

## Developing survey questions capturing gambling-related harms to self and others

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### Background

Since 2020, the Gambling Commission (GC) has conducted work to develop and test a series of survey questions aimed at collecting data on the experience of gambling harms. This focused on capturing data on harms from your own gambling (harms to self) and harms generated due to the gambling of others (harms from others). The principles guiding the GC's development process were that:

- the new questions should capture both harms experienced because of your own gambling and also because of someone else's gambling
- the harms included map to existing frameworks
- questions should capture current harms experienced and should include a dimension for capturing severity of experience
- the harms captured are valid and include a range of experiences

To do this, the GC reviewed a range of different frameworks for gambling harms (which broadly map similar criteria though summarise them in different ways). The GC then

created a suite of questions devised from the 73 harms statements developed by Browne et al. They chose 27 statements to pilot and test in three waves of their online omnibus survey and analysed the resulting data. This included looking at internal consistency of the data against other variables such as problem gambling score, gambling frequency, number of activities participated in etc. Questions were repeated across waves to look at the stability of responses in repeated cross sectional surveys. To reduce the number of items (because of respondent burden and limitations of questionnaire space), the GC used factor analysis to reduce the number of statements to a smaller subset. This produced two questionnaire sub-sets, one measuring 'harms to self' and on measuring 'harms from others'. They both consisted of 14 questions.

The next stage of development was to include these questions within the programme of work being undertaken by NatCen Social Research and the University of Glasgow to devise a new random probability survey capturing gambling prevalence across Great Britain ([gambling prevalence survey](#)). As part of the development work for this study, the harms questions were reviewed by questionnaire development experts at NatCen's Questionnaire Development and Testing Hub, with suggested amendments made prior to their inclusion in the first pilot of the gambling prevalence survey.

To aid this process, two external experts, Robert Williams and Rachel Volberg were asked to review the Gambling Commission's procedures undertaken to date and provide further expert advice on how the questions could be modified. William and Volberg were selected as they are the leading experts in the design of population-wide gambling surveys.

This note summarises the advice received from Robert Williams and Rachel Volberg (Part A); presents analysis of the harms questions from the pilot survey (Part B) and summarises the recommendations made to further test and improve the questions (Part C).

## A: Expert review of question development by Professor Robert William and Dr Rachel Volberg

Overall, Prof Williams and Dr Volberg found the intent behind the question development to be excellent. They noted the importance of capturing fuller negative impacts of gambling compared with traditional problem gambling approaches (See Appendix A for the questions reviewed). They found the process undertaken by the Commission to be thoughtful and logical. Furthermore, they indicated that draft

instruments reviewed were based on a sound definition of gambling-related harm that is consistent with other definitions in the literature, for instance Browne et al. (2018), and that the instruments accurately capture the main harms experienced by most people being heavily weighted toward financial, relationship, and mental health harms (Browne et al., 2018; Browne et al, 2021; Shannon et al., 2017). They were also supportive of capturing gambling harms from someone else's gambling.

They made the following suggestions for improvements.

1. Although the original list of harms was drawn from Browne et al's original work, the organising framework to group harms together is that of Wardle et al. They recommended that when the final instrument is published the implications of this should be discussed.
2. They highlighted that a number of initiatives to measure harms are underway, with the Short Form Gambling Harm Scale being the most dominant to date. They recommend that the GC should be clear about how these instruments build on the prior work of Browne et al and be explicit about what the GC instruments potentially adds (greater insights into the severity of harms experienced; measurement of harms to others). They also recommended comparing the correlation of the two instruments.
3. The instrument does not aspire to be psychometric scale. However, psychometric techniques have been used in development and especially in item reduction. This has produced an instrument that is heavily weighted towards the measurement of financial/ resource harms. This, while in line with current literature (Langham et al, 2015), may also be an artefact of the analytical technique, as factor analysis favours items that are most often endorsed. They recommended reviewing the included items to ensure an equal balance across a range of theoretical domains of harms.
4. Positive endorsement of some items might not indicate the experience of harms but rather potential experience of harms. This is particularly pertinent to questions which have " a little" as an answer option – it is unclear whether experiencing each harm a little represents a true negative consequence or not. The recommendation was made to remove this answer option OR if it is to be retained, to be clear that this represents the "potential" for harm, rather than experience of it.
5. Potentially the 'harms to self' questions could only be asked for those who gamble regularly (i.e., in the last month) to reduce respondent burden and to minimise the likelihood of false positives.

