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Newall, P. W. S., Rockloff, M., Hing, N., Browne, M., Thorne, H., Russell, A., & Armstrong, T. (2022). How do academics, regulators, and treatment providers think that safer gambling messages can be improved? *Addiction Research and Theory*. https://doi.org/10.1080/16066359.2022.2148663

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Published online: 20 Nov 2022.

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How do academics, regulators, and treatment providers think that safer gambling messages can be improved?

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ABSTRACT

Safer gambling messages are a common public health intervention for gambling, and yet there is little evidence to support the variety of messages that are in widespread use. This paper thematically analyzed the perspectives of 21 participants – including academics, regulators and treatment providers – regarding the design characteristics of safer-gambling messages with the goal to improve on those already being used. The focus groups were semi-structured and discussed exemplar messages based on five areas of previous gambling research: teaching safer gambling practices, correcting gambling misperceptions, boosting conscious decision making, norm-based messages, and emotional messages. Five themes were supported by the three focus groups, including that messages: may be insufficient to change behavior; should respect the diversity amongst gamblers; should not contribute to gambling stigma; should provide norm-based information thoughtfully; and should trigger only positive and not negative emotions. These findings can be useful in developing messages that are based on themes endorsed by experts as being relevant to the design of effective safer-gambling messages. Generating a pool of messages that are evidence based is likely to improve on current messages, thus serving as a useful public health tool for promoting safer-gambling involvement.

There is an increasing consensus amongst researchers and policymakers that gambling should be treated as a public health issue (Korn and Shaffer 1999; Browne et al. 2016; Gambling Commission 2019; Wardle et al. 2019; Johnstone and Regan 2020; Livingstone and Rintoul 2020; Price et al. 2021). Safer gambling messages are a common public health intervention for gambling, and yet there is little evidence to support the efficacy of messages that are presently in common use (Rintoul 2022). A reminder to 'gamble responsibly' is perhaps the most frequently used message worldwide, despite eye tracking evidence suggesting that these messages are seldom looked at by gamblers (Lole et al. 2019). Disengagement with the 'gamble responsibly' message could be due to a variety of reasons: overexposure and habituation, passive and indiscrete placement, the generic nature of the advice, or lack of a concrete call to action. Moreover, it has been suggested that this message might even backfire and be counterproductive due to an insinuation of personal responsibility for excessive gambling, and thereby could contribute to self-stigma (Livingstone et al. 2019). These arguments are consistent with results from an experiment testing the similarly anodyne primary safer gambling message used in the

UK between 2014 and 2021, 'when the fun stops, stop', which showed no protective effects on concurrent gambling behavior (Newall et al. 2022).

One challenge with safer gambling messages is in reflecting and addressing the diversity of gamblers and their personal experiences. Analysis of UK bank data indicates that the median person who gambles uses just 1.2% of their spending on electronic gambling transactions, whereas the top 1% of highest-spending gamblers use 71.9% of their spending on electronic gambling transactions (Muggleton et al. 2021). Any population-based public health approach must make tradeoffs between messages catered toward the large number of gamblers who may be experiencing a small amount of harm, versus the smaller number of gamblers who may be experiencing a lot of harm (Delfabbro and King 2017; Browne and Rockloff 2018). Those experiencing more severe gambling-related harm might seem like the logical choice for targeting interventions, but as a broadscale and relatively unobtrusive and low-impact intervention, safer gambling messages may be structurally better suited to tailoring toward the larger low-risk group of gamblers. Stronger interventions, such as expenditure limits (Rintoul

and Thomas 2017) or self-exclusion (Hayer et al. 2020), may be more appropriate for gamblers experiencing more severe gambling harm, as they are the most likely to lose track of their expenditure and gamble to excess (Murch et al. 2020). Gamblers experiencing low level harms may be more receptive to low-intensity interventions to prevent the escalation of harmful gambling involvement. Targeting safer gambling messages to gamblers who experience less severe problems, who also account for a greater portion of the gambling population, means messaging campaigns may have a broader reach, potentially increasing message efficacy. However, any safer gambling messaging campaign should still be sensitive to the experiences of gamblers who experience greater harm, and strive to avoid content that might be counterproductive amongst this group. Messages may act against their intended purpose, for instance by creating reactance and thereby contributing to harm.

