National Centre for Social Research

LIVERPOOL JOHN MOORES UNIVERSITY

UNIVERSITY OF WOLVERHAMPTON

Stigmatisation and discrimination of people who experience gambling harms: quantitative analysis

Authors: Frances Shipsey, Alexander Martin, Hannah Brearley-Bayliss, Robyn Bennetto, Eddie Cohen, Dr Sokratis Dinos (NatCen); Dr Joanne Lloyd, Dr Katy Penfold, Dr Laura Nicklin (University of Wolverhampton); Dr Darren Chadwick (Liverpool John Moores University).

Funded by: GambleAware

APRIL 2025

Acknowledgments

We would like to thank our colleagues Kate Gosschalk and Conor Cotton at YouGov for their expert support and guidance during the development of the survey for this study. We are grateful to our academic advisor, Professor Claire Henderson, Clinical Professor of Public Mental Health, at King's College London for her advice and comments on the draft stigma and discrimination scales.

We would like to thank everyone on our panel of individuals with lived experience of gambling harm for their input into the content and wording of survey items, as well as into the wider study. Their involvement contributed to the modification of several scale items in order to ensure the wording was comprehensible, and applicable to gambling-related harms.

Funding and disclaimer

This analysis has been funded by GambleAware as part of the programme of research 'Researching Stigmatisation and Discrimination of People who Experience Gambling Harms in Great Britain'.

GambleAware is a wholly independent charity and has a framework agreement with the Gambling Commission to deliver the National Strategy to Reduce Gambling Harms within the context of arrangements based on voluntary donations from the gambling industry. GambleAware commissions research and evaluation to build knowledge of what works in prevention and reduction of gambling harms that is independent of industry, government and the regulator. The authors alone are responsible for the views expressed in this article, which do not necessarily represent the views, decisions, or policies of the institutions with which they are affiliated.

Executive summary

This report forms part of a programme of research 'Researching Stigmatisation and Discrimination of People who Experience Gambling Harms in Great Britain', funded by GambleAware and undertaken by research partners University of Wolverhampton and The National Centre for Social Research (NatCen). The programme has included a Rapid Evidence Assessment (REA), qualitative research with people who experience gambling harms and with a wide range of stakeholders, a thematic analysis of online gambling support forum posts, a discourse analysis, a lived experience of gambling harms panel, and this quantitative analysis of survey data on gambling harms and stigma.

Research aims

This quantitative report sets out to answer the following broad research questions:

- How are people who experience gambling harms stigmatised and discriminated against in society, and To what extent do people who experience gambling-related harms also experience stigma and discrimination?
- To what extent are people who experience gambling harms perceived to be stigmatised? Does experiencing gambling harms effect this perception of stigma?
- Is there a relationship between different types of stigma (perceived/internalised/experienced) among people who experience direct gambling harms?
- Among people who experience direct gambling harms, which sociodemographic groups are disproportionately impacted by feelings and experiences of stigma?
- How do people who experience direct gambling-related harms and stigma use healthcare and support services?
- Does experience of stigma vary by type of gambling activity and by levels of gambling-related harm?
- What is the relationship between health (including health behaviours and wellbeing) and experienced stigma, among those who experience gambling-related stigma compared with those who do not?

Methods

Analysis in the report is from the Aug 2023 wave of the "Mini-dip Treatment and Support Survey'' conducted for GambleAware. Two datasets were used for analysis: a main dataset weighted to the GB general population and a boost sample of GB adults who had gambled in the last 12 months and reported some level of gambling harm, measured using the Problem Gambling Severity Index (PGSI).

The questionnaire included core questions on gambling participation over the last 12 months. PGSI questions to measure level of problems experienced from gambling were completed by those who had gambled in the past 12 months. A range of scales were used to measure stigmatising and discriminatory attitudes to people who gamble, and participants completed different measures depending on their experience of gambling.

Participants who had gambled in the last 12 months completed the Gambling Experienced Stigma Scale (GESS) and the Gambling Internalised Stigma Scale (GISS) which both seek to measure experienced stigma and self-stigma related to gambling. Participants who said they had been affected by other people's gambling completed the Affected Others Experienced Stigma Scale (AOESS) which seeks to measure stigma experienced by

individuals as a result of other people's gambling ("associated'' or "courtesy'' stigma). All participants completed the Gambling Perceived Stigma Scale (GPSS) which aims to measure the perception of stigma at a social level from the general population; and the Intersectional Discrimination Index (InDI-D) which measures day-to-day intersectional discrimination without attributing that discrimination to any specific characteristic such as ethnicity or sexuality.

Vignettes (short stories about hypothetical individuals) followed by multiple choice questions, were used to gauge people's attitudes towards people experiencing gambling harms and were asked of all participants.

Descriptive statistics (cross-tabulations and correlation analyses) were used to analyse the stigma scales identifying differences across sociodemographic groups, experiences of gambling, use of treatment and support services and health and wellbeing. Significance testing was carried out as part of this analysis. For the vignette analysis, robust two-way independent factorial ANOVAs were used to test for the main effects of vignette characteristics associated with stigma, and linear multiple regression was used to explore how multiple factors combined to influence desire for social distance.

Key findings

In response to our research questions, we determined the following things:

- There is clear evidence of experienced, internalised, and perceived stigma amongst people who experience gambling harms, which increases with the level of problems experienced. We also identified stigmatising attitudes towards people who experience gambling harms (in the form of desire for social distance) amongst the general population;
- Most people recognised that there was some degree of societal stigma around gambling harms in the general population. Those who had lived experience of gambling harms were most aware of this, but were, themselves, the least likely group to hold stigmatising views of others who experience gambling harms;
- Experienced, internalised, and perceived stigma were all correlated with one another; with the relationship between experienced and internalised stigma being particularly strong. This may suggest that people's direct experience of feeling/being stigmatised by others has a more dramatic effect on their feelings of internalised stigma than their perception about public attitudes in general;
- Data from self-reports and/or vignette reactions indicated that the following demographic groups are at particular risk of some form of stigma: young people, females experiencing a high level of problems from gambling, single people, people with children in the household, people from minority ethnic groups within the UK, people who follow a religion and people experiencing drug and alcohol related difficulties;
- While stigma was a barrier to help seeking for many people experiencing harms, we also found that experienced and internalised stigma were generally higher among those who had accessed services than among those who had not. This could indicate that people encountered increased experienced and internalised stigma during the process of disclosure and support seeking, or that at high levels, stigma can act as a catalyst prompting people to seek treatment;
- Overall, face to face gambling was associated with higher experienced stigma than online gambling – likely because this is a more visible means of gambling. Betting on football in-person and playing fruit/slot machines (also highly visible activities) were also associated with relatively high levels of experienced stigma. Playing the national lottery was the least associated with experiences of stigma;
- Consistent with the wider literature, stigma was significantly associated with psychological distress.

Stigmatisation of people who experience gambling harms

- Higher levels of reported stigma – **experienced and internalised stigma** – among GB adults who had gambled in the past 12 months were associated with higher levels of gambling harms, as measured by level of problems experienced from gambling (PGSI);
- Among 'affected others' (those who said they had been affected by other people's gambling), lowest levels of associated stigma were found amongst those who themselves gambled without reported problems (had a PGSI score of 0). Those who did not gamble, and those who experienced problems from gambling (PGSI score of 1+) reported higher levels of associated stigma than those who gambled without reported problems;
- There was some evidence of agreement that there is societal stigma towards people who gamble. Those experiencing a higher level of problems from gambling (PGSI score of 8+) were more likely to agree that there is societal stigma towards people who gamble than those who gambled with no reported problems;
- All GB adults reported at least some level of **intersectional day-to-day discrimination** in the past year. There was an association between higher levels of reported discrimination and level of problems experiencing from gambling.

Scores on all of the stigma scales were statistically significantly correlated with one another. There was a moderate positive correlation between experienced and internalised stigma. There was a weak positive correlation between experienced and perceived stigma, and a weak positive correlation between internalised and perceived stigma. This indicates that people are likely to be impacted by multiple forms of stigma concurrently, and suggests that experiences of being stigmatised by others are related to self-stigma.

Experiences of gambling-related stigma amongst different groups

The following findings were reported among people who had gambled in the last 12 months, and who reported they had experienced problems from gambling (PGSI score of 1+). The findings take into account (statistically) the level of problems experienced from gambling (PGSI score).

- Older **age groups** reported lower experienced stigma than younger age groups. No significant differences were seen by age group for reported internalised stigma or perceived stigma however;
- Those from **ethnic minority backgrounds** reported higher experienced, internalised and perceived stigma than those from white ethnic backgrounds;
- Those who **belonged to a religion** reported higher experienced, internalised and perceived stigmatisation scores than those not belonging to a religion**;**
- People who were **not in a relationship** reported the highest experienced stigma scores while those who were in a relationship but not married or in a civil partnership reported the lowest;
- Participants living in **households with two or more others** reported higher experienced stigma scores than those in households with fewer than two others;
- Those **living with any children in the household** reported higher experienced stigma scores than those in households with no children;
- There were no statistically significant differences in experienced stigma or internalised stigma scores by gender, sexuality, or nationality (UK / non-UK), but women reported higher perceived stigma than men. Amongst women, the rise in both experienced and perceived stigma as PGSI scores increased was steeper than it was among men – i.e. the level of problems being experienced had a more pronounced effect on the degree of stigma that women perceived and encountered, when compared with men;

- The number of different types of gambling activity was not significantly associated with higher levels of experienced stigma;
- Regarding the **type of gambling activity**, spending money only on **betting** activities was significantly associated with lower experienced stigma scores compared with those who also engaged with other types of gambling.

Attitudes towards people who experience gambling harms alongside other potentially stigmatised characteristics (via vignettes)

- Participants were significantly less willing to engage socially with (i.e. were more stigmatising of) someone experiencing gambling harms than someone who gambles without experiencing harm; e.g. 90% were willing to make friends with someone who gambles without experiencing harm, but compared with 70% who were willing to make friends with someone experiencing gambling harms. This was seen across all vignettes (i.e. regardless of the additional contextual information about the hypothetical individual's demographic or other characteristics);
- The greatest desire for social distance (i.e. stigma) was apparent when participants were asked about their attitudes towards someone experiencing gambling harms alongside drug and alcohol use. For example, only 39% of those asked were willing to make friends with someone who fit this description. This means that those who experience gambling harms in combination with drug and/or alcohol use are at particularly elevated risk of stigma from the general population;
- People who had lived experience of gambling harms were, on average, less stigmatising of someone experiencing gambling harms, being more willing to engage socially with them than people who had no personal experience of gambling harm. For example, 41% of people with lived experience of gambling harm would be happy to have someone who had experienced gambling harms marry into their family, compared to 21% of people who had no experience of gambling or gambling harms;
- People's perceptions about the cause of gambling harms impacted how stigmatising they were; in particular, those who believed gambling harms to be caused by bad character were less willing to engage socially with someone experiencing harm, with just 38% of those who held this belief willing to be friends with someone experiencing gambling harms, compared with 68% of those who did not believe this;
- The more disruptive, harmful, and difficult to recover from participants believed gambling harms to be, the less willing they were to engage with someone experiencing gambling harms.

Treatment and support, and health

- Those who had accessed treatment or support services reported more internalised and experienced stigma (but not more perceived stigma) than those who had not, even when taking into account level of problems experienced from gambling. The pattern of variation in experienced stigma as level of problems experienced increased was significantly different by whether participants had accessed services or not, with the **steepest rise in experienced stigma as level of problems experienced from gambling increased** shown among the group who had not accessed services (although the highest mean experienced stigma score was found among those who had accessed services and had experienced a high level of problems from gambling (PGSI score of 8+));
- **Anticipated stigma** was suggested as a reason for participants who had experienced problems with gambling (PGSI score of 1+) not accessing services (**barriers to seeking support**). Despite these questions only being asked of those who said they needed to cut down their gambling, 45% of participants said they did not seek support because they did not feel they needed to access services. The next most common response

was ‘I feel too ashamed or embarrassed to talk about my gambling with anyone’ (19%), followed by ‘I did not think treatment or support would be helpful / effective’ (10%);

- Feeling “ashamed” or “embarrassed” was a more common reason for not accessing services among people experiencing a high level of problems with gambling (PGSI score of 8+) **(36%),** compared with 13% of participants experiencing several problems from gambling (PGSI score of 3-7), and 4% of participants experiencing some problems with gambling (PGSI score of 1-2);
- Across **all participants who had gambled in the past 12 months**, the level of experienced stigma was significantly associated with **mental distress (Kessler 6 – K6 scale) –** even when taking level of problems experienced from gambling into account in the statistical analysis.

