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Social norms and goal-setting interventions to promote responsible gambling in low-to-moderate online gamblers: protocol for a four-arm randomised controlled feasibility study

Emily Arden-Close ,[1] Sarah Thomas ,[2] Reece Bush-Evans ,[1] Ruijie Wang ,[1] Elvira Bolat ,[3] Sarah Hodge ,[1] Keith Phalp ,[4] John McAlaney [1]

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For numbered affiliations see end of article.

Correspondence to
Dr Emily Arden-Close; eardenclose@bournemouth.ac.uk

ABSTRACT

Introduction Gambling is increasingly recognised as an important public health issue. Problem gambling is associated with highly negative impacts on physical, psychological and social well-being, not only for those who gamble but also for those around them. There has been a rapid expansion of internet gambling and attributes such as continuous play and instant rewards, and enhanced privacy may lead to a greater likelihood of gambling-related harms. In this randomised controlled feasibility study, we are testing (1) the acceptability and feasibility of three online responsible gambling interventions targeting people with low-to-moderate risk of online problem gambling and (2) the feasibility of a future full-scale randomised controlled trial (RCT) to test their effectiveness and cost-effectiveness.

Methods and analysis Four-arm randomised controlled feasibility study with qualitative substudy. One-hundred and forty UK residents with low-to-moderate risk of online gambling recruited via gambling operators and social media will be randomised (1:1:1:1) to either (1) goal setting, (2) descriptive norms messages (challenge perceptions of peer behaviours), (3) injunctive norms messages (challenge perceptions of peer attitudes) and (4) control (delayed intervention). Interventions will be delivered over 6 weeks and individually tailored. Outcomes, administered online, will be measured at baseline, 7 weeks, and 3 and 6 months post randomisation (including gambling risk behaviours and cognitions, anxiety and depression, quality of life, health use and productivity). Analyses will be descriptive, focusing on feasibility and acceptability of the interventions and study procedures. Telephone/online interviews, with a subsample of approximately 30 participants, will elicit experiences of participating in the study. Prespecified progression criteria will guide decisions around whether to progress to a definitive RCT.

Ethics and dissemination Ethical approval obtained from Bournemouth University Research Ethics Committee (reference number 33247). Participants will be given a participant information sheet plus a 'Key Facts' summary and will provide informed online consent. Findings will be published in peer-reviewed journals and presented at conferences and public engagement events.

Trial registration number ISRCTN37874344.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ We will test the relative acceptability and feasibility of injunctive and descriptive social norms in the context of online gambling.
⇒ We will use objective gambling data obtained from operators to validate participant self-reports of their gambling activity.
⇒ This study will use a mixed methods approach, enabling us not only to determine the feasibility and acceptability of study design, recruitment and randomisation procedures but also to explore experiences of participation in the intervention and the study.
⇒ Due to the nature of the interventions, blinding of participants will not be possible.
⇒ Participants will be self-selected.

INTRODUCTION

Gambling for money is a popular leisure activity worldwide but can become problematic for some. Problem gambling is detrimental to psychological and physical well-being and is associated with harmful personal and societal costs.[1–5] Thus, gambling is an important public health concern.[6 7]

Internet gambling, which facilitates high accessibility, anonymity, appealing design mechanics, immersive interface and ease of spending, is associated with higher risk and severity of gambling problems than land-based gambling.[8–10] Internet gamblers are more likely to make riskier bets,[11] consume more alcohol and illicit drugs,[12] face higher debt levels,[13] and are less likely to recognise

problems[14] than land gamblers. Internet gambling enables rapid continuous play, instant rewards, gambling while intoxicated and enhanced privacy, which may undermine a gambler's ability to maintain control and increase proclivity to chase losses.[15 16] Given the rapid expansion of internet gambling, the scale of problem gambling behaviours is at risk of increasing, with the current UK gambling prevalence estimated at 0.5%.[17] Among adolescents, 5% of teenagers in Europe are estimated as engaging in problem gambling behaviours.[18] As national lockdowns due to COVID-19 have led to rises in online gambling in some at-risk groups[19] and help-seeking is rare among individuals with low or moderate risk of problem gambling,[20] interventions to prevent gambling-related harms are urgently needed.

While a recent framework highlighted the need for behavioural science approaches and multiple stakeholder involvement to minimise gambling harms,[8] research focused on guiding evidence-based policies or practice is limited. Recent reviews on strategies and interventions for gambling-related harm[21–23] revealed the narrow scope of existing public health interventions and poor quality of current evidence for effectiveness, underlining the need for further research.

Many risk factors for gambling are heightened when using mobile (eg, smartphones and tablets) and supplementary devices (eg, gaming consoles and interactive televisions).[24] Gamblers who use mobile devices typically have higher average bets and longer, more frequent sessions than computer users.[25] Given that 95% of the UK population aged 16+ own a smartphone[26] and minimal user effort is required, mobile phone-based interventions to prevent or reduce gambling harms will likely be low cost, with wide reach. Text messaging interventions have not reduced gambling severity in problem gamblers[27 28] but may be more effective as a preventive intervention for individuals with low-to-moderate risks of online problem gambling.[27] Potential population-level benefits would be considerable, given estimated costs of up to £1.27 billion/year nationally from problem gambling.[29] Although attrition is a significant issue for mobile app interventions, reducing the number of points where it might occur can help to minimise it.[30]

Interventions involving goal setting have shown robust effects on behaviour change in numerous contexts.[31 32] Goal setting is optimally effective when goals are public, set face-to-face in combination with behavioural monitoring from another person, measurable and observable.[33] A brief in-person goal-setting intervention focusing on gambling expenditure[34] reduced spending among individuals with moderate risk and problem gambling but not non-problem or low-risk gambling. However, this intervention was delivered in one 15 min session. Repeated sessions are more effective than single sessions in enabling sustained behaviour change.[35] Mobile devices offer possibilities for tracking and sharing goals and for tailored feedback, core to goal-setting theory.[36 37]

Evidence suggests interventions targeting social norms (rules and standards understood by group members that guide or constrain social behaviours[38]) could work well in promoting responsible gambling (RG).[39] Social norms comprise 'descriptive' (perceptions of peer behaviours) and 'injunctive' (perceptions of peer attitudes) norms.[40] Social norm interventions operate on the basis that individuals typically believe their peers behave in riskier ways and hold riskier attitudes than is actually the case, misperceptions that have been documented extensively around alcohol and substance use in young adults.[41–43] Technology can be used to deliver population-level social norm campaigns, automating the process of creating personalised messages and delivering them to the intended recipients.[40] The social norms approach is one of the most cost-effective population-level methods of reducing alcohol harms on American college campuses.[44]

To date, the limited randomised controlled trials (RCTs) assessing the effectiveness of social norms in managing gambling behaviours have mainly focused on university students. For example, a single exposure to a personalised norms message reduced risky gambling behaviour and misperceptions at 3-month follow-up.[45] In contrast, a recent systematic review and meta-analysis[46] found no evidence of reductions in gambling frequency. However, this review included only adults with problematic levels of gambling. Many social norm interventions are delivered at a population level and aimed at individuals below the threshold for clinical diagnosis of a harmful behaviour.[39] Further, most social norm intervention studies have focused on descriptive norms. It remains unclear whether injunctive norm interventions can change behaviour or attitudes more effectively than descriptive norm interventions.[40] A recent meta-analysis recommends that, given their brevity and low cost, future research both investigates the utility of social norm interventions in alerting people to problem behaviour as a first step to facilitate motivation and consideration of behaviour change in those at lower risk of harms and assesses the cost-effectiveness of such interventions.[46]

As gamblers often hide the true extent of their behaviour from others,[47] preventive programmes maintaining privacy and anonymity will likely be well received. While previous studies targeted prevention and early intervention strategies by focusing on RG tools,[48] pop-up messages[49] and problem gambling education materials,[50] interactive messages involving goal setting and social norms have not been tested in relation to online gambling. Individuals who engage in problem gambling place higher confidence in and believe they have greater control over their bets than non-problem gamblers.[51 52] These cognitive distortions are associated with both emotional distress and greater problem gambling severity.[5] Hence, self-guided personalised digital approaches challenging these beliefs may facilitate positive changes in gambling behaviours and also emotional well-being. Many internet-based interventions rely on self-reported gambling behaviour, which is susceptible to

social desirability bias[53 54] and inaccurate reporting.[55–57] As a first step in tackling this problem, validation of self-reported gambling behaviour via player data obtained directly from gambling operators is needed.