Livingstone et al. (2019, p. 10) suggest that gambling messages should focus, like tobacco warnings, on the severe potential harms from gambling, e.g. 'Gambling is associated with significant harms including increased risks of physical and mental health problems, separation, divorce, financial difficulties and bankruptcy, intimate partner violence and fraud'. However, there are some potential issues with this approach. Gambling harms are more diverse than tobacco harms (Langham et al. 2016), meaning that not all possible harms will be experienced by every gambler experiencing harm, even those who are most severely harmed by their gambling (Browne and Rockloff 2018). Messages that focus on specific, severe harms may therefore be considered irrelevant by the larger number of gamblers experiencing a small amount of harm or other types of harm.

Another issue is that gambling products and marketing activities are becoming increasingly varied, which therefore leads to a range of channels through which safer gambling messages could be delivered. Safer gambling messages are for example commonly applied to billboards, TV, newspaper, and radio adverts, and can be shown in gambling venues and on specific gambling products, such as electronic gambling machines (Critchlow et al. 2020; Davies et al. 2022). Different channels may favor different types of safer gambling message, and this is an issue which has in our view received little research attention. This issue will be returned to in the Discussion, with respect to the specific message types considered in this research.

The broader context beyond the specific delivery channel of gambling messages is also important, which adds further complexity to effective gambling messaging. Reflecting that message framing effects vary with the level of audience involvement (Maheswaran and Meyers-Levy 1990; Johns et al. 2017), highly involved gamblers are more impacted by negatively framed and challenging messages. For example, Munoz et al. (2010) found that the depth of information processing evoked by strong gambling warnings enhanced change among highly involved gamblers; but these warnings had less effect on the less involved gamblers. Munoz et al. (2010) further found that warnings purported to be from medical professionals, as opposed to gambling-providers,

were more effective in promoting protective gambling attitudes. Furthermore, whether a gambler is winning can have an influence on their message reception. Ginley et al. (2016) found that warning messages delivered to winning gamblers can moderate risky play, presumably as they try to lock-in gains. Perhaps unsurprisingly, alcohol intoxication slows people's ability to respond to protective messages (Phillips and Ogeil 2010). While it may not often be possible to control the context of how and where messages are perceived, these factors may ultimately impact on message effectiveness. A recent meta-analysis of gambling messaging suggested that messages can be helpful in particular with short-term behaviors; however, the overall literature showed signs of between-study heterogeneity which could not be explained by identified factors, suggesting that messaging effectiveness is subject to various unknown moderators (Bjørseth et al. 2020).

Due to ambiguity in what constitutes effective message content and the appropriate target group, it is important that a broad range of potential safer gambling messages is considered. Based on a review of the gambling literature (Rockloff et al. 2022), five candidate message themes were considered. Messages could attempt to: teach the safer gambling practices endorsed by low-risk gamblers (Hing et al. 2019), correct gambling misperceptions (Raylu and Oei 2004), encourage conscious decision-making (Armstrong et al. 2020), provide information about normal ranges of gambling behavior amongst the population (Behavioural Insights Team 2018), or induce emotions (Munoz et al. 2010). Previous qualitative investigations have explored the perspectives of gamblers (Davies et al. 2022) and people working within the gambling industry regarding what might constitute effective messaging (Behavioural Insights Team 2021). The present research mines complementary insights, *via* three focus groups conducted with academics, regulators, and treatment providers.

Method

The focus group interviews were conducted by a group of researchers from the project, and then transcribed by a professional service. This study was approved by the CQUniversity Ethics Committee (22416). Participants were not compensated for their time.

Participants

Potential respondents were invited to participate due to their expertise in gambling, by virtue of their professional involvement in gambling-related research, regulation or treatment. Details of participants' job titles or other similar information has not been disclosed in order to protect participant confidentiality. Instead, we describe the participants in the following broad terms. Academics included people in research-based roles, ranging from senior research fellow to professor. Regulators included people in varying roles within Australian government departments, from policy and regulatory officers, managers of policy and legislation,

commissioners and directors. Treatment providers were people who worked in areas with a gambling focus, including gambling and financial counselors and support service workers, solicitors and social justice advocates. The total sample consisted of three groups comprising the following numbers of participants: academics (6), treatment providers (6), and regulators (9).

Arguably, consumer groups might have been a useful addition to focus group discussion, although some participants did also self-report a lived-experience of gambling-related problems. Moreover, there could have been some value in mixing members from these groups, although it would be impractical under such arrangements to uniquely identify the membership of each speaker from the focus group recordings and transcripts.