Areas for future research

- Further research to inform the development and/or evaluation of interventions to reduce public and self-stigma of demographic groups, and to facilitate treatment/support seeking. This would benefit from larger samples of minority groups, which would allow analysis of different subgroups;
- Comparative research with people who gamble and affected others, drawing on larger sample sizes of the latter. This could apply the bespoke scale we used to measure experienced stigma in affected others based on relevant items from the Gambling Experienced Stigma Scale, which demonstrated good reliability;
- Vignette-based research on wider characteristics that may be associated with intersectional stigma. For example, migrant groups; people with intellectual or physical disabilities; people with mental health conditions) would be of value;
- Qualitative research to further understand the inverse relationship we found between age and stigma (e.g. the greater levels of stigma among younger people and/or reduced stigma in older people) and high levels of self-stigma among females experiencing gambling harms;
- Further research applying more implicit stigma-related measures, which may confirm whether the levels of stigma identified in this study are indicative of people’s true perceptions, or whether masked and/or subconscious/implicit stigma is also operating.

Contents

Executive summary **3**

Abbreviations and glossary **11**

1. Introduction **15**

1.1 Background 15
1.2 Research aims 18
1.3 Report summary 19

2. Methodological approach **20**

2.1 The data 20
2.2 Stigma and discrimination scales 22
2.3 Vignettes 23
2.4 Stigma and discrimination scales analysis 25
2.5 Vignette analysis 26

3. Stigmatisation of people who experience gambling harms **28**

3.1 Experienced and internalised stigma by level of problems experienced from gambling (PGSI) 29
3.2 Perceived stigma by whether gambled or by level of problems experienced from gambling (PGSI) 31
3.3 Discrimination by whether gambled or by level of problems experienced from gambling (PGSI) 32
3.4 Relationship between different experiences of stigma 33

4. Experiences of gambling-related stigma among different groups **35**

4.1 Gambling-related experienced stigma (GESS) among different population groups 36
4.2 Gambling-related internalised stigma (GISS) among different population groups 43
4.3 Gambling-related perceived stigma (GPSS) among different population groups 43
4.4 Stigmatisation by type of gambling activity 44

5. Attitudes towards people who experience gambling harms alongside other potentially stigmatised characteristics **48**

5.1 Stigma across different hypothetical scenarios 49
5.2 Relationships between lived experience of gambling harm and attitudes towards others experiencing gambling harms 52
5.3 Beliefs about the nature and origin of gambling harms, and their relationship with stigma. 53

6. Treatment and support, and health **56**

6.1 Stigmatisation and accessing treatment and support 57
6.2 Health and wellbeing and gambling-related experienced stigma 62

7. Discussion and conclusion **65**

7.1 Discussion of findings 65
7.2 Limitations 73
7.3 Areas for further research 73

7.4 Conclusion 74

Appendix A: Survey Questionnaire 75

Appendix B: Methodology 101

List of tables

List of tables 9
List of figures 9
List of abbreviations 11
Glossary of terms 11
Table 1.1 Research questions 18
Table 2.1 Summary of stigma and discrimination scales 23
Table 2.2: Summary of vignette conditions 24
Table 5.1: Willingness to engage with someone who gambles in different social scenarios (proportion of entire sample indicating willingness) 51
Table 5.2: Willingness of participants to engage with someone experiencing gambling harms across six scenarios, by gambling status of participants 52
Table 5.3: Willingness of participants to engage with someone gambling without harms across six scenarios, by gambling status of participants. 52
Table 5.4: Results of multiple linear regression to explore how beliefs about nature and origin of gambling harms predict desire for social distance 54
Appendix Table B.1: Composition of the samples by relationship to gambling harms 102
Appendix Table B.2: Demographic characteristics of the sample provided 103
Appendix Table B.3: Summary of vignette conditions 107
Appendix Table B.4: Derived variables for sociodemographic characteristics 110

List of figures

Figure 3.1: Experienced stigma (GESS) by level of problems with gambling (PGSI) 29
Figure 3.2: Internalised stigma (GISS) by level of problems with gambling (PGSI) 30
Figure 3.3: Experienced stigma among affected others (AOESS) by whether gambled / level of problems with gambling (PGSI) 31
Figure 3.4: Perceived stigma (GPSS) by whether gambled / level of problems with gambling (PGSI) 32
Figure 3.5: Discrimination or enacted stigma (Indi-D) by whether gambled or level of problems with gambling (PGSI) 33
Figure 4.1: Experienced stigma by age and by PGSI 36
Figure 4.2: Experienced stigma by gender and by PGSI 37
Figure 4.3: Experienced stigma by ethnicity and by PGSI 38
Figure 4.4: Experienced stigma by whether belongs to a religion and by PGSI 39
Figure 4.5: Experienced stigma by relationship status and by PGSI 40
Figure 4.6: Experienced stigma by household size and by PGSI 41

Figure 4.7: Experienced stigma by number of children in household and by PGSI 42
Figure 4.9: Experienced stigma by whether spent money on specific gambling activities or not in the past 12 months 47
Figure 5.1: Desire for social distance from a hypothetical individual who gambles (when provided with information about gambling harms and other characteristics) 50
Figure 5.2: Willingness to engage with someone who experiences gambling harms, broken down by belief in bad character as the cause of harms 55
Figure 6.1: Experienced stigma by past year use of treatment, support or advice services and by level of problems with gambling (PGSI) 58
Figure 6.2: Internalised stigma by past year use of services and by PGSI 59
Figure 6.3: Experienced stigma by mental distress (K6) and by PGSI 63

Abbreviations and glossary

List of abbreviations

Abbreviation or acronym	
AOESS	Affected Others Experienced Stigma Scale
DSM	Diagnostic and Statistical Manual of Mental Disorders
GESS	Gambling Experienced Stigma Scale
GISS	Gambling Internalised Stigma Scale
GPSS	Gambling Perceived Stigma Scale
InDI-D	Intersectional Discrimination Index
IMD	Index of Multiple Deprivation
ISMI-9	Internalized Stigma of Mental Illness Scale
PGSI	Problem Gambling Severity Index
REA	Rapid Evidence Assessment
SDS	Social Distance Scale

Glossary of terms

Term	Definition
Affected others	People affected by someone else's gambling, e.g., relative, partner, child, parent, friend.
Affected Others Experienced Stigma Scale (AOESS)	A way of measuring levels of gambling-related stigma experienced by people who have been negatively affected by the gambling of someone close to them. AOESS is a bespoke 4-item scale created for this research and based on four items from GESS.
Categorical variable	Also known as discrete or qualitative variable(s). These are variables which can take on a set number of values. For example, category of PGSI score, such as low, medium or high.
Correlation analysis	A method of statistical analysis used to determine whether a relationship exists between two variables and what the extent and strength of that relationship is.

Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)	A screening instrument based on criteria from the fourth edition of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV). This is a tool created for diagnosis by clinicians of 'pathological gambling'. An adapted version of the DSM-IV has been used in survey settings to measure 'problem gambling'.
Descriptive statistics	Statistics that summarise and describe features of a dataset such as the mean, range, and distribution of values for variables.
Discrimination	See definition of 'stigma' below.
Explanatory variable(s)	Also known as the independent variable(s) or predictor variable(s). These are variables included in regression models to explain or predict changes in the outcome variable. For example, age, disability status and education level.
Gambling	Any kind of betting, gaming, or playing lotteries. Gaming means taking part in games of chance for a prize, betting involves making a bet on the outcome of sports, races, events or whether or not something is true, and lotteries involve a payment to participate in an event in which prizes are allocated on the basis of chance (such as raffles and sweepstakes).
Gambling disorder	'Gambling disorder' is a term which has been used by medical professionals to describe harm from gambling. In the DSM-V, gambling disorder is described as *'Persistent and recurrent problematic gambling behaviour leading to clinically significant impairment or distress'*. While still used in medical practice, these terms carry stigma and are not in line with a public health approach to gambling research. These terms are only used in the report if necessary to accurately report previous research.
Gambling Experienced Stigma Scale (GESS)	A way of measuring the amount of gambling-related stigma someone has experienced. GESS is a validated 13-item scale.
Gambling harms	The preferred term within this research, 'gambling harms' refers to any adverse impacts from gambling on the health and wellbeing of individuals, families, communities, and society. This can include impacts on people's resources, relationships, and health.
Gambling Perceived Stigma Scale (GPSS)	A way of measuring the perceptions of gambling-related stigma at the social level (i.e. what respondents believe 'most people' think about people who experience gambling harms). GPSS is a validated 13-item scale.
Index of Multiple Deprivation (IMD)	A measure of relative deprivation for small areas across each of the nations of the United Kingdom.
Intersectional Discrimination Index (InDI-D)	A way of measuring levels of discrimination. InDI-D is a validated 9-item scale.

Internalized Stigma of Mental Illness Scale (ISMI-9)	A validated scale that measures internalised stigma in relation to 'mental illness'. The scale has been adapted for use in this study to measure gambling-related internalised stigma or self-stigma (GISS).
Intersectionality / Intersectional approach	An approach to research which recognises that multiple forms of inequality or disadvantage can intersect or compound to create obstacles.
Mean score	The mean score for a scale such as GESS is the average score across all participants in a group. It is calculated by adding the individual scores of all participants (in the group being reported) and dividing the total of the scores by the number of participants.
Outcome variable	Also known as the dependent variable. Regression models estimate the relationship between a single outcome variable of interest and the explanatory variables. For example, we can use loneliness as an outcome variable to understand to what extent loneliness is explained by factors like income and gender.
p-value	Used as a measure of statistical significance. Low p-values indicate results are very unlikely to have occurred by random chance. $p<.05$ is a commonly cited value, indicating a less than 5 per cent chance that results obtained were by chance. Research findings can be accepted with greater confidence when even lower p-values are cited, for example $p<.01$ or $p<.001$.
Partial correlation analysis	A method of statistical analysis used to determine whether a relationship exists between two variables, while taking into account the effect other variables may have on this relationship.
Problem Gambling Severity Index (PGSI)	An index of 'problem gambling' which gives scores from 0-27. The measure is widely used and in the UK is used in the Health Survey for England, Scottish Health Survey, and the Welsh Problem Gambling Survey. A public health approach to gambling harms has moved away from this conceptualisation because definitions of 'problem gambling' stem from a mix of risk factors and outcomes and are inappropriate proxies of harm. We will refer to different PGSI levels using either the score bandings or the terminology 'level of problems with gambling' as shown below: **PGSI score of 0: Those experiencing no problems with their gambling** (*often referred to in wider literature as 'non-problem gamblers'*). **PGSI score of 1-2: Those experiencing a low level of problems with their gambling** (*often described in wider literature as being at 'low risk' of negative consequences and loss of control*). **PGSI of 3-7: Those experiencing a moderate level of problems with their gambling** (*often described in wider literature as being at 'moderate risk' of negative consequences and loss of control*). **PGSI of 8+: Those experiencing problems with their gambling** (*defined in the PGSI as being gambling which leads to negative consequences and a possible loss of control*).

