to older people and self-directed online services to younger people). Based on findings in allied fields, e-mental health could also be offered widely in community and treatment settings, in venues and gambling websites, and it should be embedded in responsible gambling programs.

Conclusions

This paper provides an overview of the current evidence-base for e-mental health interventions for people impacted by problem gambling.

We describe a situation in which the majority of e-mental health interventions have scarcely been evaluated (typically there are only one or two studies available for each type of intervention).

Given the apparent benefits and popularity of e-mental health, there is a need to act with imperfect evidence, however caution should be applied—especially when providing interventions that have yet to be deemed effective. With that in mind, our main conclusions are:

- E-mental health, as part of a range of service options, may encourage more people affected by gambling to access support and treatment.
- Program evaluations are required for different groups and situations, to demonstrate the efficacy and effectiveness of treatment options.
- We are yet to properly understand which e-mental health interventions work best for whom.
- Telephone-based treatments have accumulated the most comprehensive evidence base to date, but some other options also show promise. Combinations of e-mental health interventions, and integration of e-mental health with traditional supports, seem to have the greatest potential for powerful, targeted, and stepped intervention programs.

Recommendations

Providers should proceed with e-mental health because it can be used to reach underserved populations and those who otherwise would not seek help.

E-mental health should be offered in community and treatment settings, in venues and gambling websites, and it should be embedded in responsible gambling programs.

E-mental health services require targeted promotion and advertising, especially if they are to attract a new cohort of help-seekers.

Future initiatives need to take advantage of the existing service provision network and deliver more integrated options across a range of modalities.

E-mental health interventions into problem gambling should be developed and delivered as part of an evidence-informed approach. As new and innovative programs are developed, it is important that they are subjected to rigorous review and evaluation.

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