An exemplar of each message group presented to participants

During the discussion of each message group, the purpose underlying the message was defined and two or three examples for each message group were presented to increase the understanding of each message type. A full copy of the interview materials, including all the exemplar messages provided within each type, is provided in the Appendix A. Participants were reminded that the overall goal of the messages were to help gamblers appraise their wagering behavior, including the amount of time and money spent wagering. This broad advice was given because, as was mentioned in the introduction, gambling is a heterogenous behavior, in that the appropriateness of a given safer gambling behavior will vary considerably depending on a given gambler's position in the spectrum of risk.

Teaching safer gambling practices
This message type was based on research on the safer gambling practices used by gamblers who were vulnerable to gambling harm based on risk factors, but who nonetheless did not experience gambling harm (Hing et al. 2019):

An example message is, 'When you gamble, always set aside a fixed amount you can spend.'

Correcting gambling misperceptions
This message type was based on research on gamblers' misperceptions (Raylu and Oei 2004), and the literature on corrective thought messaging in electronic gambling machines (Ginley et al. 2017):

An example message is, 'Gambling is not a good way to make money - the house always wins in the end.'

Boosting conscious decision-making
This message type was based on research describing ways in which gamblers can be prompted into thinking more consciously about their gambling (Armstrong et al. 2020).

For example, 'Tracey likes to bet on the winner of the local football match. Her last three picks have all won the

game. In the next game, the 2 teams are equally matched. All else being equal, what are the odds that her pick for the next match will also win the game?
a. 50%
b. More than 50%
c. Less than 50%

Feedback: While Tracey may be knowledgeable on football, in this instance the teams are evenly matched and therefore, it is irrelevant whether or not Tracey has some football expertise. Each gamble is independent from the last so for her next gamble, the odds of picking a winner out of two otherwise equal opponents is still 50/50.'

Norm-based messages
This message type was based on research suggesting that the provision of norm-based information about average levels of behavior might affect gamblers' behavior (Behavioural Insights Team 2018):

For example, 'On average, one person's gambling problem hurts six of their close family and friends.'

Emotional messages
This message type was based on research suggesting that gambling messages may affect behavior by harnessing negative emotions such as fear (Munoz et al. 2010):

For example, 'How is gambling hurting your relationships?'

Procedure

Focus groups were conducted online in a 2-h session using the Zoom platform during the month of September 2020. Some participants joined via computer videoconference while others joined via telephone. Group members introduced themselves at the start of the session. The focus groups were semi-structured, allowing for potential back-and-forth between participants and interviewers in response to any discussion prompts. Participants were advised that the purpose of the focus groups was to discuss which messages they thought would be effective in minimizing harm and why. This was to be done through appraising the exemplar safer gambling messages and suggesting alternative messages. Participants sometimes described gamblers experiencing different levels of gambling-related harm in terms of the Problem Gambling Severity Index (PGSI; Ferris and Wynne 2001), a measurement of disordered gambling that is commonly used as a proxy for gambling-related harm (Markham et al. 2016).

The prompts used included:

- What do you think will be the efficacy on different groups (e.g., different categories on the Problem Gambling Severity Index scale)?
- What do you think might be some unintended consequences - 'backfire effects' - from this message?
- What will be the stigmatizing effects of this message?

- How engaging do you think this message is?
- How much will using fear or other negative emotions cause people simply to just avoid the message (i.e., click straight through)?

All participants were encouraged to contribute to the discussions, with the interviewer asking, 'does anyone have something more to add?' prior to moving on to the next part of the discussion.

Analysis

Interview scripts were imported into Nvivo software version 20, and then analyzed *via* thematic analysis (Braun and Clarke 2006), where the interview scripts were examined iteratively to uncover emergent themes from the data. The transcripts were first read and reread so that the first author could become familiar with the data. In the next stage, a list of preliminary codes was generated by the first author, and synthesized to reflect patterns of shared meaning across the data. A discussion of these codes with the second author provided space to reflect on these codes and their interpretation. This process led to the creation of the final list of five themes, as described below, which all authors agreed upon. Given the modest size of the dataset, thematic analysis was conducted on the whole dataset, rather than different themes being derived from the three subsets of participants. Discussion points were broadly similar across the subsets.