	PGSI of 1+: Those experiencing any level of problems with their gambling / those experiencing gambling problems. *In wider literature, those considered 'low-risk' and 'moderate-risk' are also labelled as being 'at-risk' of negative consequences and loss of control.*
Rapid Evidence Assessment (REA)	An evidence review research method, that makes use of targeted literature searches to quickly produce a literature or evidence review.
Social Distance Scale (SDS)	A way of measuring stigma and discrimination by asking people how likely they are to have social interactions with a stigmatised group.
Standard error	The standard error of the mean indicates how much the estimate of the mean (average) is likely to vary from the true mean (average) in the population being studied. It is shown with +/- to indicate that the mean could be higher or lower than the estimate.
Statistical significance	A way to quantify whether results from analysis are likely to be due to random chance. A statistically significant result or difference at the 95% level means we can be 95% confident that this was caused by something other than chance alone. All findings presented here are statistically significant unless otherwise stated.
Stigma	A social process though which difference between individuals is labelled, with negative stereotyping following from this difference. *Discrimination* is the negative actions or consequences imposed externally on those who have been stigmatised. *Enacted Stigma* refers to instances where stigma motivates discriminatory behaviour towards people who have been stigmatised. *Public stigma* or *social stigma* is the way society reacts to stigmatised individuals based on negative attitudes towards a stigmatised population or group. *Perceived stigma* refers to the fear of being discriminated against as a result of being stigmatised, or the degree to which levels of public stigma are perceived by stigmatised individuals. *Experienced Stigma* refers to people's reported experience of stigma from others. *Internalised Stigma or Self-stigma* describes when people believe the negative stereotypes associated with a stigmatised label are true and apply to oneself. *Anticipated Stigma* is a fear of being judged or of receiving negative reactions in the future as a result of being stigmatised. *Associated Stigma* or *Courtesy Stigma* is when people who know people who gamble, or have been affected by other people's gambling, are subjected to stigma as a result.
Vignettes	A survey-based research method where participants are presented with descriptions of persons or scenarios in order to elicit judgement or response. This method has been used in combination with other scales in this study to measure levels of gambling-related stigma.

1. Introduction

This chapter outlines the wider research programme of which this quantitative analysis forms a part and provides a brief overview of concepts of stigma and discrimination, of gambling harms, and of language and terms used in this report. It then summarises the findings on measures of stigma and discrimination from an earlier evidence review, and on gaps in the literature of gambling-related stigma as it affects specific sociodemographic groups, particularly those who are more likely to experience marginalisation or social exclusion.

1.1 Background

This report forms part of a programme of research 'Researching Stigmatisation and Discrimination of People who Experience Gambling Harms in Great Britain', funded by GambleAware and undertaken by research partners University of Wolverhampton and The National Centre for Social Research (NatCen). The programme has included a Rapid Evidence Assessment (REA), qualitative research with people who experience gambling harms and with a wide range of stakeholders, a thematic analysis of online gambling support forum posts, a discourse analysis, consultation with a panel who have lived experience of gambling harms, and this quantitative analysis of survey data on gambling harms and stigma.

Stigma and discrimination concepts

Concepts relating to stigma have been defined, elaborated and refined in the academic and community literature over many decades. Goffman defined **stigma** as it is currently understood an "*attribute that is deeply discrediting*" or "*discreditable*", (p.3-4) to be considered in the context of relationships.[1] A later definition with the addition of **discrimination** emphasised that the stigma, or 'mark' is not a fixed attribute but is imposed by others.[2] **Public stigma,** or **social stigma**, is described as the way society reacts to stigmatised individuals based on negative attitudes towards a stigmatised population or group.[3,4] **Perceived stigma** provides a way to operationalise public stigma by measuring an awareness of public stigma, or a belief that others might hold negative stereotyped views of a certain condition or behaviour.[5,6] **Experienced stigma** is defined as people's reported experience of stigmatisation by others.[7] **Self-stigma,** or **internalised stigma** describes "*the belief that negative stereotypes about people who struggle with gambling are true and apply to [oneself]*" (p.50).[8] Deriving from perceived public stigma, self-stigma affects people's subjective identity, and their feelings of self-worth and self-esteem.[9] **Associated** or **courtesy** stigma describes the feeling of stigma arising as a result of someone having "affective or professional ties" to a stigmatised individual, as opposed to one's own behaviour or identity

[1] Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall.
[2] Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*, 363–385. JSTOR. http://www.jstor.org/stable/2678626
[3] Corrigan, P. W., & Shapiro, J. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. Clinical Psychology Review, 30, 907–922, cited in: Hing, N., Nuske, E., Gainsbury, S. M., & Russell, A. M. T. (2016). Perceived stigma and self-stigma of problem gambling: Perspectives of people with gambling problems. *International Gambling Studies*, *16*(1), 31–48. https://doi.org/10.1080/14459795.2015.1092566
[4] Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*, 363–385. JSTOR. http://www.jstor.org/stable/2678626
[5] Donaldson, P., Langham, E., Best, T., & Browne, M. (2015). Validation of the gambling perceived stigma scale (GPSS) and the gambling experienced stigma scale (GESS). *Journal of Gambling Issues*, *2015*(31), 162–199. https://doi.org/10.4309/jgi.2015.31.8.
[6] Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*, 363–385. JSTOR.
[7] Donaldson, P., Langham, E., Best, T., & Browne, M. (2015). Validation of the gambling perceived stigma scale (GPSS) and the gambling experienced stigma scale (GESS). *Journal of Gambling Issues*, *2015*(31), 162–199. https://doi.org/10.4309/jgi.2015.31.8
[8] Pliakas, T., Stangl, A., & Siapka, M. (2022). *Building Knowledge of Stigma Related to Gambling and Gambling Harms in Great Britain: A Scoping Review of the Literature*. GambleAware. https://www.begambleaware.org/sites/default/files/2022-07/GambleAware%20Stigma%20Final.pdf
[9] Hing, N., Nuske, E., Gainsbury, S. M., & Russell, A. M. T. (2016). Perceived stigma and self-stigma of problem gambling: Perspectives of people with gambling problems. *International Gambling Studies*, *16*(1), 31–48. https://doi.org/10.1080/14459795.2015.1092566

being stigmatised itself.[10] In the context of this study, associated stigma may be reported by people who have been affected by the gambling of other(s). **Anticipated stigma** is a fear of being judged or of negative reactions in the future.[11] Lastly, the concept of **enacted stigma** describes acting on stigmatising views to the detriment of the stigmatised person, e.g., by excluding or distancing from people who experience gambling harms.[12] Enacted stigma can be defined as "*a behavioural manifestation of stigma"* (p.471),[13] and includes **discriminatory behaviour** driven by stigma.

Measurement of gambling harms

In this report, the widely used Problem Gambling Severity Index (PGSI),[14] has been used in the analyses as the measure for gambling harms. PGSI is routinely included in GambleAware's own Treatment and Support Survey. Both PGSI total scores (0-27), and standard PGSI categories (groups) of scores (0, 1-2, 3-7, 8+) are well known and understood by the research and policy communities.

However, it is worth noting that both the Gambling Commission and GambleAware have recently been engaged in reviewing the best available measures of gambling harms. The Gambling Commission has tested new measures for gambling harms, which are included in the Gambling Survey of Great Britain[15]. GambleAware's recent scoping review of gambling harms frameworks and measures found the PGSI to be an inappropriate proxy measure of gambling harms due to measure including an *"ill-defined mix of risk factors and outcomes"* (i.e. a mix of behaviours and harms) among other disadvantages.[16] As such, GambleAware recommend moving away from the use of the PGSI to measure gambling harms. The research team considered using the Short Gambling Harms Scale (SGHS), in preference to PGSI, for this study, in the light of the ongoing review work.[17] SGHS is a readily available 10-item scale measuring gambling experience in the past 12 months, which includes the option of a binary version of the scale items (questions) rather than the Likert scale version, to reduce participant burden.[18]

After reflection, PGSI was selected for this analysis, for several reasons. Firstly, as noted above, it is a widely-known and understood measurement, particularly when data are analysed as a categorical (grouped) variable, which was preferable for the type of analyses that were planned. Secondly, the timing of the review work mentioned above meant that a clear recommendation had not emerged in favour of SGHS when planning this

[10] Maldonado, D. A. C., Ronzani, T. M., & Martins, L. F. (2023). Courtesy stigma and health conditions: Systematic literature review. *Psicologia Em Estudo*, 28. https://doi.org/10.4025/psicolestud.v28i0.52111

[11] Suomi, A., O'Dwyer, C., Sbisa, A., Metcalf, O., Couineau, A.-L., O'Donnell, M., & Cowlishaw, S. (2023). Recognition and responses to intimate partner violence (IPV) in gambler's help services: A qualitative study. *Australian Journal of Social Issues*. https://doi.org/10.1002/ajs4.256

[12] Miller, H. E., & Thomas, S. L. (2018). The problem with "responsible gambling": Impact of government and industry discourses on feelings of felt and enacted stigma in people who experience problems with gambling. *Addiction Research and Theory*, *26*(2), 85–94. https://doi.org/10.1080/16066359.2017.1332182

[13] Horch, J. D., & Hodgins, D. C. (2015). Self-stigma coping and treatment-seeking in problem gambling. *International Gambling Studies*, *15*(3), 470–488. https://doi.org/10.1080/14459795.2015.1078392

[14] Ferris J, Wynne H (2001) *The Canadian problem gambling index: final report*. Ottawa, Ontario. Available at: https://www.greo.ca/Modules/EvidenceCentre/files/Ferrisetal(2001)The_Canadian_Problem_Gambling_Index.pdf

[15] Gambling Commission (2024). ambling Survey for Great Britain: Statistics on gambling participation, experiences of and reasons for gambling, and consequences from gambling. Available at: https://www.gamblingcommission.gov.uk/statistics-and-research/publication/statistics-on-gambling-participation-annual-report-year-1-2023-official

[16] Close, J., Martin, I., White, G., Lau, R., & May, J. (2023). *Frameworks and Measurement of Gambling Related Harm: A Scoping Study.* Prepared for GambleAware. The National Centre for Social Research (NatCen) and University of Plymouth. https://www.begambleaware.org/sites/default/files/2023-12/Frameworks%20and%20Measurement%20of%20GRH_Final_for%20publication.pdf

[17] Browne, M., Goodwin, B. C., & Rockloff, M. J. (2018). Validation of the Short Gambling Harm Screen (SGHS): A Tool for Assessment of Harms from Gambling. Journal of gambling studies, 34(2), 499–512. https://doi.org/10.1007/s10899-017-9698-y

[18] McLauchlan, J., Browne, M., Russell, A., & Rockloff, M.J. (2020). Evaluating the Reliability and Validity of the Short Gambling Harm Screen: Are Binary Scales worse than Likert Scales at capturing Gambling Harm? Journal of Gambling Issues.

analysis. Lastly, one of the two datasets of survey participants provided to the research team was based on and weighted to PGSI score, as described further in Chapter 2 and Appendix B.

Language

Person-first language is used in this report (e.g. referring to 'people who gamble', or 'people who experience gambling harms'). The choice of language aims to avoid reducing people's personhood to one element of their identity or behaviour.[19] When quoting or referencing publications, it has been necessary to reflect the language used in the literature, and where we do so this will be clear.

PGSI groups have been used in many of the analyses throughout the report to indicate the level of problems with gambling reported by participants, with score groups ranging from a low of 0 to a high of 8+. While these groupings are often reported in terms of 'no problem', 'low-risk', 'moderate-risk', and 'problem', in this report the PGSI categories are generally briefly referred to by score or score range: 'PGSI score of 0', 'PGSI score of 1-2', 'PGSI score of 3-7', and 'PGSI score of 8+'. 'PGSI 1+' is also used to denote survey participants who reported any non-zero score for PGSI. In some cases, reference may be made to 'problems with gambling'. PGSI is further defined in the glossary above.