## B: Analysis of pilot data

In January 2022, NatCen Social Research and the University of Glasgow conducted a random-probability push-to-web pilot study to assess the impact of changing survey methodologies upon gambling participation and problem gambling prevalence rates. Participants were first invited to complete the survey via an online survey, with postal questionnaires sent to those who did not complete online. In total, 1078 participants aged 16 and over, took part in the pilot study, with 619 completing this online and 459 completing it via the paper questionnaire.

The gambling harms questions were included in this pilot (see Appendix A). Those who had gambled in the past 12 months were asked to report their experience of a range of individual harms (harms to self). This covered 14 individual harms, ranging from experience of violence and abuse to cutting back on spending on everyday items. These questions covered three broad domains: financial harms, relationship harms and health harms. Similar questions were asked of everyone who reported that they knew somebody close to them who had gambled. They were asked to think about the impact that somebody else's gambling had upon them (harms from others). All participants were asked whether they had attempted suicide in the last 12 months and, if so, whether this was gambling-related.

For all harms questions, hidden skip codes were used in the online survey so that if someone attempted to move past the questions without completing, they were then presented with a "prefer not to say" answer code. In the paper questionnaire, people could just leave questions blank.

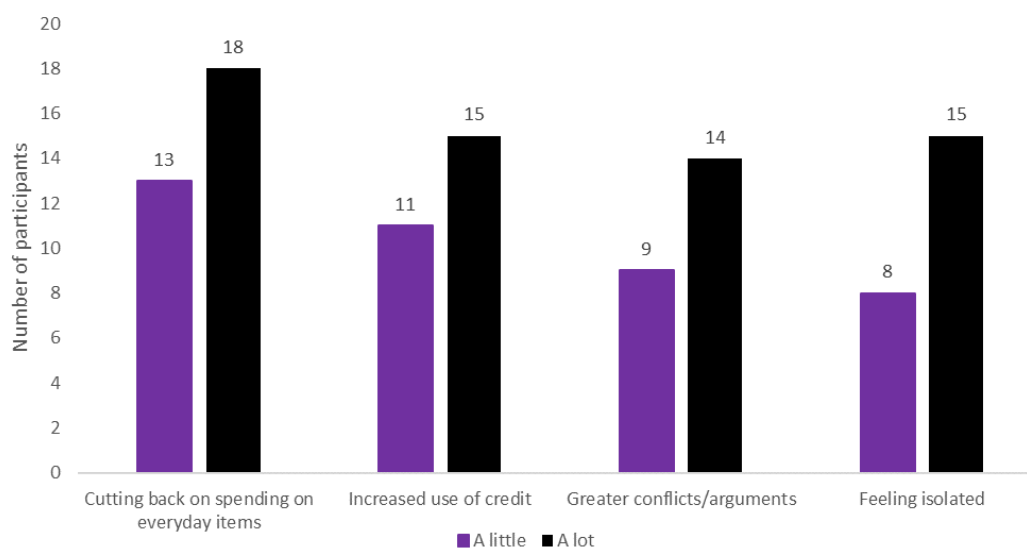
These data were analysed to assess their performance and make recommendations for future development. Key results are summarised below.

### **Harms to self**

- A. Experience of severe harms (experience of violence/abuse; relationship breakdown; losing something of significant financial values; gambling-related suicidality):
  - Response options for these questions were either yes or no.
  - As expected, endorsement of these items was very low – with 2 or 3 different participants endorsing each one. Around 4% of participants did not answer these questions, indicating relatively high item non-response.

- Rates of endorsement for the first question, losing something of significant financial value, were the same as losing a relationship or the experience of violence/abuse. If financial loss is a main driver of harm, we might have expected endorsement of this item to be higher than relationship loss or violence/abuse.
  - One participant reported that a suicide attempt in the past 12 months was gambling related.
- B. Experience of other harms (ranging from cutting back on spending on everyday items to greater conflicts/arguments)
- These questions were measured on a three-point scale: not at all; a little; a lot.
  - For each harm, around 1-2% of past year gamblers (n=8 to n=15) reported that they had experienced each harm “a little”.
  - An additional 2-3% of past year gamblers (n=14 to n=18) reported that they had experienced each harm “a lot”.
  - Around 3-4% of past year gamblers did not answer these questions – representing reasonably high item non-response.
  - Relatively similar numbers of men and women endorsed each harm.
  - The gradient of responses across the answer options did not operate in the way expected. Normal response patterns for a scaled response option (where behaviours are relatively rare) would tend to show endorsement reducing as severity or frequency increases. This is not the case for these questions, where endorsement of “a lot” is higher than “a little” for each question. (See Figure 1)

**Figure 1: number of participants reporting that they experienced each harm “a little” or “a lot”**



- Correlation coefficients examined the relationship between experience of any financial harm; any health harm and any relationship harm with problem gambling status, finding a strong correlation (>0.7) regardless of whether problematic gambling status was defined by the Problem Gambling Severity Index or the DSM-IV.