Findings

Theme #1: messages may be insufficient to change behavior

Participants from all groups thought that messages could be insufficient to meaningfully change behavior, at least regarding certain groups of gamblers, such as people who gamble frequently and young men (with between-group differences amongst gamblers covered more extensively in the second theme below). Gambling can be a habitual or engrossing activity, and messages are a rather unobtrusive addition to gambling environments and products. Due to these factors, messaging was thought to be less effective at reducing or minimizing harm for those who gamble very regularly, which the corresponding insight that messages should perhaps focus on lower-risk and lower-frequency gamblers:

> Have a dedicated budget - the second part of that problem is most of our research has said just giving a notice like that is insufficient because all it is - is another slogan. It actually doesn't say anything about how you set a budget. Has nothing on that. (Academic 1)

> If people are already in a situation … betting on about a second division Belgium tennis [match] because that was the next thing on. A message saying gambling is bad for you, that's probably beyond that, we want to catch them before that point. (Regulator 1)

This difficulty of getting through to gamblers experiencing higher levels of harm was also noted in the treatment providers focus group, and was specifically attributed to the way that these gamblers can lose track of their surroundings while gambling. Breaking that rhythm of repeated gambling and capturing their attention was identified as the biggest challenge in getting through to gamblers experiencing higher levels of harm:

> It's grabbing their attention, because people just get into a rhythm of gambling and you've got to do something that just says, "Hey, rethink," … But it's grabbing their attention that we've found to be probably one of the hardest things, to say, "Stop. There is an alternate way. There are other things that you can do." (Treatment provider 6)

Through their different perspectives, the participants were each aware that gambling environments can be highly stimuli-laden environments, perhaps with live sporting events being played on a TV, and the sounds of people playing and winning on gambling machines. Amongst all of these stimuli, safer gambling messages can be rather small and uninteresting, in particular messages that gamblers have seen many times before. For all of these reasons and more, safer gambling messages may be an overly light-touch intervention, which may not be sufficient to affect behavior.

Theme #2: messages should respect the diversity amongst gamblers

As a group, treatment providers tended to largely discuss gamblers experiencing higher levels of harm, because this is the group of gamblers that their day to day focus in their organizations is on. Given that safer gambling messages are a relatively light-touch intervention, any message may fail to have much impact on these gamblers:

> … not all the messages are going to fit everybody. … We see mostly people that have been gambling a long time and have a very big amount of debt or have a lot of consequences. … when you're trying to get messages across to people in that situation, it might be different to the messages [to people] with low harm. But of course, that's very important, to try and get messages across to them as well. (Treatment provider 5)

In contrast, one regulator raised the possibility that people experiencing low-harm might see the message as not being applicable to them:

> Where this should be pitched is at people who are at risk of gambling harm, some would say that's everybody … So, I think it is anyone who is potentially at risk and you're not going to capture everybody. People will say, "I'm fine I'm under control that doesn't apply to me, it applies to others who are in such a phase that they don't actually want to listen to anything." But there's a big band in the middle that we should be targeting these at, I think. (Regulator 1)

This issue was similarly raised in the focus group with academics, where one participant stated this same concern in terms of the Problem Gambling Severity Index. They raised the many alternative purposes of messaging and how they need to promote different behaviors for people at different levels of gambling harm:

> Is it to reduce harm in people with problem gambling, or to reduce harm from problems [that are] developing, or is it to get

people to stick to their limits … across the board it's about reducing gambling? Again, our research has shown that when you look at PGSI score and these messages, they score differently according to levels of PGSI. (Academic 1)

Although participants tended to focus on different groups of gamblers, with the treatment providers being most concerned about gamblers at the highest level of risk, they were all aware that different levels of harm have very different implications for what they should do in order to reduce that harm. A gambler at a low level of harm might only have to become more aware of their budget and the exact amount of money that they can afford to spend on gambling. Whereas, a gambler experiencing a high level of harm might need to stop gambling entirely, for example by self-excluding from gambling venues. That gambler may also need to seek out treatment, and also enlist the help of friends and family. These large differences between gamblers explain why messages for different groups of gamblers might need to have quite different sets of content.

Theme #3: messages should not contribute to gambling stigma

The three groups unanimously emphasized the importance of using messages that would not contribute to potential negative perceptions around gambling and gambling-related stigma. Regulators emphasized the potential for stigma from previous gambling messaging campaigns. In the following example, the message was found to alienate, instead of resonate with, the audience it was targeting:

> … we had a previous [campaign] around EGM [electronic gambling machine] gambling. … saying like, "oh you know, basically the kids can have cereal for dinner" and things like that. We found in the testing … that, really, label avoidance was the main sort of consequence from that type of messaging. (Regulator 3)

These concerns were echoed by treatment providers, who emphasized that such material could trigger the avoidant state mentioned under the first theme, which is likely to reduce receptivity to safer gambling messages. This treatment provider explained that the negative emotions aroused by the message also risked prompting further gambling:

> One of the main reasons people relapse is because of negative emotions. And when we re-looked at [anonymized gambling help service], we had to change the way we were actually connecting with people. …on the help line …if we ask for these confessionals, "How much have you gambled? How long have you been gambling for," people just get really guilty, they get really ashamed and they just go back to that behaviour, that erratic behaviour where they can't think critically. (Treatment provider 1)

In fact, treatment providers' concerns that messages could potentially contribute to gambling-related stigma was the key theme to come out of that focus group. There was only one potential message type that they thought might be helpful, and that type will be discussed under the next theme. For reasons stated earlier, gamblers who experience more severe harm might not be the most appropriate audience for safer gambling messages, but safer gambling messages should still be carefully designed to avoid backfire effects amongst this group. The following additional quote

highlights how overriding this concern was amongst treatment providers:

> And yes, using the word "problem", I think problem is just negative to start off with. It's like Participant 5 was saying before, we talked about the flavour of language that's used as well to de-stigmatise it and make people feel more comfortable. I didn't want to talk about some of those things. I knew, and I think Participant 1 said it, I don't need you to tell me that it's affecting my life because I know that. I need support around it, that's really what I need, but any doors open. (Treatment provider 4)

Academics raised the same concerns about gambling stigma, where messages could alienate people who are currently experiencing harm and potentially cause them to become less likely to seek help. Echoing the perspective of Regulator 8 from another focus group, this concern was thought to be particularly relevant to *safer gambling practices* messages, which might multiply problems and stresses for people:

> Often when people are depressed, that's why they go and gamble, particularly [on] pokies. We know that a fair bit. So, would that be potentially stigmatising someone who is depressed? It's possible. (Academic 2)

Theme #4: norm-based information should be provided thoughtfully

Norm-based messages can be constructed in ways that are effective, or can backfire by legitimizing and therefore encouraging undesired behaviors. For example, a message that was attempting to prevent people from stealing wood from a forest, instead served to normalize that behavior, and ended up encouraging it (Cialdini et al. 2006). Overall, the norm-based message type was received positively, although participants identified a number of ways that these messages could be improved. Similar to the messages that ended up normalizing the theft of wood from a forest, participants thought it was important that these messages did not serve to normalize high levels of gambling expenditure and harm:

> Because one of the things, you could interpret these as [follows]: if you hurt your family and friends, you're pretty much a normal gambler because one in six do it. So, if you're trying to change subjective norms - that's not going to do it. That's going to reinforce those norms. (Academic 1)

Other participants in the regulator group were enthusiastic about norm-based messaging around gambling expenditure:

> I think there might be value in putting out a normative message about how much people actually spend on gambling because most people spend quite a small amount like $20 a week. If you put that out as a message, it can encourage people to realise that them spending $200 a week is actually a lot more than is normal. (Regulator 5)

> That's one issue, if we're going to be able to explore harms, or whether or not we try and normalise it, I love that example of the $20 versus $200 that starts to have people thinking a little bit, comparatively, about their behaviours as opposed to others. (Regulator 7)

One way to reduce potential backfires from norm-based messaging around gambling expenditure was highlighted by

one of the academic participants, who commented how the skewed nature of gambling distributions affect the population mean more than the population median:

> … you just need to be a little bit careful talking about average frequency and spend and stuff because, if you do it as a group, obviously your heavy outliers, … [people experiencing gambling problems] … tend to push up those averages. So, you've just got to be careful in the way you express it. Otherwise, you can start to normalise levels of expenditure that are still potentially harmful. (Academic 5)

Given that gambling expenditure and time spent gambling are positively skewed, with some large outliers toward the right of the distribution, population means will be above more than what 50% of gamblers experience. Population means may therefore normalize and reinforce undesirably high levels of engagement with gambling. Given this skewness, population medians will be lower than these population means, however, and so norm-based messages might therefore be best expressed in terms of median players, for instance, 'most gamblers spend less than x hours gambling a week.'

Theme #5: trigger only positive and not negative emotions

The emotional message examples in the focus group materials were primarily focused on the power of negative emotions to harness behavioral change (Mutti-Packer et al. 2022), similar to the graphic health warnings on cigarettes (Hammond 2011; Noar et al. 2020). However, some gambling researchers have also suggested that contrasting *positive* emotional messages should also be given further consideration by the field (Harris et al. 2018). Stakeholders in each of the three focus groups brought up the potential utility of safer gambling messages that harness hopefulness and other positive emotions, as ways of promoting gamblers to change.