Learnings for the quantitative study from the Rapid Evidence Assessment

A rapid evidence assessment (REA) was conducted in 2023 to inform the primary work strands of the research programme.[20] One element of the REA focussed on a review of available scales relating to stigma and gambling, to support the selection of validated measures for use in this quantitative study. The review indicated that the validated scales Gambling Experienced Stigma Scale (GESS) and Gambling Perceived Stigma Scale (GPSS) were suitable for use in the survey to measure **experienced** and **perceived gambling-related stigma**.[21] The Internalized Stigma of Mental Illness Scale (ISMI-9) was also selected to be adapted for use in measuring gambling-related **internalised** stigma (or **self-stigma**).[22] No relevant scale was identified to measure **associated** or **courtesy stigma** among people affected by the gambling of others, so a novel scale adapted from the GESS was planned for development. During the course of the REA, the Intersectional Discrimination Index (InDI-D) was also identified and selected to measure **discrimination driven by stigma or enacted stigma**.[23] A bespoke compilation of brief scales that measure **components of stigma (origin, peril, concealability, course/recoverability, disruptiveness, and social distance)** was identified by University of Wolverhampton during survey planning as suitable for use with vignettes for surveys of the general population.[24] Lastly, a novel question on barriers to treatment/support seeking (adapted from the GambleAware/YouGov full gambling treatment survey[25] together with some newly-developed items on barriers) was planned to measure **anticipated stigma**.

[19] GambleAware (2020). *Research Publication Guidelines.* GambleAware. https://www.begambleaware.org/sites/default/files/2020-12/research-publication-guidelines_may2020_0.pdf

[20] Shipsey, F., Weston-Stanley, P., Bennetto, R. & Martin, A. (unpublished, June 2023). *Researching the Stigmatisation and Discrimination of Gambling Harms: Rapid Evidence Assessment (REA)*. National Centre for Social Research (NatCen).

[21] Donaldson, P., Langham, E., Best, T., & Browne, M. (2015). Validation of the gambling perceived stigma scale (GPSS) and the gambling experienced stigma scale (GESS). Journal of Gambling Issues, 2015(31), 162–199. https://doi.org/10.4309/jgi.2015.31.8

[22] Hammer, J. H., and Toland, M. D. (2017). Internal structure and reliability of the Internalized Stigma of Mental Illness Scale (ISMI-29) and Brief Versions (ISMI-10, ISMI-9) among Americans with depression. *Stigma and Health*, *2*(3), 159.

[23] Scheim, A. I., and Bauer, G. R. (2019). The Intersectional Discrimination Index: Development and validation of measures of self-reported enacted and anticipated discrimination for intercategorical analysis. *Social Science & Medicine*, *226*, 225-235.

[24] Hing, N., Nuske, E., Gainsbury, S. M., and Russell, A. M. (2016). Perceived stigma and self-stigma of problem gambling: Perspectives of people with gambling problems. *International Gambling Studies*, *16*(1), 31-48.

[25] Gosschalk, K., Webb, S., Cotton, C. , Harmer, L., Bonansinga, D., & Gunstone, B. (2022) Annual GB Treatment and Support Survey 2022. Available online at: https://www.gambleaware.org/sites/default/files/2023-07/GambleAware%202022%20Treatment%20and%20Support%20Report.pdf

The REA highlighted some evidence gaps that would benefit from investigation by the quantitative study. These included the potential impact on stigmatisation of factors including migration status, Index of Multiple Deprivation (IMD) level, current living arrangements, relationship status, disability and health, and wellbeing. Differences in relative stigmatisation associated with the use of different gambling products was evidenced in the literature, particularly from Australian studies concerning electronic gaming machines.[26] Exploring gambling-related stigma by gambling activity types in a GB population was therefore taken forward as a research question for this quantitative study.

1.2 Research aims

Overall project research questions / aims

The overall research aims as set out in the Project Protocol were:

- Establish how people who experience gambling harms are stigmatised by service and healthcare providers, civil society and the third sector, the community and families, popular media and political discourse, and the gambling industry;
- Establish which communities are disproportionately impacted by stigmatisation and why; and how stigma affects multiply-marginalised populations experiencing gambling related harms alongside challenges such as substance use issues, mental health conditions, minority status and homelessness;
- Begin to identify the kinds of services, interventions, information campaigns and policies that may be necessary to challenge stigmatisation and reduce associated harms.

Quantitative survey – people who experience harms – research questions

Research questions specific to the quantitative work strand were developed. These were included in the protocol and have been refined to include the following set of questions (Table 1.1).

Table 1.1 Research questions

Number	Question
RQ1	To what extent do people who experience gambling-related harms also experience stigma and discrimination? – RQ1a People who experience harms from their own gambling – RQ1b People who experience harms from someone else's gambling
RQ2	To what extent are people who experience gambling harms perceived to be stigmatised? Does experiencing gambling harms effect this perception of stigma?
RQ3	RQ3a Is there a relationship between perceived and experienced stigma among people who experience direct gambling harms? RQ3b Is there a relationship between internalised and experienced stigma among people who experience direct gambling harms? RQ3c Is there a relationship between perceived and internalised stigma among people who experience direct gambling harms?

[26] Miller, H. E., & Thomas, S. L. (2017). The "Walk of Shame": A qualitative study of the influences of negative stereotyping of problem gambling on gambling attitudes and behaviours. International Journal of Mental Health and Addiction, 15(6), 1284–1300. https://doi.org/10.1007/s11469-017-9749-8

RQ4	Among people who experience direct gambling harms, which sociodemographic groups are disproportionately impacted by feelings and experiences of stigma?
RQ5	How do people who experience direct gambling-related harms and stigma use healthcare and support services? – Are those who experience stigma less likely to use these services?
RQ6	Does experience of stigma vary by type of gambling activity and by levels of gambling-related harm?
RQ7	What is the relationship between health (health, health behaviours, wellbeing) and experienced stigma, among those who experience gambling-related stigma compared with those who do not?

1.3 Report summary

The remainder of this report is arranged in the following chapters:

- **Chapter 2** summarises the overall Methodological Approach.

Findings from the survey are presented in Chapters 3 to 6 as follows:

- **Chapter 3** reports on stigmatisation and discrimination of people who experience gambling harms;
- **Chapter 4** explores experiences of gambling-related stigma among different groups;
- **Chapter 5** reports on attitudes towards people who experience gambling harms alongside other potentially stigmatised characteristics;
- **Chapter 6** presents findings on stigmatisation in relation to seeking treatment, support and advice, and in relation to a range of health, wellbeing and health behaviours measures;
- **Chapter 7** includes a discussion of findings, limitations, and areas for future research, as well as conclusions;
- **Appendix A** reproduces the survey questionnaire with kind permission of YouGov and GambleAware;
- **Appendix B** provides full details of the methodology used in the study.

2. Methodological approach

The overall methodological approach used in this study is summarised in this chapter, including the survey data from which the analysis is drawn, key demographic characteristics of the sample, a description of the stigma and discrimination scales used, an explanation of the use of vignettes and bespoke stigma questions, data preparation, and analysis. Full details of the methodology are provided in Appendix B.

2.1 The data

The analysis presented in this report is drawn from the August 2023 wave of YouGov's quarterly Mini-dip Treatment and Support Survey conducted for GambleAware. NatCen and University of Wolverhampton contributed additional questions on gambling-related stigma for inclusion in the August 2023 wave. The full questionnaire is provided in Appendix A.

Following fieldwork in August 2023, YouGov provided two cleaned and weighted datasets from the Mini-dip Treatment and Support Survey responses, for analysis as shown below.

- **Main dataset (n=3,276):** a sample of adults (18+), weighted to be representative of the GB general population. The sample was made up of people who had not gambled in the past 12 months (n=1,174), and people who had gambled in the past 12 months (n=2,102). Of those in the sample who had gambled in the past 12 months, over three quarters (76%) did not experience problems from gambling (PGSI score of 0) (n=1,604). Among the main sample there were people affected by the gambling of others (n=250), made up of those who had gambled in the past 12 months (n=169) and those who had not gambled (n=81);

- **PGSI 1+ dataset (n=796):** due to the small numbers of people in the main dataset who had gambled in the past 12 months and experienced problems from gambling (PGSI score of 1+), it was necessary to boost sample the sample of GB adults (18+) in this group. The PGSI 1+ dataset included all the participants who experience problems from gambling (PGSI score of 1+) from the main dataset (n=498), as well as additional participants from the boost sample of people who experience problems from gambling (PGSI scores of 1+) (n=298). That is, 498 cases were present in both the main and the PGSI 1+ datasets. Some of the sample were people who reported being negatively affected by the gambling of others (n=118), as well as gambling themselves, experiencing problems with gambling (PGSI score of 1+). To reiterate, there was some overlap of cases across both datasets and the same questionnaire was presented to all participants. See Appendix table B.1 for a detailed breakdown of the two datasets by PGSI score and by whether participants were affected by the gambling of others.

Demographic characteristics of the sample

Appendix table B.2 provides a breakdown of key demographic characteristics of the sample for both the Main and the PGSI 1+ datasets. These are: age, gender, sexuality, ethnicity, and limiting health condition or disability expected to last 12 months or more. YouGov collects a wide range of sociodemographic data from their online panellists. In Chapter 4, analyses are provided for reported stigma among population groups by: age, gender, ethnicity, religion, nationality, sexuality, relationship status, household size, number of children in household, gross household income, and IMD. Stigma by self-reported limiting health condition or disability was analysed and is reported in Chapter 6. YouGov collect data on minority gender identities, but the sample sizes were too small for analysis to be carried out.

Weighting

Both datasets were weighted by YouGov to allow for generalisability of the findings, using an iterative weighting approach. The main dataset was weighted to be representative of the general population of GB adults (18+), while the PGSI 1+ dataset was weighted to be representative of GB adults (18+) who experience problems from gambling (PGSI score of 1+). Further details of the weighting approach used are provided in Appendix B. Because there was overlap of cases (participants) across the two datasets, and to retain the benefits of the separate weightings, specific analyses were conducted on one or other of the datasets. Comparisons across both datasets were avoided. The exception to this was the vignettes analysis (reported in Chapter 5) where a merged, deduplicated, unweighted dataset was used in order to achieve a larger sample.

Variables and data preparation

The datasets included variables from three broad areas of the survey and YouGov panel:

- **Core Treatment and Support Survey questions**: These core parts of the regular survey include questions on gambling participation, the Problem Gambling Severity Index (PGSI), access to and awareness of treatment and support services, and some questions about harms from the gambling of others;

- **Questions on stigmatisation and discrimination:** The questions developed by NatCen and University of Wolverhampton included stigma and discrimination scales, vignettes and accompanying questions, a question on reasons for not seeking support, a mental distress scale question, and a question on drug use;

- **Sociodemographic questions:** YouGov regularly collects data from its online panel members on a range of sociodemographic characteristics and re-presents these questions at periodic intervals to keep the data current and accurate.

From the **core questions**, past 12 months gambling participation by type of activity was used for analysis of stigma by type of gambling. Derived variables were created for a number of different gambling activity types engaged with, and for National Lottery only, betting only, and gaming only. While a few products blur the distinction between gaming and betting, *betting* generally relates to events external to the gambling environment (e.g. results of cricket matches), whereas gaming outcomes are generated within the gambling environment (e.g. by the roulette wheel). National lottery is the most popular gaming product in the UK, while also having the lowest risk for gambling harm measured by PGSI, which makes it a unique derived variable for analysis.[27]

A question on use of different types of treatment or support was used and a derived variable with three categories was created ('Have used support', 'No, have not used support', 'No, did not need to cut down on gambling'). PGSI total score was provided with the delivered datasets. Categorical PGSI variables were created for use in the analyses: a four-group variable (0, 1-2, 3-7, and 8+). For a few analyses for which base sizes were very low, a two-group PGSI variable was used (0, and 1+ in the Main dataset; 1-2, 3+ in the PGSI 1+ dataset). PGSI was only asked of people who had gambled in the past 12 months, so to allow for analysis of perceived stigma, discrimination, and associated stigma among both people who gambled and those who did not in the main dataset, 'people who did not gamble' were coded to be included in the analysis.

From the various **stigma and discrimination scales**, total score variables were derived and used in analyses to calculate mean scores. Derived categorical variables were created for some of the **sociodemographic**

[27] Gamble Aware (2022). Patterns of Play, Technical Report 2: Account Data Stage

characteristics, mainly to manage small base sizes by combining groups from the provided variables to reduce the number of categories and increase base sizes. For further details of the stigma scales, including reliability tests (Cronbach's Alpha), and for details of sociodemographic derived variables, see Appendix B.