Aims and objectives

The aims of this multiarm randomised controlled feasibility study are to assess (1) the feasibility and acceptability of three RG interventions (goal setting, descriptive norm messages and injunctive norm messages) and (2) the feasibility of conducting a full-scale effectiveness and cost-effectiveness superiority trial testing the aforementioned interventions, which aim to reduce the likelihood of individuals moving from low or moderate risks of problem gambling to problem levels of gambling.

The specific objectives are to:

- Assess the acceptability and feasibility of key aspects of study design, recruitment and randomisation processes, the data collection strategy and the respective interventions.
- Estimate eligibility, participation and drop-out rates (from intervention and/or study) and adherence to the three interventions (number of goals set and number met (goal-setting arm) and number of social norm messages read (social norms arms)).
- Explore participants' experiences of participating in the trial, receiving the interventions and completing the outcome measures, via qualitative interviews (telephone/video conference/secure messaging app (WIRE)) and participant feedback via WIRE about intervention messages.
- Determine whether a social norms approach to promoting RG is acceptable to individuals at low-to-moderate risk of online problem gambling, as measured by uptake of and adherence to the interventions and feedback from the qualitative interviews.
- Assess the acceptability and suitability of the outcome measures and inform the selection of the primary outcome for a future full-scale RCT.
- Collect data on the variability of outcome measures to inform a sample size calculation for a larger trial and obtain preliminary effect size estimates.
- Provide preliminary information about levels of gambling at which the intervention is most beneficial.
- Pilot questions about primary healthcare use and productivity levels in preparation for an economic evaluation in a future definitive RCT.

METHODS AND ANALYSIS

Design

This is a 26-week, four-arm, parallel group, pragmatic randomised controlled feasibility study with a nested qualitative study. Participants will be randomised to one of four arms (goal setting vs descriptive norms vs injunctive norms vs control) in a 1:1:1:1 ratio (figure 1). Those randomised to the control arm will have the option of receiving their choice of one of the three interventions at the end of the feasibility study (6 months following randomisation). This design has the potential to minimise the impact of disappointment those allocated to a non-intervention group might experience. A nested qualitative interview study will provide insights into experiences of participating and acceptability of study processes, the respective interventions and outcome measures.

We will report the study and findings in line with the Consolidated Standards of Reporting Trials (CONSORT) extension for randomised controlled pilot and feasibility studies,[58] the CONSORT extension for reporting of multiarm trials[59] and for psychological interventions,[60] the CONSORT ehealth guidelines,[61] and guidelines for describing interventions[62] and reporting of qualitative research.[63 64] The Standard Protocol Items: Recommendations for Interventional Trials reporting guidelines will be followed.[65]

The study is now in follow-up. The first participant was recruited on 5 May 2021 to complete the prebaseline social norm questions. The first participant was randomised on 26 January 2022 and the final participant on 17 August 2022. The final 6-month follow-up questionnaires are scheduled for administration on 16 February 2023.

Patient and public involvement (PPI)

Two people with former gambling problems were involved in developing this protocol, including providing feedback about the study questionnaires. People with a former gambling problem and those who gamble at low-to-moderate levels will provide input throughout the study including developing the interview topic guide, interpretation and dissemination of findings. We will follow national PPI standards[66] and record outcomes and impacts of PPI.[67]

Sample size considerations

As this is a feasibility study, sample size considerations relate primarily to determining the feasibility of progressing to a definitive trial. Following Lewis *et al*'s recommendations,[68] we based our sample size on ensuring adequate power to evaluate signals for progression across our three prespecified progression criteria relating to (1) study uptake, (2) study retention and (3) intervention adherence. This involves using a multicriterion hypothesis testing approach (for a detailed explanation, see Lewis *et al*[68]) focused around the traffic light system convention for progression criteria.[69] Using the look-up grid Lewis *et al*[68] provided (to meet 90% power with one-tailed 5% alpha), of our three specified progression criteria, intervention adherence (criterion 3) requires the largest sample size (34 per arm; see table 1). For convenience, we rounded this up to 35 per arm, meaning 140 participants overall, in line with recommendations suggesting 35 per arm is sufficient to estimate key parameters in feasibility and pilot studies and adequate to estimate the SD of a continuous outcome.[70]

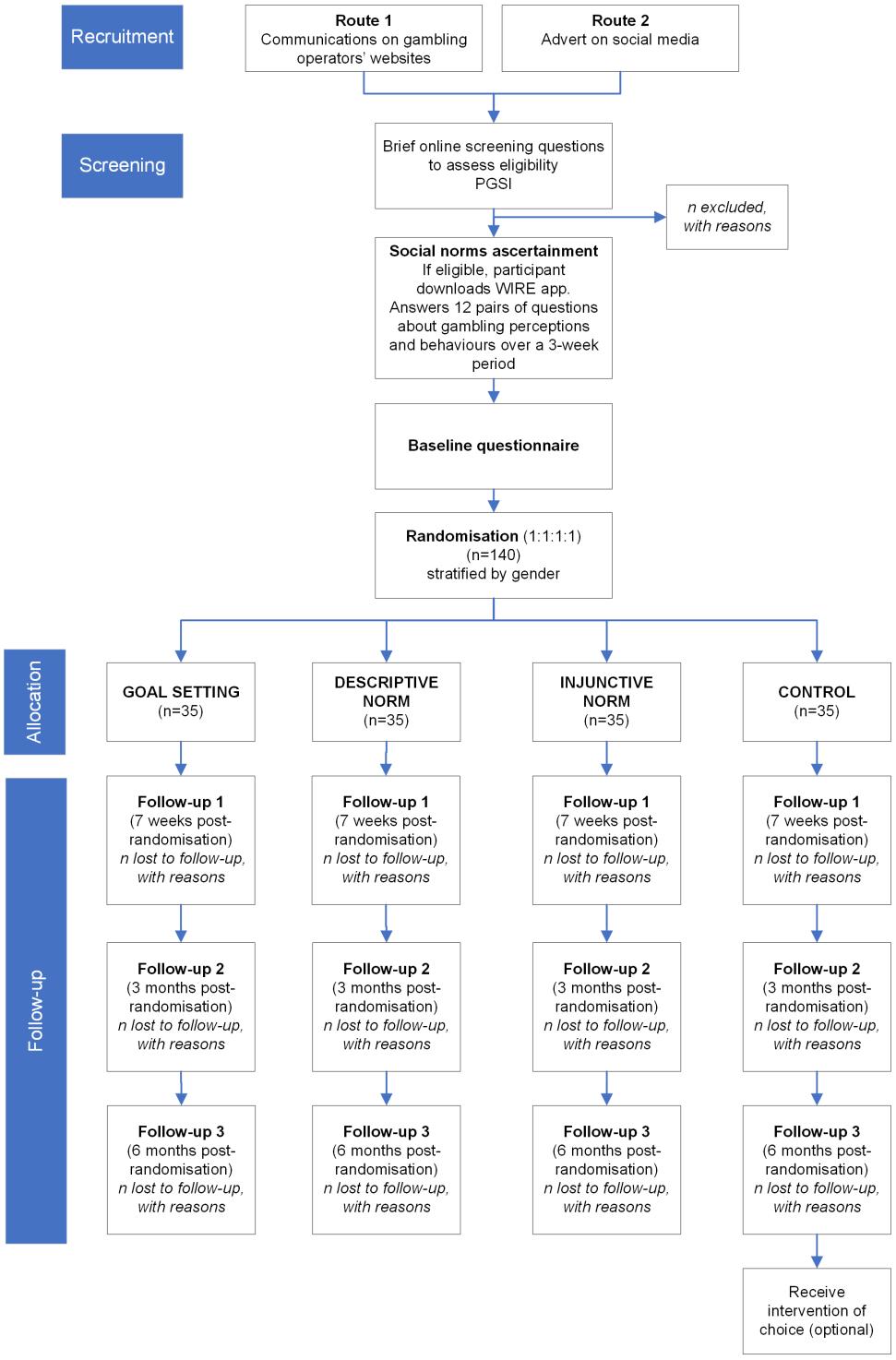

Figure 1 Consolidated Standards of Reporting Trials diagram. PGSI, Problem Gambling Severity Index.