### Harms from others

- Table 1 shows how many pilot participants reported that a family member, friend or someone else close to them gambled. Endorsement rates were highest for a family member (n=219). Overall, 308 participants reported that someone close to them gambled and were thus eligible to complete the ‘harms from others’ gambling questions.
- Overall, 65% of pilot participants reported gambling in the past year, with around 40% of participants living with someone else who gambled. However, when answering a specific question on this, only 308 (28.5%) participants reported that they knew someone close to them who had gambled. This suggests there is some **under-reporting** in this measure, which is likely related to how it is worded (asking about gambling with no clarification of the types of activities to include).

**Table 1: Harms to others**

	Whether anyone close to the participant gambled	
	Yes	No
	% (n)	% (n)
A family member	20.33 (219)	79.67 (858)
A friend	8.73 (94)	91.27 (983)
Someone else	2.23 (24)	97.77 (1053)

- A. Experience of severe harms (experience of violence/abuse; relationship breakdown; losing something of significant financial value; gambling-related suicidality):
- Response options to these questions were either yes or no.
  - Rates of endorsement for each item were low, ranging between 1 participant reporting losing something of value and 9 participants reporting relationship breakdown.
  - Item non-response ranged between 1.5% to 3.9% of those who were eligible to answer the questions.
- B. Experience of other harms (ranging from cutting back on spending on everyday items to greater conflicts/arguments)
- These questions were measured on a three-point scale: not at all; a little; a lot.
  - Endorsement of experiencing each harm “a little” varied from 2% (n=7) for those increasing their use of credit to 7% (n=22) for those stating that other people’s gambling caused increased conflict/arguments.
  - An additional c. 2% of those answering each harm question reported that they had experienced each harm “a lot”.
  - Item non-response for these questions was low (n=1).
  - For some harms, the gradient across the response options operated in a more conventional way – with endorsement decreasing as severity increased. For others, such as feeling socially isolated, broadly equal proportions endorsed that they experienced this “a little” and “a lot”.

- Rates of endorsement between men and women were similar.

## C: Recommendations

- Overall, expert review and analysis of the harms questions within the pilot gambling prevalence survey suggested that question development process was robust and the questions presented to the survey participants were clear and unambiguous. The resulting set of questions captured important domains of harms including financial, relationship, and health harms. It was particularly encouraging that similar numbers of men and women endorsed the harms questions.
- As the development of these questions is an ongoing priority, the following improvements were suggested:
  1. The range of harms included in the question set were heavily weighted towards financial harms. The GC should review their prior pilot data to establish a more balanced set of questions, covering a broader range of issues. For instance, questions related to productivity (e.g., absenteeism or presenteeism at school/work), health (both physical and mental health), as well as other wellbeing measures could be added. This would give the resulting set of questions closer correspondence to the theoretical frameworks which underpin them.
  2. The pilot data showed that questions which used scaled answer options were not performing in the way expected, with fewer people reporting experiencing each harm 'a little' than 'a lot'. The scaling between answer options is also uneven. Combined, this raises uncertainty about whether those experiencing something "a little" are actually experiencing harms or rather experiencing the potential for harms. We recommend changing the scaled response options to have more equally spaced responses (if it is to be retained). We also recommend experimental work comparing results between harms questions using binary yes/no answer options and (revised) scaled answer options. Currently, scaled answer options are used in the measurement of problem gambling which allows people to express endorsement without having to specify "yes" in concrete terms. Retaining some flexibility in responses might be wise, given the stigma that surrounds gambling harms. However, this should be tested further.