2.2 Stigma and discrimination scales

A range of scales were used to measure stigma and discrimination. The full wording of the scales is included in Appendix A.

Gambling Experienced Stigma Scale (GESS)

The Gambling Experienced Stigma Scale measures self-reported stigma experienced ('your thoughts about your own gambling experiences') by people who have gambled. It contains 13 items, with response categories Strongly Disagree, Disagree, Agree, and Strongly Agree (scored 1-4) giving a total score range for any participant of 13-52. Higher scores indicate higher levels of agreement that stigma has been experienced. The GESS scale was validated independently in previous research and with all items of the scale loading strongly onto a single global experienced-stigma factor[28] however the results should be treated with caution due to data limitations of the available sample.

Gambling Perceived Stigma Scale (GPSS)

The Gambling Perceived Stigma Scale (GPSS) measures perceived stigma in the general population by asking 'how you think people who gamble are generally perceived by others' based on level of agreement with 13 statements.[29] The scoring is identical to GESS, that is a total score range of 13-52, with higher score indicating higher levels of agreement that stigma is perceived in the general population. The GPSS scale was validated independently in previous research with a Cronbach's alpha of 0.87 indicating that the scale is a reliable instrument.[30]

Gambling Internalised Stigma Scale (GISS)

A novel scale was created by adapting the Internalized Stigma of Mental Illness Scale (ISMI-9) for use in measuring gambling-related internalised stigma (or self-stigma).[31] The response categories to the 9-items in this scale were as for GESS and GPSS (1-4 from Strongly Disagree to Strongly Agree), giving a possible total score for participants in the range 9-36. Higher scores indicate higher levels of internalised stigma.

Affected Others Experienced Stigma Scale (AOESS)

A novel scale was created by selecting four of the items from the GESS in order to measure stigma experienced by people as a result of others' gambling, i.e. associated or courtesy stigma. Full details of the questions included are given in Appendix B. A total score in the range 4-16 was possible with higher scores indicating higher associated stigma.

Intersectional Discrimination Index (InDI-D)

InDI-D measures day to day intersectional discrimination, without attributing discrimination to any specific characteristic such as ethnicity or sexuality.[32] As recommended, responses to this 9-item scale were recoded to

[28] Donaldson, P., Langham, E., Best, T., & Browne, M. (2015). Validation of the gambling perceived stigma scale (GPSS) and the gambling experienced stigma scale (GESS). Journal of Gambling Issues, 2015(31), 162–199. https://doi.org/10.4309/jgi.2015.31.8
[29] As above (*ibid.)*.
[30] As abov *(ibid).*
[31] Hammer, J. H., and Toland, M. D. (2017). Internal structure and reliability of the Internalized Stigma of Mental Illness Scale (ISMI-29) and Brief Versions (ISMI-10, ISMI-9) among Americans with depression. Stigma and Health, 2(3), 159.
[32] Scheim, A. I., and Bauer, G. R. (2019). The Intersectional Discrimination Index: Development and validation of measures of self-reported enacted and anticipated discrimination for intercategorical analysis. Social Science & Medicine, 226, 225-235.

scores of 0 for ‘Never’ or ‘Yes, but not in the past year’, 1 for ‘Yes, once or twice in the past year’ and 2 for ‘Yes, many times in the past year’. This gave a total score range of 0 to 18. Any score of 1+ was indicative of some reported experience of discrimination in the past year and higher scores indicated more and/or more recent instances of discrimination. Research involving known-groups comparisons and associations with psychological distress has provided evidence of construct validity for the InDI-D scale. Test-retest reliabilities for the InDI component were acceptable (ICC = 0.70-0.72).[33]

The scales used to measure gambling-related stigmatisation and general intersectional discrimination are described in detail in Appendix B and their features are summarised in Table 2.1 below.

Table 2.1 Summary of stigma and discrimination scales

Name of scale	Short name	Base	Source of scale	Number of items	Response categories	Range of possible total scores
Gambling Experienced Stigma Scale	GESS	People who had gambled in the past 12 months	Published and validated	13	Strongly disagree Disagree Agree Strongly agree	13-52
Gambling Perceived Stigma Scale	GPSS	All	Published and validated	13	Strongly disagree Disagree Agree Strongly agree	13-52
Gambling Internalised Stigma Scale	GISS	People who had gambled in the past 12 months	Novel scale, adapted for gambling from Internalized Stigma of Mental Illness Scale (ISM-9)	9	Strongly disagree Disagree Agree Strongly agree	9-36
Affected Others Experienced Stigma Scale	AOESS	People who had been negatively affected by the gambling of other(s)	Novel scale adapted from GESS	4	Strongly disagree Disagree Agree Strongly agree	4-16
Intersectional Discrimination Index (Day-to-Day)	InDI-D	All	Published and validated	9	Never or Yes, but not in the past year Yes, once or twice in the past year Yes, many times in the past year	0-18

2.3 Vignettes

Vignettes (short stories about hypothetical individuals), followed by multiple choice questions, were used to gauge participants' attitudes towards people experiencing gambling harms. The scenarios covered are

[33] As above *(ibid.)*.

summarised in Table 2.2 below, and presented in full in Appendix A. The description of the protagonist's gambling (either implying five DSM symptoms of 'gambling disorder; or gambling without harms) was based on Hing et al.[34] Initials ('AJ') were used rather than a forename, to avoid biasing participants' assumptions about age, social class or ethnicity.

A between-subjects design was used with one vignette presented per participant, to minimise participant burden and avoid carry-over effects, meaning approximately 250 participants received each vignette.

Table 2.2: Summary of vignette conditions

Vignette conditions	
(1) Gambling, no harms, male	(2) Gambling, no harms, female
(3) Gambling harms, male	(4) Gambling harms, female
(5) Gambling harms + identifies as LGBTQ, male	(6) Gambling harms + identifies as LGBTQ, female
(7) Gambling harms + mental health problems, male	(8) Gambling harms + mental health problems, female
(9) Gambling harms + drug and alcohol use, male	(10) Gambling harms + drug and alcohol use, female
(11) Gambling harms + minority ethnicity, male	(12) Gambling harms + minority ethnicity, female
(13) Gambling harms + low income, male	(14) Gambling harms + low income, female

After viewing the vignette, participants were presented with the following, to measure their attitudes towards the protagonist:

The Social Distance Scale (SDS)
This 6-item measure asks participants to rate how willing they would be to do things like 'be friends with' or 'live next door' to the individual described ('AJ').[35] Responses are scored from 1 ('definitely willing') to 4 ('definitely unwilling'), with higher scores (/24) indicating greater desire for social distance (a proxy measure for stigmatisation and discrimination).

Perceived harmfulness
Two items probed about perceived harmfulness of the individual described, adapted from Horch & Hodgins' (2008) 'perceived dangerousness' item,[36] in consultation with our lived experience panel. These were: 'how likely do you think it is that AJ would cause hurt or harm to other people?'; and 'how likely do you think it is that AJ would cause hurt or harm to themselves'. They were scored from 1 ('extremely unlikely') to 5 ('extremely likely'), with higher scores indicating greater perceived harmfulness.

Perceived noticeability*[37]
A single item ('how noticeable would AJ's situation be to their family and friends if they hadn't told them about it?') taken from Hing et al. (2016) was used to measure perceived noticeability/concealability of AJ's situation.

[34] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. *Journal of Behavioral Addictions*, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[35] Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of Fear and Loathing: The Role of "Disturbing Behavior," Labels, and Causal Attributions in Shaping Public Attitudes toward People with Mental Illness. *Journal of Health and Social Behavior*, *41*(2), 208–208. https://doi.org/10.2307/2676306
[36] Horch, J. D., & Hodgins, D. C. (2008). Public Stigma of Disordered Gambling: Social Distance, Dangerousness, and Familiarity. *Journal of Social and Clinical Psychology*, *27*(5), 505–528. https://doi.org/10.1521/jscp.2008.27.5.505
[37] The measures 'Perceived noticeability', 'Perceived disruptiveness', 'Perceived causes' and 'Perceived recoverability' marked with asterisks (*) were only presented to those who viewed vignettes 3-14, as they would not make sense when asked about the individual in vignettes 1-2 who did not exhibit any gambling harms.

Responses were scored from 1 (not at all noticeable) to 5 (extremely noticeable), i.e. higher scores indicated a belief that the situation was more noticeable.[38]

Perceived disruptiveness*

A 4-part item adapted from the 'Key Informants' Questionnaire,[39] to apply to gambling,[40] and modified to include feedback from our lived experience panel, assessed perceived disruptiveness, by asking participants to rate how much they think AJ's situation would impact their ability to live independently, be in a serious relationship, work/study, or be successful. Responses were scored from 1 (not at all) to 4 (a large amount), with higher scores indicating higher disruptiveness.

Perceived Causes*

A 6-part question involved participants rating how much they attributed AJ's circumstances to each of six different causes ('bad character'; 'chemical imbalance in the brain'; 'stressful life circumstances'; 'genetic/inherited problem'; 'god's will'; and 'the way they were raised'). The question was based on the 'Perceived Causes' scale,[41] used in relation to gambling.[42] Responses were scored from 1 (extremely unlikely) to 5 (extremely likely), i.e. a higher score indicated greater belief in a cause.

Perceived recoverability*

A single item ('How strongly do you agree or disagree that people can recover from AJ's situation?') measuring perceived recoverability was taken from Hing et al., (2016). Responses were scored from 1 ('strongly disagree') to 5 ('strongly agree').

Level of prior contact measure

A 'level of contact report',[43] adapted in consultation with our lived experience panel, required participants to indicate which of 11 types of contact they have had with someone experiencing gambling harms. Scoring was hierarchical, ranging from 1 (no experience of contact at all) to 11 (first-hand lived experience), with participants total score (/11) corresponding to the highest level of contact reported.

2.4 Stigma and discrimination scales analysis

Descriptive statistics and correlation analyses were applied to examine the level of stigmatisation of and discrimination against people who experience gambling harms. The first set of analyses explored the level of reported stigmatisation among the general population using the main dataset. Crosstabulations were used to assess whether there was an association between reported PGSI level (category) and, in turn, mean reported scores of gambling-related experienced stigma (GESS), and gambling-related internalised stigma (GISS), among those who had gambled in the past 12 months. A crosstabulation was conducted on experiences of associated stigma among those who said they were negatively affected by the gambling of others (AOESS), by

[38] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. Journal of Behavioral Addictions, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[39] Alem, A., Jacobsson, L., Araya, M., Kebede, D., & Kullgren, G. (1999). How are mental disorders seen and where is help sought in a rural Ethiopian community? A key informant study in Butajira, Ethiopia. *Acta Psychiatrica Scandinavica*, *100*(S397), 40–47. https://doi.org/10.1111/j.1600-0447.1999.tb10693.x
[40] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. *Journal of Behavioral Addictions*, *5*(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[41] Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health*, *89*(9), 1328–1333. https://doi.org/10.2105/AJPH.89.9.1328
[42] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. *Journal of Behavioral Addictions*, *5*(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[43] Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Changing Attitudes About Schizophrenia. *Schizophrenia Bulletin*, *25*(3), 447–456. https://doi.org/10.1093/oxfordjournals.schbul.a033392

whether they had gambled or not / by level of problems experienced from gambling (PGSI level). Further crosstabulations were conducted using the main general population dataset to assess the level of perceived gambling-related stigma (GPSS) and of intersectional discrimination (InDI-D) among all participants (including those who had not gambled in the past 12 months and those who had), by whether they had gambled / level of problems experienced from gambling (PGSI level).

To examine whether there was a relationship between each of the various stigma scales, a series of partial correlations were conducted, using the PGSI 1+ dataset. The analyses examined the relationship between GESS and GISS, GESS and GPSS, and GISS and GPSS, in each case controlling for the influence of PGSI on both of the stigma scales being analysed. For the partial correlations, the total score variables were used for the three stigma scales and also for PGSI.