Participants in the regulator focus group had reached this perspective from their experiences in designing population-based campaigns:

> Something that we've tried in [X jurisdiction] is a positively framed emotional message. So as in, "if you're gambling too much you might feel stressed and if you were to reduce your gambling, you would actually feel better." There's an ad … with the blowing up the balloon and it reducing the stress with a reduction in gambling. So, there is a way to frame emotional messages to focus on positive emotions. (Regulator 8)

A very similar perspective was brought forward in the remaining two focus groups:

> Certainly, in our messaging the [organisation]s found that trying to put a more positive spin on things or "you will feel better by doing X" or "there's a positive outcome from what you're doing", people seem to support that a bit more. Admittedly … that was in the PG [problem gambler] harms group. That was who we were trying to talk to … But certainly, the idea of rather than going with "what damage have you done" it's "how much better will things be if you do X" or "you can do Y to feel better." (Academic 5)

> I think it's really important to give them some hopeful messages, because they are going to be distressed. Despair is what people I talk to say. So, we need to say, "You know what?

It's okay to feel upset, or it's normal to be upset. With the right help, you can get better. We can help you stop." Really giving those messages to pull them out of that despair is really important. That's what I've found all the years I've worked with people and from my research. (Treatment provider 1)

Overall, this unanimous recommendation to use positive emotions was a useful outcome from the focus groups. Gambling is seen as a public health issue, and therefore approaches are often recommended for gambling based on existing public health issues such as smoking. While the population-level effects on gambling are similar to smoking, there are also unique differences between gambling and smoking. In particular, the very high levels of expenditure amongst some gamblers, and the shame and secrecy that may come with that expenditure, is different in gambling to smoking. These unique issues mean in some instances that approaches used in smoking may not always be appropriate for gambling. The need to only invoke positive and not negative emotions was a good example of this point.

Discussion

This paper thematically analyzed the perspectives of 21 participants, including academics, regulators and treatment providers, regarding the design of improved safer gambling messages. The focus groups were semi-structured, and participants discussed exemplar messages based on five areas of previous gambling research: teaching safer gambling practices (Hing et al. 2019), correcting gambling misperceptions (Raylu and Oei 2004), boosting conscious decision making (Armstrong et al. 2020), norm-based messages (Behavioural Insights Team 2018), and emotional messages (Munoz et al. 2010). Five themes were supported by the three focus groups, including that messages: may be insufficient to change behavior; should respect the diversity amongst gamblers; should not contribute to gambling stigma; should provide norm-based information thoughtfully; and should trigger only positive and not negative emotions. These insights could in future help guide an improved general model of effective safer gambling messaging, as a recent meta-analysis of quantitative studies suggest safer gambling messaging effectiveness is subject to presently-unknown moderators safer gambling (Bjørseth et al. 2020).

Overall, these themes have a number of implications for the implementation of safer gambling messages. Given that messages may be insufficient to change behavior, they should not be relied on as a public health approach to gambling, and must be used in conjunction with interventions aimed at gamblers experiencing higher levels of harm. Structurally, safer gambling messages are better suited to the larger number of gamblers experiencing lower levels of harm, and should be complemented by interventions such as self-exclusion for gamblers experiencing higher levels of harm. Saying that, messages need to be designed thoughtfully in ways that do not contribute to stigma amongst higher-harm gamblers. Messages should also use norm-based information thoughtfully, as the normalization of high levels of expenditure and harm could also have unintended consequences (backfire). Finally, unlike messages in smoking,

which can effectively harness negative emotions, the groups were unanimous in their recommendation to leverage positive emotions only.

This research was subject to various limitations. The present research did not investigate the issue of the various channels across which safer gambling messages can be delivered, such as on TV, billboards, or on gambling products. This is another issue which may affect the five types of safer gambling message considered here differently, as for example the correcting gambling misperceptions messages were on average relatively short, and could potentially suit a range of distribution outlets. By comparison, the boosting conscious decision making messages were longer, which make them suitable only for a narrower range of delivery channels. Additionally, only one focus group was conducted within each of the three groups, and further sampling of each group may have yielded contrasting insights. Participants were all from Australia, and so these findings may be less relevant to gamblers in other jurisdictions. Although some participants did have a lived experience of gambling harm, including a dedicated sample from within this group would have provided additional perspectives (Ortiz et al. 2021), as would the recruitment of recreational gamblers (Davies et al. 2022). Industry could also provide alternative reflections on safer gambling messages (Behavioural Insights Team 2021). Although participants all brought a diverse range of experiences in gambling to their responses, these answers may not necessarily correspond to the influence of actual messages on gamblers' behavior, for example, as shown through field trials (Behavioural Insights Team 2018; Heirene and Gainsbury 2021). In particular, although negative emotional messages were not well-supported in the interviews, these messages have proved effective for smoking cessation (Biener et al. 2004). Therefore, there is a case for exploring their potential in future research with aforementioned safety concerns, such as stigmatizing effects, kept in mind.