With a total sample of 140, the recruitment rate will be estimated with a precision of ±6% (assuming a recruitment rate of 50%), and we will be able to estimate a drop-out rate of 30% to within a 95% CI of ±8%. A questionnaire return rate of 80% would mean availability of data at baseline and follow-up for 112 participants with the return rate estimated with precision of ±7%.

Participants and eligibility criteria

We aim to recruit 140 participants in total. Eligibility criteria are provided in box 1.

Study setting, screening and recruitment

The study will be advertised via communications on UK-licensed gambling operators' websites and social media. Individuals will be asked to click on a link which will direct them to a study information page with the participant information sheet (see online supplemental file 1) and

Table 1 Progression criteria with sample size requirements

Outcome	Measure	Green: proceed to RCT	Amber: consider possible improvements	Red: do not proceed	Sample size required (from Lewis *et al*'s lookup grid)[68]
Uptake	% randomised of those screened as eligible	≥35%	20%–34%	<20%	78 screened
Retention	% of participants retained at 6-month final follow-up	≥70%	50%–69%	<50%	55 randomised
Adherence	% of participants with ≥60% adherence to intervention (adherence defined as having read at least four of six messages in social norms arms or setting at least four of six goals in goal-setting arm)	≥75%	50%–74%	<50%	34 per intervention arm

RCT, randomised controlled trial.

consent (agreement) form (see online supplemental file 2). Those interested in participating who have provided informed consent will be asked to complete an online screening questionnaire via the Qualtrics survey platform (Qualtrics, London, UK) to assess whether they fulfil the inclusion criteria. Eligible participants will be informed via email, resent the participant information sheet and a 'Key Facts' summary and provided with instructions to download WIRE (a secure messaging app) (used for prebaseline social norm data collection and intervention delivery). Ineligible participants will be informed via email and provided with information about the National Gambling Helpline.

Social norm establishment (prerandomisation)

This phase will take place with all trial participants via the WIRE app before randomisation and will involve establishing baseline gambling behaviours (eg, frequency of gambling and typical amount gambled) and attitudes (eg, feelings of regret and willingness to seek professional help), as well as perceptions of peers' gambling behaviours and attitudes. Participants will be sent 12 pairs of questions assessing their behaviours and perceptions towards gambling over a 3-week period, via the WIRE app. Administration will be spaced across 3 weeks to reduce the risk that prompting a participant to consider one norm may influence their response to a subsequent norm question.[71]

In addition to the prebaseline social norms assessment, an online survey will be undertaken with a separate sample of 350 people (not part of the randomised feasibility study) who live in the UK and gamble frequently (at least once/week). They will be asked questions about their gambling behaviours, attitudes and perceptions of peers' gambling behaviours and attitudes. Participants will be recruited via an online platform (Prolific) where the survey will be hosted. These data will inform the content of the social norm arms messages.

Box 1 Eligibility criteria

Inclusion criteria
- ⇒ Age 18 years or above.
- ⇒ Resident in the UK.
- ⇒ Gambles online for a minimum of one session per week on a UK gambling operator's website (assessed via self-report).
- ⇒ Sufficient English language ability to complete the questionnaires and engage with the interventions.
- ⇒ Owns a smartphone.
- ⇒ Willing to download WIRE.

Exclusion criteria

Score on the PGSI[81] indicative of problem gambling (PGSI score ≥8).

PGSI, Problem Gambling Severity Index.

Randomisation, concealment of allocation and blinding

Randomisation will take place after participants have completed the 3-week social norm establishment (prebaseline) and baseline questionnaires. To ensure adequate allocation concealment, sequence generation and randomisation will be undertaken using Sealed Envelope, a centralised, independent web-based randomisation service (https://www.sealedenvelope.com). Once a participant completes and returns the baseline questionnaires, the study manager will randomise them, in an equal ratio, to one of the four study arms via Sealed Envelope. Permuted randomised blocks will be used and randomisation stratified by gender (male/female/prefer not to say or other).

Given the nature of the interventions, participants cannot be blinded to allocation. The study manager will screen and enrol participants, deliver intervention materials and send out links for the online follow-up questionnaires, and so will not be blinded to allocation. All outcome measures will be self-completed online. The study data will be analysed with no access to information about allocation.

Interventions

All three interventions (goal setting, descriptive norms and injunctive norms) will be delivered via a secure messaging mobile phone application (app) called WIRE and will run for 6 weeks. To enable comparison with the broader literature, table 2 specifies the behaviour change techniques (BCTs) used in the interventions according to the BCT taxonomy (v1).[35]

Goal setting

Participants will be provided with advice about how to set specific, measurable, attainable, realistic and time-bound goals, first via a video (which can be replayed at any point during the intervention), then via text message. We will ask participants to create a weekly goal relating to their gambling activity (money-based goals will be

Table 2 BCTs used in the interventions

Intervention	BCT
Goal setting	Goal setting (behaviour) (1.1) Goal setting (outcomes) (1.3) Action planning (1.4) Review behaviour goals (1.5) Social reward (10.4)
Descriptive norms	Social comparison (6.2)
Injunctive norms	Social comparison (6.2) Information about others' approval (6.3)

BCT, behaviour change technique.

recommended) and one to three action plans for the goal, and to share these goals with the study manager via WIRE. At the end of each week, we will ask participants to provide their gambling data for that week via WIRE.

Participants will be asked to create six goals in total over the 6-week period. Each week we will ask participants if they have achieved the goal they set. Those who have partially/completely achieved a goal will be given positive feedback. Those who have not met a goal will be encouraged to revise it to something more manageable. If participants do not create or share a goal, they will be sent a maximum of two reminders per week.

Social norm interventions

In both social norm interventions, participants will be sent brief weekly messages (six in total) via WIRE based on their social norm prerandomisation data and tailored to their age and gender. Participants will be invited to provide feedback about each message.

Descriptive norm intervention

Messages will challenge any misperceptions participants may have around norms of gambling behaviours; for example, 'You told us you gamble 7 days a week and that you think a typical person who gambles does so five times a week. Most men (61%) aged 35 or over gamble no more than 2 days a week.'

Injunctive norm intervention

Messages will challenge any misperceptions participants may have around norms of gambling attitudes; for example, 'You told us that you sometimes feel you should cut down on your gambling. Most women (60%) aged 18 to 34 very rarely feel that they should cut down on their gambling'.

Control arm

Participants in this arm will not receive any of the three interventions but will be offered the option of receiving their choice of intervention (goal setting/descriptive norms/injunctive norms) after the final follow-up (6 months post randomisation).

Participants in all arms will have optional access to RG tools made available by operators they are signed up with, including deposit limits and self-exclusion options. Participants will be asked at baseline if they use any RG tools and use of RG tools will be explored in the qualitative interviews.