For the remainder of the analyses performed on the stigma scales, nested crosstabulations were used to examine the mean GESS score by PGSI category and a series of sociodemographic variables, use of treatment and support services, types of gambling activity, and health, wellbeing and health behaviours. The nested crosstabulations were then repeated on GISS score, and GPSS score, by PGSI category and the same sociodemographic variables. These analyses were conducted using the PGSI 1+ dataset.

Significance testing was carried out on the results of the analyses of stigma (as measured by the indexes and scales) in this report. The term 'significant' refers to statistical significance at the 95% level and is not intended to imply substantive importance. Significance tests of main effects and interaction effects were conducted on the crosstabulations. Charts are provided to illustrate the findings when the main effects were significant or when there was a significant interaction effect. Significance testing was also carried out on the partial correlations, at the 95% level.

Mean scores for scales such as the Gambling Experienced Stigma Scale (GESS) are reported. These are estimates of the average mean score that would occur in the population being studied. The sample is weighted to be representative of the general population (main dataset), or the population of people who experience problems from gambling) (PGSI 1+ dataset). Standard errors indicate how much higher or lower the true mean (average) in the population being studied might be compared with the estimate provided from this sample.

The findings of these analyses are reported in Chapters 3, 4, and 6.

2.5 Vignette analysis

To test for main effects of gender and other vignette characteristics on the aforementioned variables associated with stigma; i.e. desire for social distance (the key proxy measure of stigma used in relation to the vignettes), and beliefs about origin, recoverability, harmfulness, disruptiveness and noticeability, robust two-way independent factorial ANOVAs based on a 20% trimmed mean were conducted, using the WRS2 package in R (utilised due to violation of parametric assumptions for some variables). Significant main effects were followed by post-hoc multiple comparisons using the Games-Howell test in SPSS (which uses ranked variables and does not require equal variances). It was particularly appropriate for our data, as it is based on Welch's degrees of freedom, controls for type I error for the entire comparison and is considered particularly appropriate where 6 or more conditions are compared with >50 cases per group.[44]

[44] Lee, S., & Lee, D. K. (2018). What is the proper way to apply the multiple comparison test? *Korean Journal of Anesthesiology*, *71*(5), 353–360. https://doi.org/10.4097/kja.d.18.00242

To explore how multiple factors combined to influence desire for social distance, a multiple linear regression with 'desire for social distance' as the criterion variable and stigma-related constructs (beliefs about origin, recoverability, disruptiveness, harmfulness, and noticeability) was also conducted, with appropriate assumption checks.

Crosstabulations were used to explore differences in the proportion of participants endorsing particular beliefs/attitudes, based on various factors (e.g. to compare proportion of people with and without lived experience of gambling harms who would be willing to engage with someone experiencing gambling harms), with significance tests (e.g. Chi-square/Fisher's Exact test) where relevant.

3. Stigmatisation of people who experience gambling harms

This chapter explores stigma and gambling harms, presenting data from different measures of gambling-related stigma among people who experience direct gambling harms, and among people who experience harms from the gambling of others examining levels of stigma by levels of problems with gambling. The chapter also looks at the level of stigmatising attitudes towards gambling in society, in the general GB population. It examines whether there are relationships between different types of gambling-related stigma.

Chapter three: Key findings

- Among GB adults who had gambled in the past 12 months those who experience higher levels of gambling harms reported higher levels of both experienced and internalised stigma;
- Among 'affected others' (those who said they were affected by someone else's gambling), the lowest levels of associated stigma were reported amongst those who gambled, but experienced low levels of gambling harms. 'Affected others' who did not gamble, or who gambled and experienced higher levels of hambling harms reported higher levels of associated stigma;
- Among all GB adults, there was an indication of some agreement that there is societal stigma towards people who gamble;
- All GB adults reported at least some level of **intersectional day-to-day discrimination** in the past year. People who experienced higher levels of gambling harms reported higher levels of discrimination;
- Levels of experienced, internalised and perceived stigma were all found to be related to each other, even when taking the effect of level of gambling harms into account. The strongest of these relationships was between experienced and internalised stigma, which could suggest that people's direct experience of feeling/being stigmatised by others has a more effect on their feelings of internalised stigma than their perception about public attitudes in general.

The Main dataset was used for the analyses in this chapter. Scales and measures of gambling-related stigma and of level of problems with gambling used in the analyses for this chapter include the Gambling Experienced Stigma Scale (GESS) and the Gambling Internalised Stigma Scale (GISS), which were completed by those who had gambled in the past 12 months; the Gambling Perceived Stigma Scale (GPSS) and the Intersectional Discrimination Index (InDI-D) which were asked of all participants; the Affected Others Experienced Stigma Scale (AOESS) which was completed by those who said they had been affected by others' gambling; and the Problem Gambling Severity Index (PGSI), completed by those who had gambled in the past 12 months.

Main dataset

GB adults aged 18+ including people who had gambled in the past 12 months and people who had not gambled.

The four gambling-related stigma scales were analysed using mean scores, while the PGSI has been used as a categorical variable with possible values of No problem with gambling (0), Low-risk (1-2), Moderate risk (3-7),

and Problems with gambling (8+). Further details about the datasets and the scales are provided in Chapter 2 and Appendix B.

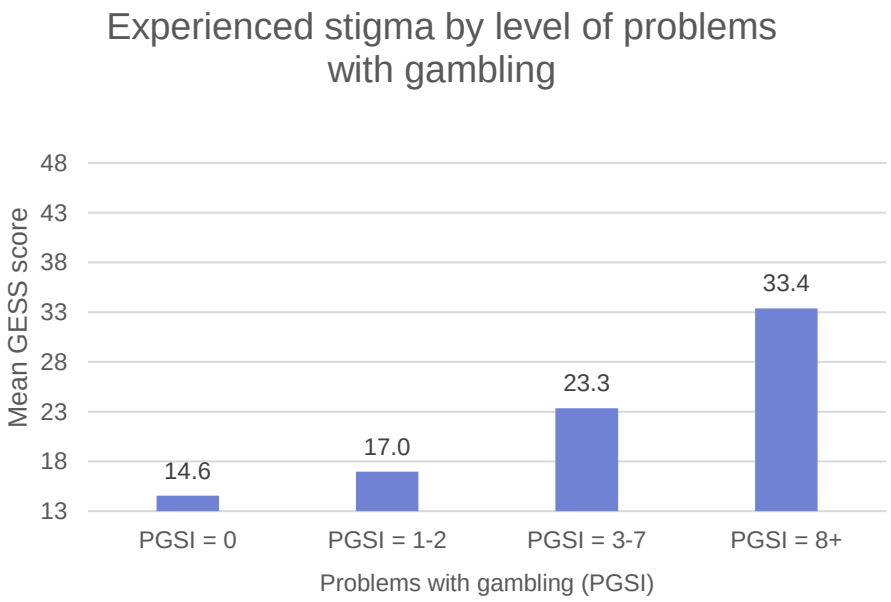
3.1 Experienced and internalised stigma by level of problems experienced from gambling (PGSI)

Experienced gambling-related stigma by PGSI

The Gambling Experienced Stigma Scale (GESS) is made up of 13 items and scores of 3 or 4 on an item indicate agreement or strong agreement. Total GESS scores for participants can range from strong disagreement on all 13 items through to strong agreement on all 13 items (13-52).

The mean experienced stigma (GESS) score (of those who had gambled in the past 12 months) was 16.3 overall. Those who experienced greater levels of problems from gambling (measured by PGSI scale) reported a statistically significantly ($p<0.001$) higher level of experienced stigma than those with lower levels of experienced gambling harms. Mean experienced stigma (GESS) score was higher among those experiencing higher levels of problems from gambling (higher PGSI levels), rising from 14.6 among those experiencing no problems from gambling (PGSI scores of 0) through to 33.4 among those experiencing a high level of problems from gambling (PGSI scores of 8+) (Figure 3.1).

Figure 3.1: Experienced stigma (GESS) by level of problems experienced from gambling (PGSI)



Source: Main dataset. Base: GB adults (18+) who had gambled in the past 12 months (n=2,102). The possible range for total GESS scores is 13–52.

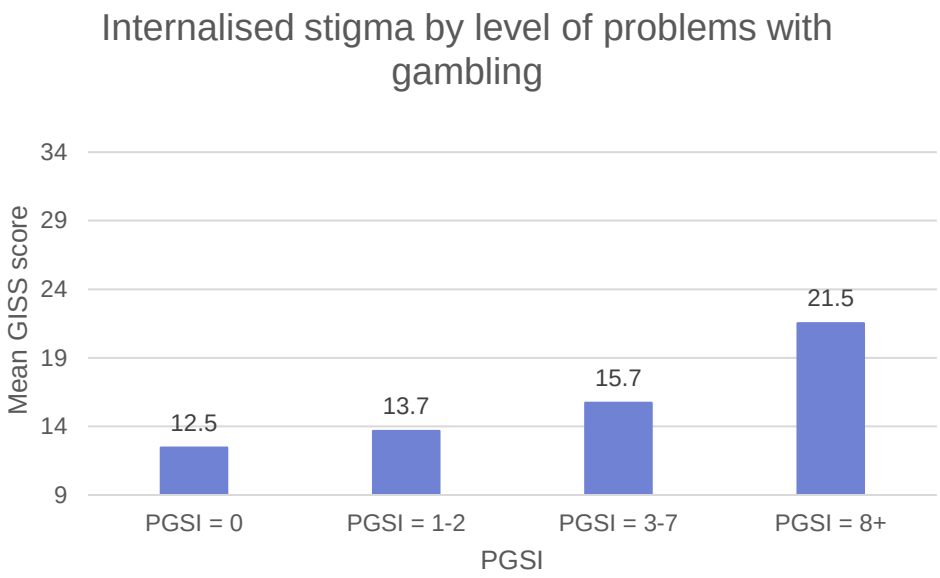
Internalised gambling-related stigma by level of problems experienced from gambling (PGSI)

Internalised stigma (GISS) is made up of 9 items and scores of 3 or 4 on an item indicate agreement or strong agreement. Total GISS scores for participants can range from strong disagreement on all 9 items through to strong agreement on all 9 items (9-36).

The mean internalised gambling-related stigma (GISS) score reported by those who had gambled in the past 12 months was 13.3 overall and was significantly associated with PGSI ($p<0.001$). Those who reported higher levels of problems with gambling tended to report higher levels of agreement with internalised stigma. The mean internalised stigma (GISS) score reported by GB adults who did not experience problems with their gambling

(PGSI score of 0) was 12.5 and this rose to 21.5 among those who experienced a high level of problems from gambling (PGSI score of 8+) (Figure 3.2).

Figure 3.2: Internalised stigma (GISS) by level of problems with gambling (PGSI)



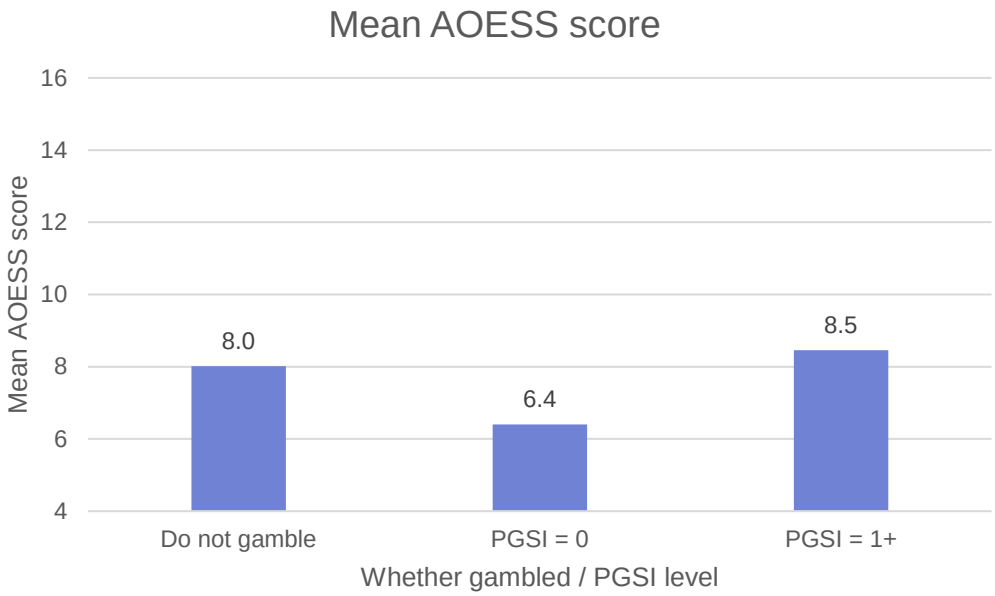
Source: Main dataset. Base: GB adults (18+) who had gambled in the past 12 months (n=2,102). The possible range for total GISS scores is 9–36.