There is another potential limitation regarding the extent to which the exemplar messages provided to participants accurately reflect their categories. For example, research on boosting conscious decision making is relatively recent and scarce in gambling research (Armstrong et al. 2020), although this is a topic which has a longer history in the psychology literature (Grüne-Yanoff and Hertwig 2016). It is possible that the exemplars provided for the boosting conscious decision making group share some conceptual overlap with the more established area in gambling research of correcting misperceptions, and that more unique exemplar messages could have been provided to participants for this category. For example, gamblers could take conscious decisions to take time out during an immersive gambling session (Murch et al. 2020). Similar issues may have affected the norm-based message exemplars given, as these tended to focus on the distribution of harm experienced in the population. Other norm-based messages trialed in the literature have for example focused on gambling expenditure, either with respect to a gambler's past behavior (Auer and Griffiths 2020), or compared to other gamblers (Behavioural Insights

Team 2018; Berge et al. 2022). It is possible that a different subset of exemplar messages may have yielded different insights to those observed here.

Conclusion

The design of safer gambling messages involves the careful consideration of at least five key factors. Some of these factors reinforce established positions within gambling research, for example, the need to avoid contributing to stigma (Livingstone et al. 2019), and the view that messages may be insufficient to change behavior (Rintoul 2022). However, gambling researchers have frequently advocated for negative emotional messages such as the fear-based appeals used in smoking (Munoz et al. 2010, 2013; Mutti-Packer et al. 2022), with positive emotional messages being a minority alternative position (Harris et al. 2018). The present results suggest that researchers should more carefully consider the role that induced emotions may contribute to any messaging strategy.

Ethics approval

This study was approved by the CQUniversity Ethics Committee (22416).

Disclosure statement

Funding

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Appendix A.   Interview materials

Focus group structure
Aims of focus groups

1. Share the results of our literature review with stakeholders, so that each workshop will proceed from a shared framework and basis of understanding about current knowledge on effective messaging. Literature review will keep participants focused on the most promising avenues of messaging to explore in the trial.
2. Expand our universe of potential messages and message types that could merit inclusion in the trial
3. Evaluate message themes and properties, with the aim of identifying those that are of most interest for testing
4. Work toward a consensus regarding the features that are largely agreed upon as important for subsequent empirical evaluation and comparison.

Note. Several aspects of messaging are well known, such as prominent placement of the message, and therefore should not unduly occupy discussion at the workshops/interviews.

Structure of sessions

Introduction

Thank you all so much for coming. My name is Hannah Thorne/Nancy Greer and I am a PhD candidate at CQU. I'll be facilitating the focus group. Just a note to everyone to put yourselves on mute when you are not talking as we sometimes get feedback if mics are open. All feedback will be anonymised and you are welcome to request a copy of the project report.

There are two other CQU researchers here as well and I will just get them to introduce themselves now starting with Nancy/Hannah …

Brief overview of project

I'll start us off by giving a brief overview of the project and the aims of this focus group and then we'll go around our little Zoom room and if you are comfortable, get everyone to introduce themselves. This project is supported by a grant from Gambling Research Australia and the Principal Investigator is Prof. Matthew Rockloff.

The aim of the project is to conduct a behavioral trail to test design features for consistent gambling messaging for online wagering (race and sports betting). The trial will test and identify messages that best encourage online sports and race bettors to become more aware of their gambling and decisions, boost conscious decision-making, and correct any misperceptions about gambling. It will also test the efficacy of the messages for different groups of people (e.g. no risk, low risk, moderate risk, problem gambling) and any unintended consequences

or stigmatizing effects. The current phase we are in is expanding our universe of potential messages to use in the trial.