Outcome measures and data collection

Study data will be collected and managed using the Qualtrics survey platform and the WIRE application. One aim of this feasibility study is to inform selection of outcome measures for a subsequent full trial. We therefore include a broad range of outcome measures to explore acceptability and completion rates. Questionnaires will be administered online at baseline (including demographic and gambling information) and at 7 weeks, 3- and 6 months post-randomisation (see table 3 for details of self-reported outcomes and administration schedule). If participants do not complete questionnaires, they will be sent two email reminders.

Two former problem gamblers reviewed all outcome measures. One, in addition to positive feedback, suggested asking if participants play online games requiring payment to level up. We added a question about this to the baseline questionnaires. The second commented that the ICEpop Capability Measure for Adults (ICECAP-A)[72] questionnaire items seemed strange. We will examine completion rates for the ICECAP-A and explore its acceptability and relevance in the qualitative interviews.

We will ask about age category, gender, household living arrangements, education, ethnicity, employment status and narcissism, an exploratory outcome (using the Narcissistic Admiration and Rivalry Questionnaire).[73] We will ask about type of gambling activities undertaken (eg, sports betting, casino games, etc), device used, typical gambling location, number of online accounts and use of RG tools.

Participants will be offered £55 in Amazon vouchers for completion of study outcome measures (£5 following completion of the social norm prebaseline questionnaire, £10 following completion of the baseline questionnaires, £20 following completion of the 7-week follow-up questionnaires, £10 following completion of the 3-month follow-up questionnaires and £10 following completion of the 6-month follow-up questionnaires).

In each online questionnaire pack, participants will be given a link to the Participant Information Sheet, which contains information about the National Gambling Helpline and a link to GamCare support, if required.

Outcomes

Our primary outcomes are feasibility and process outcomes related to determining the feasibility and acceptability of study design, recruitment and randomisation, the data collection strategy, methods and interventions. These are summarised in table 4.

Secondary outcomes will be completed by all participants and will include self-reported outcome measures related to gambling risk behaviours, anxiety and depression, gambling cognitions, capability, well-being and

Table 3 Schedule of enrolment, interventions and assessments

	Study period											
	Enrolment	Baseline	Allocation							Follow-up (time post allocation)		
Timepoint	$-t_1$	0	0	1	2	3	4	5	6	7 w	3 m	6 m
Enrolment												
Eligibility screen	X											
Informed consent	X											
Social norms ascertainment	X									X		X
Allocation			X									
Interventions												
Descriptive norms				—	—	—	—	—	—			
Injunctive norms				—	—	—	—	—	—			
Goal setting				—	—	—	—	—	—			
Assessments												
Demographics		X										
PGSI (9 items)*	X	X								X	X	X
NARQ (18 items)		X										
GRCS (23 items)		X								X	X	X
PHQ-8 (8 items)		X								X	X	X
GAD-7 (7 items)		X								X	X	X
EUROHIS-QOL (8 items)		X									X	X
EQ-5D-5L (5 items)		X									X	X
ICECAP-A (5 items)		X									X	X
Primary care health use		X									X	X
Productivity		X									X	X

Social norms ascertainment based on[82] PGSI,[81 83] NARQ,[73] GRCS,[84] PHQ-8,[85] GAD-7,[86] EUROHIS-QOL,[87] EQ-5D-5L[75] and ICECAP-A.[72]
*Using a 1-month recall period as used by others.[83]
EQ-5D-5L, EuroQoL Five Dimensions Five Levels; EUROHIS-QOL, European Health Interview Survey–Quality of Life; GAD-7, Seven-Item Generalised Anxiety Disorder Questionnaire; GRCS, Gambling-Related Cognitions Scale; ICECAP-A, ICEpop Capability Measure for Adults; NARQ, Narcissistic Admiration and Rivalry Questionnaire; PGSI, Problem Gambling Severity Index; PHQ-8, Eight-Item Patient Health Questionnaire.

quality of life (see table 3). We will also collect information about adverse events (AEs) (see separate section).

Feasibility economic component

We will pilot resource use questions asking participants how many contacts they have had with general practitioners (GPs) or nurses in the past 3 months (including virtual, face-to-face and telephone) and whether gambling was mentioned during these contacts.

We will pilot a self-report measure of productivity based on an existing measure[74] that includes questions regarding (1) number of days of sick leave due to gambling/gambling-related health issues (past month), (2) number of days at work where productivity was perceived to be <50% of usual levels and (3) extent to which participants feel non-work daily activities have been affected by gambling/gambling-related health issues (both past 3 months). We will also pilot administration of the EuroQoL Five Dimensions Five Levels (EQ-5D-5L)[75] and the ICECAP-A.[72]

Nested qualitative study

The study researcher will conduct approximately 30 qualitative semistructured telephone/video conference interviews: eight per intervention arm (post 3-month follow-up) and six with control arm participants (at the end of the study). Participation in the qualitative substudy will be optional (see Participant Information Sheet (PIS) and consent form (online supplemental files 3,4). Participants will be purposively sampled for diversity of demographic characteristics, PGSI baseline scores and (intervention arms only) engagement with the interventions. Interviews will elicit participants' experiences of the interventions and study participation and processes. A flexible topic guide will allow adaptations in response to topics that emerge during the interviews. Interview participants will be offered a £20 Amazon voucher.

Analysis

Quantitative

As this is a feasibility study focused on estimating key feasibility parameters, analyses will be mainly descriptive.[76] A CONSORT diagram[77] will present proportions eligible, enrolled, randomised and lost to follow-up. Data related

Table 4 Feasibility and process outcomes

Feasibility objective	Outcomes (and how measured)
Assess acceptability and feasibility of key aspects of study design, methods and study interventions	Eligibility, recruitment and retention ▶ Number of participants screened, eligible, enrolled and randomised (study records and logs). ▶ Number of participants lost to follow-up (with reasons, if known) (study records).
	Outcome measures ▶ Response rates and levels of missing data (overall and item-level completion rates). ▶ Acceptability and relevance (from participant interviews).
	Primary care health use and productivity questions ▶ Levels of missing data. ▶ Acceptability and relevance (from participant interviews).
	Study design ▶ Acceptability of control group (participant interviews).
	Study interventions ▶ Appropriateness of goals set on WIRE (goal setting arm). ▶ Acceptability of social norms interventions (feedback via WIRE). ▶ Acceptability of interventions (participant interviews). ▶ Adherence: number of intervention sessions completed based on whether participants have opened and/or read the message (social norms messages) or set a goal (goal-setting arm).
	Self-reported gambling data (goal-setting arm only) ▶ Proportion of participants who share data at each assessment and format supplied.
	Objective player data ▶ Proportion of participants for whom data are obtained from gambling operator.
Inform selection of primary outcome measure for a definitive RCT	▶ Response rates and % missing data of outcome measures. ▶ Feedback from participant interviews. ▶ Preliminary effect size estimates.
Inform sample size of a future RCT	▶ SDs of continuous outcomes at 6 months follow-up. ▶ Study recruitment and attrition rates.

RCT, randomised controlled trial.

to recruitment, attrition, outcome measures, process measures, questionnaire return rates and adherence to the interventions will be presented using descriptive statistics (with 95% CIs). SDs of potential primary outcome measures will be estimated. We will summarise and report rates and patterns of missing questionnaire data to inform the selection of outcomes and administration strategy for a full trial. We will also develop and test our data analysis procedures, with the aim of informing the statistical analysis plan for a full trial. Preliminary estimates of effect size (with 95% CIs) for potential primary outcome measures will be calculated to inform the plausibility of the effect sizes used in future sample size calculations.

We will summarise primary care contacts with GPs and nurses using descriptive statistics and will derive QALY estimates (with 95% CIs) from EQ-5D-5L utility scores.

Qualitative

Data will be analysed using thematic analysis, following Braun and Clarke.[78 79] We expect 30 interviews will be sufficient to reach saturation. Interviews will be coded by one researcher and a minimum of 2 interviews per arm second coded by another researcher.

Trial and data management

The chief investigator (CI) (JM) will be responsible for overall study conduct. The study management team, led by the CI, will meet at least monthly to review and monitor research conduct and address issues as they arise.