Stigma related to the gambling of others by whether gambled or by level of problems experienced from gambling (PGSI)

The novel 4-item Affected Others Experienced Stigma Scale (AOESS) was completed by all 250 participants who said they had been affected by someone else's gambling (often referred to as 'affected others'). The four items were adapted from the most relevant items from the experienced stigma scale (the GESS): 'I feel the need to hide the person's gambling from my friends', 'People have criticised or insulted me because of the person's gambling', 'Once they know that someone close to me is a person who gambles, most people will take my opinion less seriously', and 'People think less of me for maintaining a relationship with the person who gambles'. See Appendix B for further details. AOESS Scores could range from 4 (strong disagreement with all statements) to16 (strong agreement with all statements). Owing to very low base sizes, PGSI scores were grouped into two categories for the analysis of this AOESS scale by PGSI: PGSI score of 0 and PGSI score of 1+, with those who did not gamble coded as 'Do not gamble'. The mean reported AOESS score across all participants affected by the gambling of others was 7.4 (SE +/- 0.19) and was significantly associated with level of problems experienced from gambling (PGSI score) ($p<0.001$).

The mean experienced gambling related stigma score of people who said they had been affected by someone else's gambling (AOESS), varied by whether people gambled and whether they also experienced harms relating to their own gambling (PGSI). Those who did not gamble themselves, or who themselves experienced some level of gambling harms (PGSI score of 1+) were more likely to report experiencing stigma related to the gambling of others than those who reported gambling with no problems (PGSI score of 0). Mean experienced stigma by affected others (AOESS scores) among those who gambled themselves without experiencing any problems was lower at 6.4 than among those who did not gamble (8.0), and those who gambled and reported at least some problems with gambling (8.5) (Figure 3.3).

Figure 3.3: Experienced stigma among affected others (AOESS) by whether gambled / level of problems experienced from gambling (PGSI)



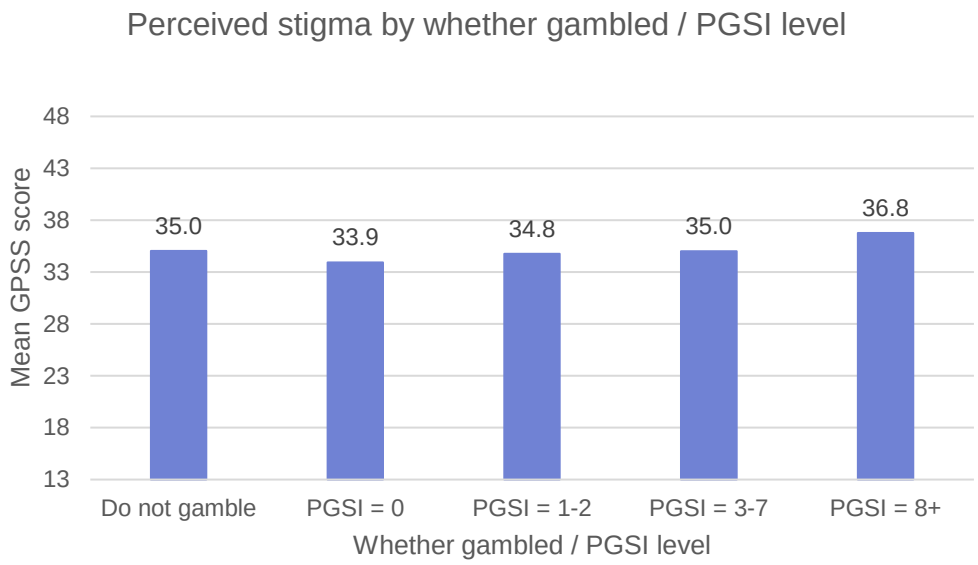
Source: Main dataset. Base: GB adults (18+) who had been affected by someone else's gambling (n=250). The possible range for total AOESS scores is 4–16.

3.2 Perceived stigma by whether gambled or by level of problems experienced from gambling (PGSI)

The Gambling Perceived Stigma Scale (GPSS) is made up of 13 items and was asked of all in the main general population dataset. Scores of 3 or 4 on an item indicate agreement or strong agreement with the belief that there is some level of societal stigma associated with gambling. Total GPSS scores for participants can range from strong disagreement on all 13 items (score of 13) through to strong agreement on all 13 items (score of 52). The scale was completed by all participants in the main dataset, both those who had gambled in the past 12 months and those who had not.

Among the GB adult general population overall, the mean perceived stigma scale score was 34.5. There was a statistically significant relationship between perceived stigma (GPSS) and whether survey participants gambled, gambled without experiencing problems, or experienced problems with their gambling (PGSI) ($p<0.001$). Those who did not gamble had higher mean perceived stigma scores (GPSS 35.0) than those who gambled without experiencing subsequent problems (PGSI score of 0) (GPSS 33.9). Those who gambled and experienced low and moderate levels of gambling problems had similar scores to those who did not gamble (34.8 and 35.0 respectively). The mean perceived stigma (GPSS) score then rose to 36.8 among GB adults who reported the most severe level of problems from gambling (Figure 3.4).

Figure 3.4: Perceived stigma (GPSS) by whether gambled / level of problems experienced from gambling (PGSI)



Source: Main dataset. Base: GB adults (18)+ (n=3,276). The possible range for total GESS scores is 13–52.

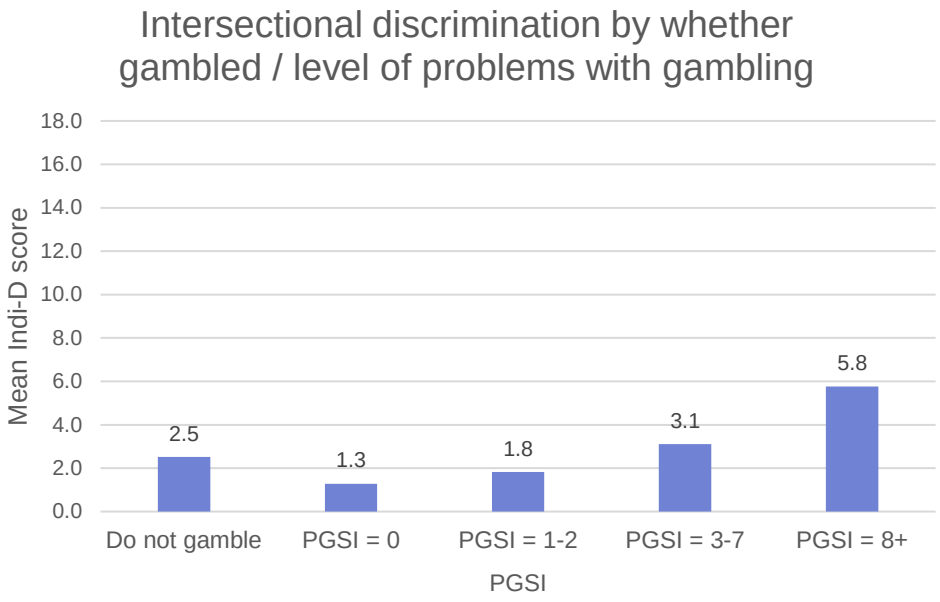
Perceived level of contempt and ostracism of people who experience gambling harms (GPSS subscales) by whether participant gambled and by level of problems experienced from gambling (PGSI)

Analyses of perceived stigma were conducted for the two subscales of the perceived stigma scale (GPSS), Contempt and Ostracism. Similar significant patterns were seen in the mean scores for both Contempt and Ostracism by whether gambled / PGSI level as for the main GPSS scale, with mean scores higher among those who did not gamble.

3.3 Discrimination by whether gambled or by level of problems experienced from gambling (PGSI)

The Intersectional Discrimination Index (InDI-D) is a 9-item unidirectional scale designed to measure frequency and recency of reported day-to-day intersectional discrimination. The scores for individual items are 0 (Never or not in the past year), 1 (Yes, once or twice in the past year), and 2 (Yes, many times in the past year). The range of total scores is 0-18, with 0 representing no discrimination in the past year, and 1+ representing experiencing some discrimination in the past year. Among the GB adult general population, the mean score was 2.0. There was a statistically significant relationship ($p<0.001$) between experiencing discrimination and experiencing gambling problems. Participants who reported experiencing a high level of problems from gambling (PGSI score of 8+) had the highest mean Intersectional Discrimination Index score at 5.8, compared with a score of 1.3 among those who reported not experiencing problems from gambling (PGSI score of 0), and 2.5 among those who had not gambled in the past 12 months (Figure 3.5).

Figure 3.5: Discrimination or enacted stigma (InDI-D) by whether gambled or level of problems with gambling (PGSI)



Source: Main dataset. Base: GB adults (18+) (n=3,276). The possible range for total InDI-D scores (re-coded) is 0-18.

3.4 Relationship between different experiences of stigma

To address Research Question 3, relationships between the different stigma scales were explored, among people who had gambled in the past 12 months and who experienced direct gambling harms, using the PGSI 1+ dataset. Three partial correlation analyses were conducted: of Experienced Stigma score (GESS) and Perceived Stigma score (GPSS); of Experienced Stigma score and Internalised Stigma score (GISS); and of Internalised Stigma and Perceived Stigma score. In each case PGSI score was controlled for, to take into account the separate relationship between experiencing problems with gambling and both of the two stigma types in the three analyses below. For these partial correlation analyses, total score variables were used for the three stigma scales and also for PGSI (rather than the categorical PGSI variables used for the crosstabulations).

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported experiencing some or more problems from gambling (PGSI score of 1+).

Experienced and perceived stigma

The results showed that, among people who gambled and experienced problems from gambling (PGSI scores of 1+), there was a relationship between experienced stigma and perceived stigma. Higher levels of experienced stigma were related to higher levels of perceived stigma, even after taking the level of problems with gambling into account. The partial correlation analysis of experienced and perceived stigma showed that, controlling for PGSI score, there was a significant, weak, positive correlation between experienced stigma and perceived stigma, $r(793) = .216$, $p<.001$.

Experienced and internalised stigma

Results from the partial correlation analysis of experienced and internalised stigma, controlling for PGSI score, showed a significant, moderate, positive correlation between experienced and internalised stigma, $r(793) = .614$, $p<.001$. In other words, the greater the level of gambling-related stigma someone experienced, the greater

their internalised stigma, and this couldn't be explained away simply by the fact that both of these things tend to increase with the severity of gambling harms.

Internalised and perceived stigma

Lastly, the results of the partial correlation analysis of internalised and perceived stigma, controlling for PGSI score indicated a significant, weak, positive correlation between internalised and perceived stigma, $r(793) = .114$, $p<.001$. In other words, the more severe a person perceived societal stigmatisation of gambling harms to be, the higher their internalised stigma tended to be; and this wasn't just an artefact of the fact that perceived social stigma and internalised stigma both increase with severity of gambling harms.

4. Experiences of gambling-related stigma among different groups

In this chapter, reported experience of gambling-related stigma among people who had gambled in the past 12 months and who reported experiencing some problems from gambling (PGSI score of 1+) is explored. Firstly, differences in experienced stigma (GESS) among different population groups are analysed. This is followed by a summary of participants' reported internalised stigma (GISS) and perceived stigma (GPSS), among the same population groups. Lastly, differences in experienced stigma according to intensity and type of gambling participation are reported.