The findings of this project will be used to inform the Consistent Gambling Messaging measure as outlined in the National Consumer Protection Framework for Online Wagering. The National Framework consists of 10 measures, which aim to reduce the harm that can be caused by online wagering to consumers. The measures will provide people with easy-to-use tools and information to better control their gambling from a voluntary opt-out pre-commitment scheme through to a national self-exclusion register. Six measures have already been implemented with the remaining measures – including Consistent Gambling Messaging – subject to further development, trialing and testing.

Zoom admin

We will try to ensure that everyone is given the opportunity to speak. That might mean that I ask people directly or if you feel like you want to say something but don't want to interrupt the person speaking, you can use the raise-hand function or write something in the chat box.

Group introductions

{Introductions and scan of experience of those in the room around warning messages (Go around the 'room' with introductions (facilitator selecting people as unclear on Zoom who is 'sitting' where): name, location, organization, role, e.g. counselor.), experience of messaging.}

Literature review

Philip to briefly inform the group of literature review key findings with the goal of keeping p's focused on the most promising avenues to explore in the trial. IMPT: keep high level as we do not want to 'tell' people what to say.

Discussion

We want to discuss what messages you think would be effective in minimizing harm and why. The overarching aim of the messages is to provide people with an opportunity to appraise their online wagering behavior, including keeping time and money spent within their means. We'll try to discuss a number of message themes today so please be understanding if I need to move you on from a discussion (as I am conscious that your time is valuable). *We're interested in your perceptions, experience, knowledge and ideas about gambling product warning messages.*

● The first theme that we want to explore is messages that best encourage online sports and race bettors to *become aware of their gambling behavior and decisions.*
    ○ Examples:
        ■ When you gamble, always set aside a fixed amount you can spend.
        ■ Have a dedicated budget for your gambling and stick to it.
        ■ Gambling when you are feeling depressed or upset can lead to spending more money than you mean to.
● The second theme that we want to explore is messages that *boost conscious decision making.*
    ○ Examples:
        ■ Q50. Tracey likes to bet on the winner of the local football match. Her last three picks have all won the game. In the next game, the 2 teams are equally matched. All else being equal, what are the odds that her pick for the next match will also win the game?
            □ a. 50%
            □ b. More than 50%
            □ c. Less than 50%

Feedback: *While Tracey may be knowledgeable on football, in this instance the teams are evenly matched and therefore, it is irrelevant whether or not Tracey has some football expertise. Each gamble is independent from the last so for her next gamble, the odds of picking a winner out of two otherwise equal opponents is still 50/50.*

- Going to the races, Belinda noticed she's won every time she brought her partner to the track. Her chances of winning next time are:
    - a. Better if she brings her partner
    - b. Worse if she brings her partner
    - c. *About the same, regardless of whether or not she brings her partner*

Feedback: *In gambling, no one person is more or less lucky than anyone else. Similarly, despite many superstitions suggesting otherwise, there is no strategy or ritual that is likely to help you win. Belinda is incorrectly attributing her wins to the presence of her partner. Her good fortune when accompanied by her partner is nothing more than a coincidence.*

- The third theme that we want to explore is messages that *correct gambling misperceptions.*
    - Examples:
        - Gambling is not a good way to make money – the house always wins in the end.
        - Australians lose $24.8 billion a year gambling – the house always wins in the end.
        - Systems or strategies will not make you successful at gambling.
- The fourth theme that we want to explore is messages based on *norm-based information.*
    - Example:
        - On average, one person's gambling problem hurts six of their close family and friends.

- One in five people who gamble experience harm from their gambling.
- Many gamblers have relationship conflict as well as feelings of regret and anger about their gambling.
- The final theme that we want to explore is *emotional messages.*
    - Example:
        - How is gambling hurting your relationships?
        - Have you ever been late to pick up your child because of your gambling?
        - What else could you be doing with this money?

Prompts (used to keep conversations above 'on track')

- What do you think will be the efficacy on different groups (e.g., different categories on the Problem Gambling Severity Index scale)?
- What do you think might be some unintended consequences – 'backfire effects' – from this message?
- What will be the stigmatizing effects of this message (e.g., norm-based information)?
- How engaging do you think this message is?
- How much will using fear or other negative emotions cause people simply to just avoid the message (i.e., click straight through)?

Debrief and thank you

Thank you for your time today. Your insights will be very informative for our next research phase of testing effective gambling messaging with gamblers. At the end of the project, we will be delivering a report to Gambling Research Australia. Please let us know if you are interested in reading this report and we will email you a link to it when available. If you have any questions, feel free to ask now or follow myself or Nancy/Hannah up *via* email. Thank you again for your time.