All personal data collected during the study will be handled, stored and protected in accordance with the UK Data Protection Act (1998) and the General Data Protection Regulations (2018). All participants enrolled in the study will be allocated a unique study identification (ID). The document linking IDs with personal details will be password-protected and stored on a Bournemouth University secure server. Data will be anonymised and only accessible to authorised staff working on the study. The sponsor/host institution will be given access on request for monitoring and inspection purposes.

Data processing, management, validation and quantitative analysis activities will be conducted in accordance with Bournemouth University Clinical Research Unit standard operating procedures to ensure a clear audit trail and that relevant regulatory governance requirements are met. All data will be stored on a secure backed-up university server. Quantitative data will be exported from Qualtrics to a password-protected (SPSS V.28) database, plausibility data checks carried out (eg, range checks) and the database then closed to further changes, prior to analysis. All study documentation will be kept for at least 10 years after publication of study data in line with Bournemouth University policy. Digital audio recordings of interviews will be deleted once the anonymised transcripts are finalised.

Reporting of AEs

This is a low-risk study involving members of the general public who gamble, excluding those with PGSI scores indicative of problem gambling. We do not envisage any study-related serious AEs.

To help inform AE recording and reporting in a potential future definitive trial, the study manager and other research team members will inform the CI of any concerning communications or potential AEs received or reported via WIRE/email or during interviews. The CI will discuss these with two core research team members (EA-C, a health psychologist, and ST), then offer advice to the wider project team. The CI will assess an AE to establish if it is serious according to the National Research Ethics Service definition. If not defined as serious, the AE will be recorded on a case report form and stored in the site file, and the participant will be followed up as appropriate and signposted to relevant support, if necessary. Reporting of related and unexpected serious AEs (which we consider highly unlikely) would follow the same timelines as the Health Research Authority (email notification to university ethics committee within 15 days and notification to the study sponsor within 24 hours).

Progression criteria

To guide decisions about whether a full RCT is feasible and warranted, we have specified three progression criteria (recruitment, retention and intervention adherence) based on a traffic light system[69] (green, proceed; amber, consider possible improvements; red, do not proceed; see table 1). We will also consider the secondary outcomes and qualitative interview data.

Ethics and dissemination

This study has been approved by Bournemouth University Faculty of Science and Technology Ethics Committee (ref 33247, approved 11 September 2020). Participants will give informed consent online after reading the participant information sheet. We will comply with the Declaration of Helsinki principles and the International Conference for Harmonisation of Good Clinical Practice (ICH GCP) guidelines.

Findings will be disseminated via peer-reviewed journal articles, reports, conference presentations and public engagement events.

Anonymised quantitative data will be publicly stored in Bournemouth University's online data repository, BORDAR (https://bordar.bournemouth.ac.uk/).

DISCUSSION

This feasibility study of social norms and goal setting to promote responsible online gambling will identify the conditions necessary for a definitive trial, including requirements for successful study design and data collection. If progression criteria are met/met within reasonable limits and the interventions and study processes appear acceptable and feasible, we will proceed to a definitive trial of effectiveness and cost-effectiveness of goal setting and social norms compared with usual care for those who gamble online at low-to-moderate levels.

This feasibility study has several limitations. First, given the nature of the interventions, blinding participants to allocation will not be possible. Also, as the study manager will screen and enrol participants, deliver intervention materials and send out links for the online follow-up questionnaires, they will not be blinded to allocation. However, this is unlikely to significantly impact findings as all outcome measures will be self-completed online. Second, participants will be self-selected, increasing the possibility of selection bias. However, as we aimed to recruit via the general population, the only way to provide a more representative sample would be for gambling operators to embed the study into their platforms.

Given the rapid expansion of internet gambling, which is associated with higher risk for and severity of gambling problems than land-based gambling,[9 10] increases in gambling among adolescents[18] and increases in those with problem gambling behaviours in the general population,[17] interventions to prevent gambling-related harms are urgently needed. However, as stigma around gambling leads to many hiding their gambling from significant others,[80] the three interventions in this feasibility study were designed to enable individuals to access anonymous online support.

The use of social norms in the context of online gambling is novel as is the use of objective player data (provided by operators) to validate self-reported gambling data. This is a first step towards basing future interventions directly on live data rather than self-report, which will enable individuals to receive more accurate feedback about their gambling. Given that numbers of gamblers and those with problem levels of gambling continue to rise with the shift to online gambling following the COVID-19 pandemic, interventions to promote responsible online gambling are needed more than ever.

Author affiliations
[1]Department of Psychology, Faculty of Science and Technology, Bournemouth University, Poole, UK
[2]Clinical Research Unit, Faculty of Health and Social Sciences, Bournemouth University, Poole, UK
[3]Bournemouth University Business School, Faculty of Management, Bournemouth University, Poole, UK
[4]Department of Computing and Informatics, Faculty of Science and Technology, Bournemouth University, Poole, UK

Twitter Emily Arden-Close @ArdenClose and Sarah Thomas @SThomasBU

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Contributors EA-C and JM conceived the study and wrote the initial grant application. JM designed the social norms arms of the trial and EA-C the goal-setting arm. ST provided methodological advice and input. EA-C, ST and JM led the drafting of the paper. RB-E and RW contributed to the writing of the paper. SH, EB and KP provided feedback on drafts. EA-C and ST contributed equally to this paper and are joint first authors. All authors critically reviewed and approved the final version.

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ORCID iDs
Emily Arden-Close http://orcid.org/0000-0002-5954-2598
Sarah Thomas http://orcid.org/0000-0002-9501-9091
Reece Bush-Evans http://orcid.org/0000-0001-6300-6117
Ruijie Wang http://orcid.org/0000-0001-8025-549X
Elvira Bolat http://orcid.org/0000-0003-0910-0860
Sarah Hodge http://orcid.org/0000-0001-5007-8429
Keith Phalp http://orcid.org/0000-0003-4458-686X
John McAlaney http://orcid.org/0000-0003-4062-6131

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Ethics ID: 33247
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Bournemouth University

Participant Information Sheet

The title of the research project

Data-informed behaviours and responsible online gambling

Invitation to take part

You are being invited to take part in this research project coordinated by Dr John McAlaney, an Associate Professor in Psychology at Bournemouth University. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Ask us if anything is unclear or if you would like more information. Take time to decide whether or not you wish to take part.

Who is organising/funding the research?

The research is being organised by Bournemouth University and is funded by GambleAware.

What is the purpose of the project?

This project aims to find out whether a) setting time and money limits in relation to your online gambling and b) receiving information about how your gambling compares to others of a similar age and gender offer promise in reducing online gambling. The project also aims to explore how people of different ages and genders use online gambling websites.

Why have I been chosen?

You have been chosen because you are aged 18 or older, live in the UK, have an active account on a UK gambling operators' website, currently bet online approximately once a week or more, and have a smartphone. Problem gamblers will be excluded. We are hoping to recruit approximately 140 participants for this study.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a participant agreement form. We want you to understand what participation involves before you make a decision on whether to participate. Deciding to take part or not will not unfavourably affect you in any way.

Can I change my mind about taking part?

Yes, you can stop taking part at any time and without giving a reason. You can withdraw at any time, up to the point where the data are processed and become anonymous, so your identity cannot be determined, without it affecting any benefits that you are entitled to in any way.

If I change my mind, what happens to my information?

After you decide to withdraw from the study, we will not collect any further information from or about you. Any data that has already been collected might be used in accordance with the study proposal, however your data will remain confidential and kept in compliance with the Data Protection Act / University Policy. If you decide to withdraw from the study and would like your data to be deleted, then you can request this by contacting the researchers via the information below.

What would taking part involve?