3. Relatedly, if scaled answer options are retained, the GC will need to consider how it reports summary statistics from these questions and how these are defined. For example, what level of endorsement most likely indicates that negative consequences are being incurred?
4. The filter question into the 'harms from others' questions should be revised. The current question appears to under-report the number of people who know people close to them who gamble. This will then lead to underestimation of harms from others.
5. The ordering of the harms questions should be changed so that items relating to less severe harms are presented first.
6. The question wording of all harms questions should be further reviewed by questionnaire development experts.
7. Methodologically, it is encouraging that there was some endorsement of the gambling-related suicide question within the pilot. This should be included in the next phase of development work to assess further.

## References

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## Appendix A: Harms questions used in the pilot survey

**Note:** where harms were already included in either the DSM-IV instrument or the Problem Gambling Severity Index (PGSI), these questions were used and were not repeated.

### **Harms to self**

*Harms questions taken from the DSM-IV*

*Asked if gambled in the past year*

In the past 12 months...				
	Very often	Fairly often	Occasionally	Never
Have you lied to family, or others, to hide the extent of your gambling?				
Have you committed a crime in order to finance gambling or to pay gambling debts?				
Have you asked others to provide money to help with a desperate financial situation caused by gambling?				

### **Harms questions taken from the PGSI**

*Asked if gambled in the past year*

In the past 12 months, how often...				
	Almost always	Most of the time	Sometimes	Never
...have you borrowed money or sold anything to get money to gamble?				
...have you felt that gambling has caused you any health problems, including stress or anxiety?				
...have you felt guilty about the way you gamble or what happens when you gamble?				

### **Questions asked if gambled in the past year**

In the last 12 months...		
	Yes	No
...have you lost something of significant financial value such as your home, business, car or been declared bankrupt because of your own gambling?		
...has your relationship with someone close to you, such as a spouse, partner, family member or friend broken down because of your own gambling?		
...have you experienced violence or abuse because of your own gambling?		

In the last 12 months, to what extent, if at all, has your own gambling led to you...			
	Not at all	A little	A lot
... reducing or cutting back your spending on everyday items such as food, bills and clothing?			
...having to use your savings to fund your own gambling?			
...increasing your use of credit, such as credit cards, overdrafts and loans?			
...experiencing greater conflict or arguments with friends, family and work colleagues?			
...feeling isolated from other people, left out or feeling completely alone due to your own gambling?			

**Affected others:**

*Everyone asked*

Does anyone you are close to gamble?	
No	
Yes, a family member	
Yes, a friend	
Yes, someone else	

*Rest of questions asked if anyone close to does gamble*

Sometimes other people can be affected by someone's gambling. In the past 12 months, how often have you...				
	Very often	Fairly often	Occasionally	Never
...lied to family, or others, to hide the extent of someone else's gambling?				
...committed a crime in order to finance someone else's gambling or to pay their gambling debts?				
...asked others to provide money to help with a desperate financial situation caused by someone else's gambling?				

In the last 12 months...				
	Almost always	Most of the time	Sometimes	Never
... have you borrowed money or sold anything to get money because of someone else's gambling?				
...have you felt that someone else's gambling has caused you any health problems, including stress or anxiety?				
...have you felt that someone else's gambling has made you feel embarrassment, guilt or shame?				

Harms due to someone else's gambling:		
	Yes	No
In the last 12 months, has your relationship with someone close to you such as a spouse, partner, family member or friend broken down because of someone else's gambling?		
In the last 12 months, have you lost something of significant financial value such as your home, business, car or been declared bankrupt because of someone else's gambling?		
In the last 12 months, have you experienced violence or abuse because of someone else's gambling?		

In the last 12 months, to what extent has someone else's gambling led to you...			
	Not at all	A little	A lot
... having to use your savings?			
...increasing your use of credit, such as credit cards, overdrafts and loans?			
... reducing or cutting back your spending on everyday items such as food, bills and clothing?			
... experiencing greater conflict or arguments with friends, family and work colleagues?			
... feeling isolated from other people, left out or feeling completely alone?			

Thinking about the impact that someone else's gambling may have had on you during the past 12 months, have you sought help, support or information online, in-person or by telephone from...

	Yes	No
...mental health services?		
...food banks or other welfare organisations?		
...relationship counselling and support services?		
...gambling support services?		

### Suicidal thoughts/attempts

*Everyone asked*

	Yes	No
In the past 12 months have you ever thought about taking your own life, even though you would not actually do it?		
In the past 12 months, have you made an attempt to take your life, by taking an overdose of tablets or in some other way?		

*Asked if yes to attempt to take own life in past year*

	Not at all	A little	A lot
To what extent, if at all, was this related to your or someone else's gambling?			