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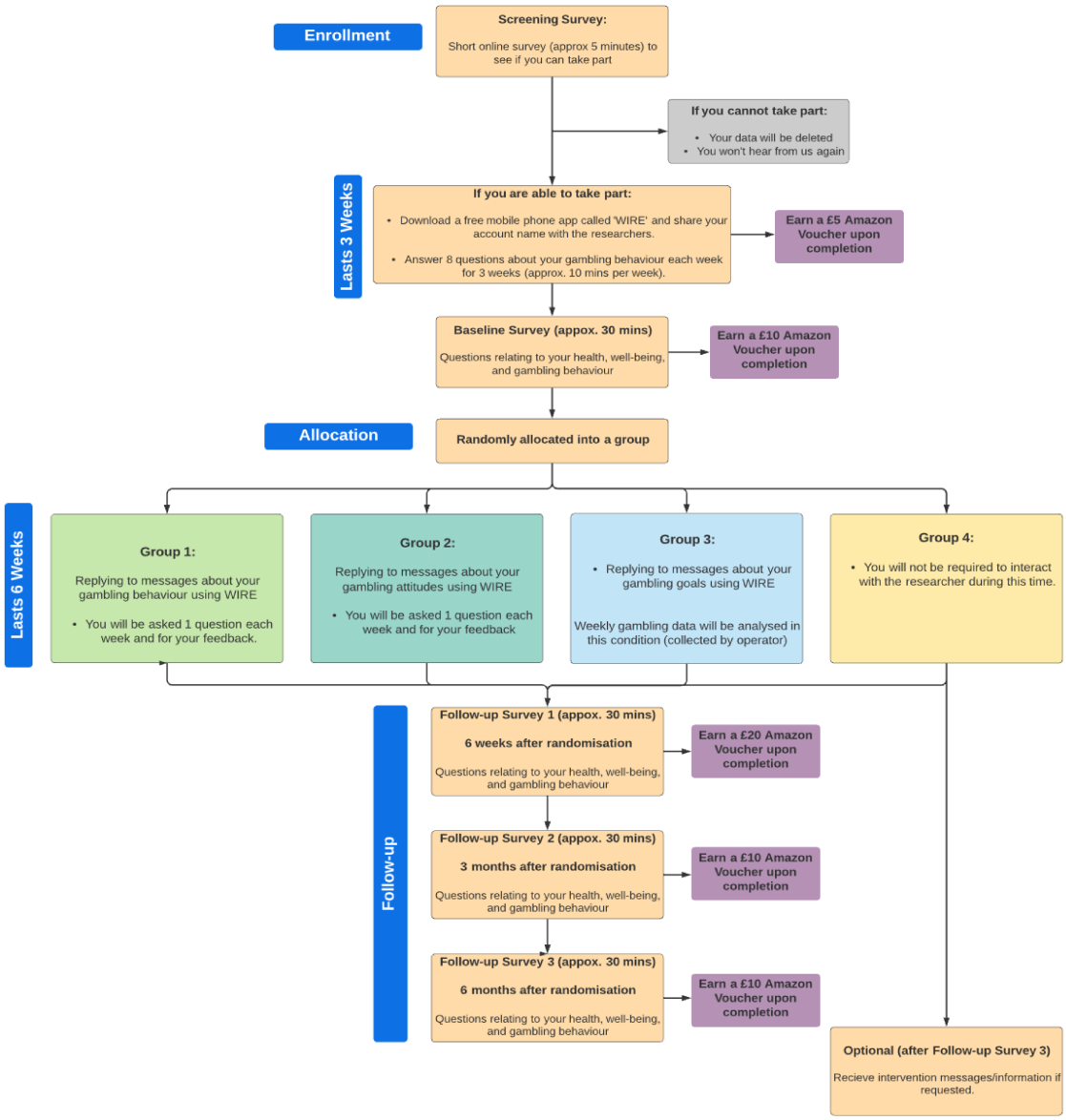
If you agree to take part, you will be required to complete several online surveys, obtain and share your gambling data with the researchers or agree to a gambling operator of your choice to share your gambling data regularly with the researchers, and interact with the researchers at several specific points. A brief overview of what this would look like can be found in the image below. For a detailed explanation of each part of the study, please read the information after this image.



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Will I be reimbursed for taking part?
You will be compensated with up to £55 in Amazon vouchers.

More information about what taking part would involve:

If you agree to take part, you will be asked to complete a short online survey to determine whether this is possible. This survey is about how you bet online and will take approximately 5 minutes to complete. If the data you provide in the online screening survey meets the study requirements, a researcher will contact you to discuss the next steps. If you are not eligible for this study, you will receive an email to tell you this. Eligible participants will be asked to download a mobile phone application called 'WIRE' and to set up an account. WIRE is a very secure messaging app and does not require a mobile phone number to register. Once your account has been set up, you will be asked to share your account name with the researchers to begin the study.

The first part of the study involves collecting some information about your online gambling. Using the WIRE application, you will be contacted up to 5 times a week for 3 weeks with some questions relating to your gambling behaviour. The questions will take approximately 10 minutes to complete each week. After the end of the 3 weeks, you will receive a £5 Amazon voucher for your participation so far. As this study requires a minimum number of people to complete the first part of the study, the researcher will inform you whether you can continue with the next part of the study straightaway or whether you have to wait a short while before resuming.

The second part of the study involves completing an online survey about your health, well-being, and gambling behaviour, which will take approximately 20 minutes to complete. After this, you will be asked to send the researcher a link/screenshot/data file of your gambling data covering the previous week. Alternatively, if a data sharing agreement has been set up, the researcher will obtain your gambling data (e.g., transaction and bet history) covering the previous week. This data can be from a gambling operator of your choice (if you have multiple online accounts then you can just send data relating to one account). You will be sent some information about how to download your data from the researcher. You will be asked to send data similar to this (i.e., the previous week) 3 more times throughout the study. After this has been completed, you will be sent a £10 Amazon voucher for your participation so far.

The third part of the study involves a six-month study (called a randomised controlled trial), in which you will be randomly allocated to one of four groups (goal setting, two types of information about how you bet compared to similar others, and a control group, which will only complete surveys). If you are allocated to one of the social norms groups (group 1 or group 2) then you will be sent a message each week based on responses from the first part of the study and will be asked your feedback on one message each week, for six weeks. This will take approximately 5 minutes each week.

If you are allocated to the goal setting group (group 3) then you will be asked to send a link/screenshot of your gambling behaviour (e.g., time spent online, values of bets, winnings and losses) each week for a period of six weeks and will be asked to set goals based on your gambling behaviour. The researcher will provide you with information about how to obtain this data. If you are allocated to the control group (group 4) then you will not receive any messages from the researcher and you will be informed once the six-week period has been completed.

Next, you will be asked to complete an online survey about your health, well-being, and gambling behaviour, which will take approximately 20 minutes. Like the second part of the study, you will be asked to send the researcher a link/screenshot/data file of your gambling data covering the previous week. Alternatively, if a data sharing agreement has been set up, the researcher will obtain your gambling data (e.g., transaction and bet history) covering the previous week. Once you have completed this, you will be sent a £20 Amazon voucher for your participation so far.

Approximately, 7 weeks later, you will be asked to complete the same online survey again and to send the researcher a link/screenshot/data file of your gambling data covering the previous week. Alternatively, if a data sharing agreement has been set up, the researcher will obtain your gambling data (e.g., transaction and bet history) covering the previous week. Once you have completed this, you will be sent a £10 Amazon voucher for your participation so far.

Finally, approximately 3 months later, you will be asked to complete the same online survey again and to send the researcher a link/screenshot/data file of your gambling data covering the previous week. Alternatively, if a data sharing agreement has been set up, the researcher will obtain your gambling data (e.g., transaction and bet history) covering the previous week. Once you have completed this, you will be sent a £10 Amazon voucher for your participation.

Once either the final survey is complete (Group 4), or the 3-week survey is complete (Groups 1-3) if you have given consent to do so, you will be sent information about a follow-up interview study. Participation in this second study is optional and will involve a brief telephone interview relating to your experiences in the first study. After the study has ended, the researchers will no longer have access to your gambling data from the operator.

What are the advantages and possible disadvantages or risks of taking part?

By taking part, you will contribute to our understanding of people's beliefs and behaviours around online gambling and help us to find out whether people might benefit from tailored programmes to reduce online gambling.

The study involves answering questions about your health, well-being, personality, and gambling behaviours that may potentially cause slight discomfort. The study also involves downloading your online gambling data from your current gambling operator. This data can be in the form of a URL link, a screenshot, or a downloadable file (e.g., Excel). If you do feel uncomfortable or experience any mild discomfort resulting from this request and would like to speak to someone, we recommend that you contact The National Gambling Helpline via their freephone number: 08088020133, or via online live chat at: www.gamcare.org.uk/get-support

What type of information will be sought from me and why is the collection of this information relevant for achieving the research project's objectives?

In this study you will be asked questions relating to your health, well-being, personality, and gambling behaviour. You will also be asked to download your online gambling data from your current online gambling operator, and to share this data with the researchers. Or, if a data sharing agreement has been set up, the researcher will obtain your gambling data from the operator (transaction and bet history) at different time points across the study. Collecting this data is vital for the research study as it will enable the researchers to explore whether the tailored interventions show promise in reducing online gambling. You will also be asked questions relating to what you believe about gambling and how you bet, as well as your experiences during the study. This information will inform our research practices and offer understanding of approaches to manage online gambling.

How will my information be managed?

Bournemouth University (BU) is the organisation with overall responsibility for this study and the Data Controller of your personal information, which means that we are responsible for looking after your

information and using it appropriately. Research is a task that we perform in the public interest, as part of our core function as a university.

Undertaking this research study involves collecting and/or generating information about you. We manage research data strictly in accordance with:

- Ethical requirements; and
- Current data protection laws. These control use of information about identifiable individuals, but do not apply to anonymous research data: “anonymous” means that we have either removed or not collected any pieces of data or links to other data which identify a specific person as the subject or source of a research result.

BU’s Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your personal information.

Research data will be used only for the purposes of the study or related uses identified in the Privacy Notice or this Information Sheet. To safeguard your rights in relation to your personal information, we will use the minimum personally-identifiable information possible and control access to that data as described below. The data obtained from the operator will be stored separate to the rest of the data collected from the participants. Wherever possible, data will be anonymised, other than to ensure that data is matched across the study.

Publication

You will not be able to be identified in any external reports or publications about the research without your specific consent. Otherwise, your information will only be included in these materials in an anonymous form, i.e. you will not be identifiable.

Research results will be published in academic journals and conference presentations, and in reports we provide to the funder.

Security and access controls

BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Personal information which has not been anonymised will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research, or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations.

If you agree to participate in the optional interview at the end of the study, data will be anonymised after it has been transcribed.

Sharing your personal information with third parties

As well as BU staff working on the research project, we may also need to share personal information in non-anonymised form with a transcription service. This data would be audio recordings with no other personal information

Further use of your information

The information collected about you may be used in an anonymous form to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data. To enable this use, anonymised data will be added to BU's online Research Data Repository: this is a central location where data is stored, which is accessible to the public.

Keeping your information if you withdraw from the study

If you withdraw from active participation in the study, we will keep information which we have already collected from or about you, if this has on-going relevance or value to the study. This may include your personal identifiable information. As explained above, your legal rights to access, change, delete or move this information are limited as we need to manage your information in specific ways for the research to be reliable and accurate. However, if you have concerns about how this will affect you personally, you can raise these with the research team when you withdraw from the study.

You can find out more about your rights in relation to your data and how to raise queries or complaints in our Privacy Notice.

Retention of research data

Project governance documentation, including copies of signed **participant agreements**: we keep this documentation for a long period after completion of the research, so that we have records of how we conducted the research and who took part. The only personal information in this documentation will be your name and signature, and we will not be able to link this to any anonymised research results.

Research results:

As described above, during the study we will anonymise the information we have collected about you as an individual. This means that we will not hold your personal information in identifiable form after we have completed the research activities.

You can find more specific information about retention periods for personal information in our Privacy Notice.

We keep anonymised research data indefinitely, so that it can be used for other research as described above.

Contact for further information

If you have any questions or would like further information, please contact Dr John McAlaney, Principal Investigator, or Reece Bush-Evans, Study Manager by email to: [redacted]

In case of complaints

If you have any complaints about this project, please contact Professor Tiantian Zhang, Deputy Dean for Research and Professional Practice of the Faculty of Science and Technology at Bournemouth University at the following address:

Professor Tiantian Zhang

Version 1.3
Ethics ID: 33247
06.09.2021

[redacted]

[redacted]

[redacted]

Finally

If you decide to take part, you will be given a copy of the information sheet and a signed participant agreement form to keep.

Thank you for considering taking part in this research project.

Version 1.1
Ethics ID: 33247
Date: 06.09.2021

Bournemouth University

Participant Agreement Form

Full title of project: Data-Informed behaviours and responsible online gambling

Name, position and contact details of researcher: Dr John McAlaney, Associate Professor in Psychology, [redacted]

Section A: Agreement to participate in the study

You should only agree to participate in the study if you agree with all of the statements in this table and accept that participating will involve the listed activities.

I have read and understood the Participant Information Sheet (Version 1.1) and have been given access to the BU Research Participant Privacy Notice which sets out how we collect and use personal information (https://www1.bournemouth.ac.uk/about/governance/access-information/data-protection-privacy).
I have had an opportunity to ask questions.
I understand that my participation is voluntary. I can stop participating in research activities at any time without giving a reason and I am free to decline to answer any particular question(s).
I understand that taking part in the research will include the following activity/activities as part of the research:
• Completing an online screening survey to ascertain your eligibility to participate in this study
• Completing 4 separate online surveys regarding your gambling behaviour and health, across a 6-month period
• Downloading a free mobile phone application called 'WIRE' and sharing your contact details with the researchers involved in this study
• Downloading your gambling data from a specific gambling operator and sharing this with the researchers involved in this study. Or, if a data sharing agreement is in place, consenting to your gambling data being shared directly with the researcher by a gambling operator of your choice
• Being randomly allocated to one of four conditions by the researcher and responding to different questions based on this condition via the WIRE app.
• Unless I am randomly allocated to the control group, interacting with the researchers involved in this study via the WIRE app regularly, across a 6-week period starting 3 weeks after the study starts.
I understand that my data will be retained for analysis even if I withdraw from the study, unless I explicitly request my data to be removed and deleted (before the data are anonymised)
I understand that my data may be included in an anonymised form within a dataset to be archived at BU's Online Research Data Repository.
I understand that my data may be used in an anonymised form by the research team to support other research projects in the future, including future publications, reports or presentations.

	Initial box to agree
I consent to take part in the project on the basis set out above (Section A)	

Section B: The following parts of the study are optional

You can decide about each of these activities separately. Even if you do not agree to any of these activities you can still take part in the study. If you do not wish to give permission for an activity, do not initial the box next to it.

		Initial boxes to agree
	I agree to be contacted by the researchers from approximately 10 weeks after the study starts to take part in an interview about my experiences of participating in this study.	

I confirm my agreement to take part in the project on the basis set out above.

Name of participant (BLOCK CAPITALS)	Date (dd/mm/yyyy)	Signature
Name of researcher (BLOCK CAPITALS)	Date (dd/mm/yyyy)	Signature

Version 1.1
Ethics ID 33247
21.08.2020

Bournemouth University

Participant Information Sheet

The title of the research project

Data-informed behaviours and responsible online gambling: qualitative process interviews

Invitation to take part

You are being invited to take part in this research project coordinated by Dr John McAlaney, an Associate Professor in Psychology at Bournemouth University. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Who is organising/funding the research?
The research is being organised by Bournemouth University and funded by GambleAware.

What is the purpose of the project?

This project aims to explore experiences of those who took part in the randomised controlled trial "Data-informed behaviours and responsible gambling." Each interview will take approximately 30 minutes to one hour.

Why have I been chosen?

You have been chosen because you took part in the randomised controlled trial "Data-informed behaviours and responsible gambling" and previously gave consent to be contacted to take part in an interview about your experiences. We aim to recruit approximately 30-40 participants for this study, 10-12 per group.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a participant agreement form. We want you to understand what participation involves, before you make a decision on whether to participate. Deciding to take part or not will not adversely affect you in any way.

Can I change my mind about taking part?

Yes, you can stop participating at any time and without giving a reason. You can withdraw at any time, up to the point where the data are processed and become anonymous, so your identity cannot be determined, without it affecting any benefits that you are entitled to in any way.

If I change my mind, what happens to my information?

After you decide to withdraw from the study, we will not collect any further information from or about you. Any data that has already been collected might be used in accordance with the study proposal, however your data will remain confidential and kept in compliance with the Data Protection Act / University Policy. If you decide to withdraw from the study and would like your data to be deleted, then you can request this by contacting the researchers on the information below.

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What would taking part involve?

As a participant in this project, you will be asked to take part in an audio interview with a member of the research team. This interview could be conducted by telephone or via a videoconferencing platform such as Skype depending on your preferences, location, and availability. If the interview takes place via a videoconferencing platform, you will be invited to share your video to introduce yourself to the researcher if you wish, but then required to switch your video off for the interview. You will be asked about your experiences of taking part in the randomised trial "Data-informed behaviours and responsible gambling," including what you felt worked well and what you felt did not work so well.

What are the advantages and possible disadvantages or risks of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will improve our understanding of the acceptability of goal setting and social norms messages in managing responsible gambling. You will receive a £20 voucher as compensation for your time. The findings will be used to help us design a further large-scale trial. We do not anticipate any possible disadvantages or risks from taking part in this study.

What type of information will be sought from me and why is the collection of this information relevant for achieving the research project's objectives?

In the interview you will be asked questions relating to your experiences of participating in the "Data-informed behaviours and responsible gambling" randomised controlled trial, including what you felt worked well, what you felt did not work so well, and if it has influenced how you gamble. The research objective is to explore participants' experiences of taking part in the trial before we proceed to a larger-scale trial. You will be asked what group you were assigned to in the trial, your age, gender and how much you bet. This is because these factors may have influenced your experience of participation in the trial.

Will I be recorded, and how will the recorded media be used?

The interview will be audio recorded. The audio recordings made during this research will be used only for analysis and the transcription of the recording(s) for illustration in conference presentations and lectures. No other use will be made of the recording without your written permission, and no one outside the research team will be allowed access to the original recordings. The audio recordings made during this research will be deleted once transcribed and anonymised. The transcription of the interviews will not include your name or any identifiable information. Instead, each person will be identified by their code (i.e. #id523741, #id523753, etc.).

You will be given the option to be acknowledged using your name for your contribution in the publications and presentations which may result from this research.

How will my information be managed?

Bournemouth University (BU) is the organisation with overall responsibility for this study and the Data Controller of your personal information, which means that we are responsible for looking after your information and using it appropriately. Research is a task that we perform in the public interest, as part of our core function as a university.

Undertaking this research study involves collecting and/or generating information about you. We manage research data strictly in accordance with:

- Ethical requirements; and
- Current data protection laws. These control use of information about identifiable individuals, but do not apply to anonymous research data: "anonymous" means that we have either removed or not

collected any pieces of data or links to other data which identify a specific person as the subject or source of a research result.

BU's Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your personal information.

Research data will be used only for the purposes of the study or related uses identified in the Privacy Notice or this Information Sheet. To safeguard your rights in relation to your personal information, we will use the minimum personally-identifiable information possible and control access to that data as described below.

Publication

You will not be able to be identified in any external reports or publications about the research without your specific consent. Otherwise your information will only be included in these materials in an anonymous form, i.e. you will not be identifiable.

Research results will be published in academic journals and conference presentations, and in reports we provide to the funder.

Security and access controls

BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Personal information which has not been anonymised will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations.

Data will be anonymised after it has been transcribed.

Sharing your personal information with third parties

As well as BU staff working on the research project, we may also need to share personal information in non-anonymised form with a transcription service. This data would be audio recordings with no other personal information

Further use of your information

The information collected about you may be used in an anonymous form to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data. To enable this use, anonymised data will be added to BU's online Research Data Repository: this is a central location where data is stored, which is accessible to the public.

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Keeping your information if you withdraw from the study

If you withdraw from active participation in the study we will keep information which we have already collected from or about you, if this has on-going relevance or value to the study. This may include your personal identifiable information. As explained above, your legal rights to access, change, delete or move this information are limited as we need to manage your information in specific ways in order for the research to be reliable and accurate. However if you have concerns about how this will affect you personally, you can raise these with the research team when you withdraw from the study.

You can find out more about your rights in relation to your data and how to raise queries or complaints in our Privacy Notice.

Retention of research data

Project governance documentation, including copies of signed **participant agreements**: we keep this documentation for a long period after completion of the research, so that we have records of how we conducted the research and who took part. The only personal information in this documentation will be your name and signature, and we will not be able to link this to any anonymised research results.

Research results:

As described above, during the course of the study we will anonymise the information we have collected about you as an individual. This means that we will not hold your personal information in identifiable form after we have completed the research activities.

You can find more specific information about retention periods for personal information in our Privacy Notice.

We keep anonymised research data indefinitely, so that it can be used for other research as described above.

Contact for further information

If you have any questions or would like further information, please contact Dr John McAlaney, Principal Investigator or Reece Bush-Evans, postdoctoral researcher by email to: [redacted]

In case of complaints

If you have any complaints about this project please contact Professor Tiantian Zhang, Deputy Dean for Research and Professional Practice of the Faculty of Science and Technology at Bournemouth University at the following address:

[redacted]

Version 1.1
Ethics ID 33247
21.08.2020

Finally

If you decide to take part, you will be given a copy of the information sheet and a signed participant agreement form to keep.

Thank you for considering taking part in this research project.

Version 1:
Ethics ID: 33247:
21.08.2020

Bournemouth University

Participant Agreement Form

Full title of project: Data-Informed behaviours and responsible online gambling: qualitative process interviews

Name, position and contact details of researcher: Dr John McAlaney, Associate Professor in Psychology, [redacted]

To be completed prior to data collection activity

Section A: Agreement to participate in the study

You should only agree to participate in the study if you agree with all of the statements in this table and accept that participating will involve the listed activities.

I have read and understood the Participant Information Sheet (Version 1) and have been given access to the BU Research Participant Privacy Notice which sets out how we collect and use personal information (https://www1.bournemouth.ac.uk/about/governance/access-information/data-protection-privacy).
I have had an opportunity to ask questions.
I understand that my participation is voluntary. I can stop participating in research activities at any time without giving a reason and I am free to decline to answer any particular question(s).
I understand that taking part in the research will include the following activity/activities as part of the research:
• being audio recorded during the project
• my words will be quoted in publications, reports, web pages and other research outputs without using my real name.
I understand that my data will be retained for analysis even if I withdraw from the study, unless I explicitly request my data to be removed and deleted (before the data are anonymised).
I understand that my data may be included in an anonymised form within a dataset to be archived at BU's Online Research Data Repository.
I understand that my data may be used in an anonymised form by the research team to support other research projects in the future, including future publications, reports or presentations.

	Initial box to agree
I consent to take part in the project on the basis set out above (Section A)	

I confirm my agreement to take part in the project on the basis set out above.

Name of participant (BLOCK CAPITALS)	Date (dd/mm/yyyy)	Signature
Name of researcher (BLOCK CAPITALS)	Date (dd/mm/yyyy)	Signature