Chapter four: Key findings

There were some statistically significant differences in the level of **stigma** across different population groups**,** even when taking level of problems with gambling into account. The following findings involve differences in stigma across different groups who had all gambled in the last 12 months, and reported experiencing problems with gambling (PGSI score of 1+):

- Older **age groups** reported lower experienced stigma than younger age groups. No significant differences were seen by age group for reported internalised stigma or perceived stigma, however;
- Those from **ethnic minority backgrounds** reported higher levels of experienced, internalised and perceived stigma than those from white ethnic backgrounds. Those who **belonged to a religion** reported higher levels of experienced, internalised and perceived stigma than those not belonging to a religion**;**
- Those who were **not in a relationship** reported the highest levels of experienced stigma while those who were in a relationship but not married or in a civil partnership reported the lowest. Participants living in **households with two or more others** reported higher levels of experienced stigma than those in households with fewer than two others. Those **living with any children in the household** reported higher levels of experienced stigma than those in households with no children;
- There were no statistically significant differences in levels of externalised or internalised stigma by **gender**, sexuality, or nationality (UK / non-UK). However, experienced stigma increased with higher levels of problems experienced from gambling (higher PGSI scores) among both men and women, but more steeply among women compared with men. Women reported statistically significantly higher levels of perceived stigma than men across all levels of reported gambling problems;
- Number of different types of gambling activity was not significantly associated with higher levels of experienced stigma. However, among those who had gambled on **four or more different types of gambling activity**, reported levels of experienced stigma rose more steeply with higher levels of reported gambling problems than among those who had gambled on less than four types of activity;
- In terms of **type of gambling activity**, spending money only on **betting** activities was associated with significantly lower reported experienced stigma than spending money on other gambling activities in addition to (or instead of) betting.

4.1 Gambling-related experienced stigma (GESS) among different population groups

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported experiencing problems from gambling (PGSI score of 1+)

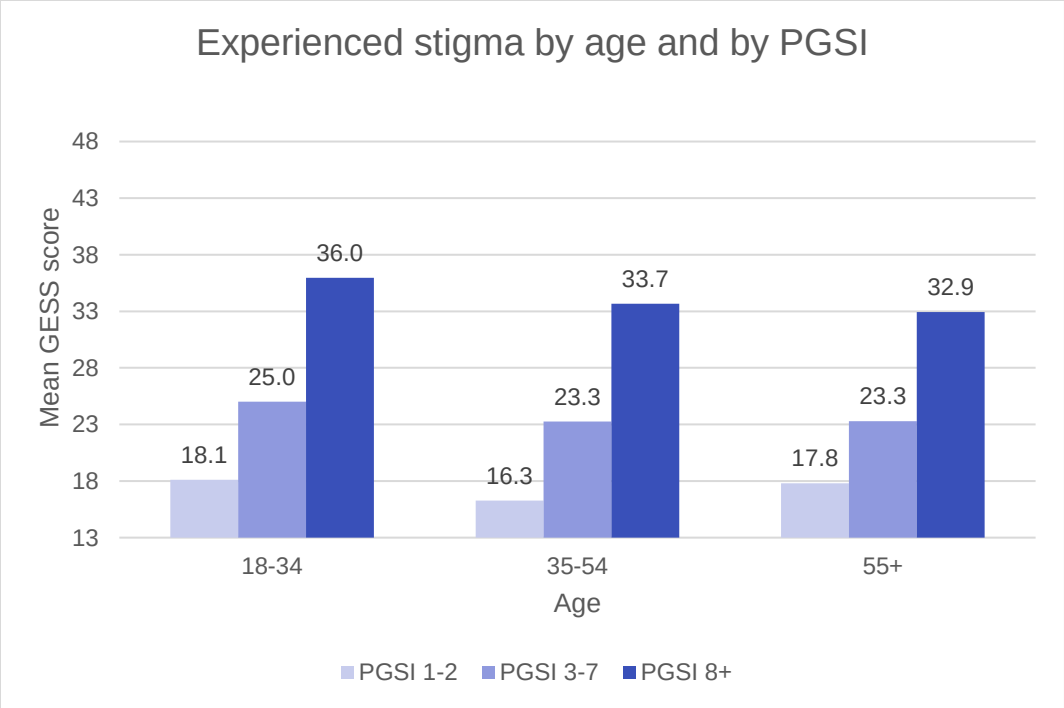
The analyses reported in this section (4.1) have drawn on the PGSI 1+ dataset. Gambling Experienced Stigma Scale (GESS) was used to measure participants' reported levels of gambling-related stigma by a range of sociodemographic characteristics in these analyses, using the mean GESS score, and by PGSI level. As shown in Chapter 3, higher experienced stigma (GESS) scores were significantly related to higher levels of problems from gambling (PGSI scores). In this chapter, differences in experienced stigma (GESS) among various population groups are explored, taking level of problems experienced from gambling (PGSI) into account. Across all participants in the sample (n=796) the mean GESS score was 22.7 (SE +/- 0.36).

The significant association of level of problems from gambling (PGSI) with experienced stigma remained in all the analyses below, after taking the sociodemographic characteristic of interest into account.

Experienced stigma by age and by level of problems experienced from gambling (PGSI)

We comparatively analysed three broad age groups (18-34, 35-54, and 55+). Overall, across all levels of problems experienced from gambling (PGSI score of 1+), the mean average experienced stigma (GESS) score significantly decreased as age group increased, meaning older groups experience less experienced stigma than younger age groups (p=0.003). Among those experiencing problems from gambling (PGSI score of 1+), the mean experienced stigma (GESS) score was 25.7 among people aged 18-34, 21.1 among those aged 35-54, and 20.1 among those aged 55+. Among those with the highest levels of reported gambling harms (PGSI of 8+), the highest experienced stigma (GESS) mean score was reported by those in the 18-34 age group (36.0) and the lowest among those in the 55+ age group (32.9) (Figure 4.1 below).

Figure 4.1: Experienced stigma by age and by level of problems experienced from gambling (PGSI)

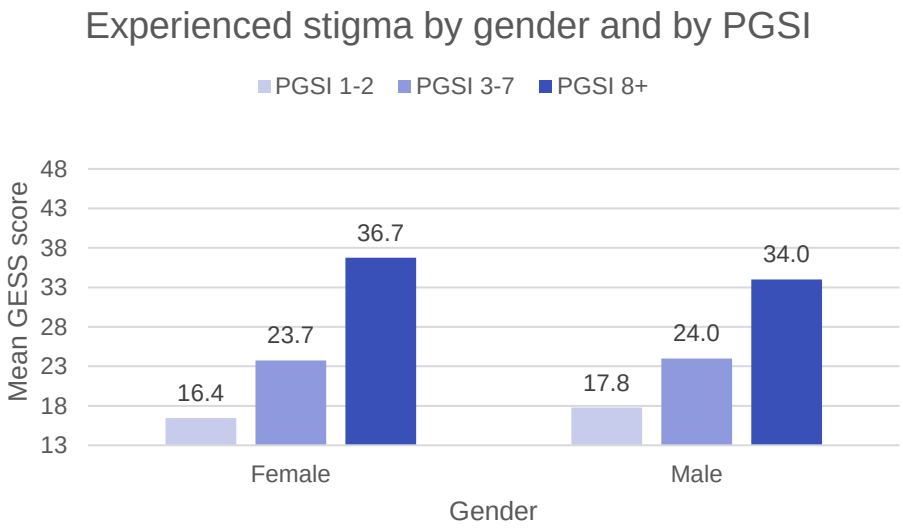


Source: PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796). Range of possible GESS score is 13-52.

Experienced stigma by gender and by level of problems experienced from gambling (PGSI)

A 'gender' variable provided with the cleaned and weighted dataset from YouGov included participants coded to 'female' or 'male', with no missing data. The questionnaire itself allowed participants to self-describe or to select 'Prefer not to say'. The mean experienced stigma (GESS) scores among men and women experiencing all levels of gambling problems (PGSI score of 1+) were similar (22.9 and 22.3, respectively). Experienced stigma increased with higher level of problems experienced from gambling (PGSI scores) among both men and women, but more steeply among women compared with men (p=0.007). Mean experienced stigma (GESS) scores among those with who experience some problems from gambling (PGSI score of 1-2) were lower for women (16.4) than men (17.8), however, for those who experience a high level of problems from gambling (PGSI score of 8+), women reported experiencing greater stigma (GESS score of 36.7) than men (34.0) (Figure 4.2).

Figure 4.2: Experienced stigma by gender and by level of problems experienced from gambling (PGSI)

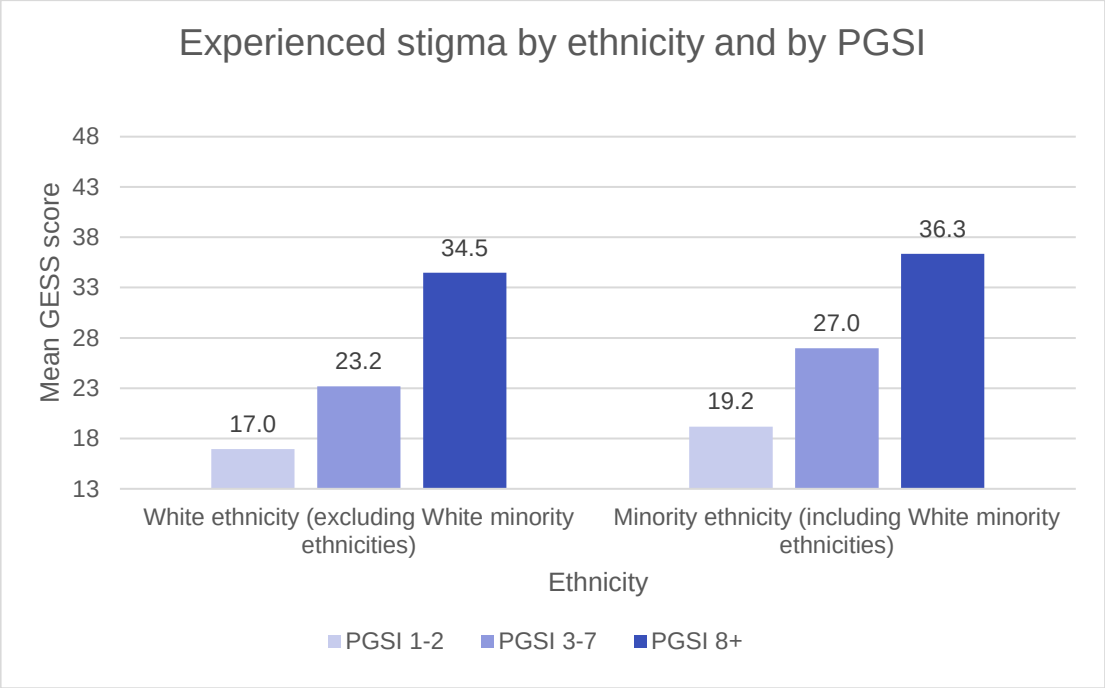


Experienced stigma by ethnicity and by level of problem experienced from gambling (PGSI)

Ethnicity was grouped into two groups: people from white British backgrounds (n=644), and participants from all ethnic minority backgrounds including white minority groups (n=152). This was due to small sample sizes among specific ethnic minority groups meaning that it would be difficult to carry out analysis on these small groups. Whilst acknowledging that not all members of ethnic minority groups will share the same experiences, there is also strength in grouping people from minoritised backgrounds to understand their collective experiences of social exclusion and marginalisation. Among participants who experience problems from gambling (PGSI score of +1) overall, there was a significant difference in experienced stigma between those from white British backgrounds and those from ethnic minority backgrounds (p<0.001), taking PGSI into account. The mean experienced stigma (GESS) score among those from ethnic minority backgrounds (including white minority ethnicities) was 27.0 compared with 21.8 among participants from white British backgrounds.

Levels of experienced stigma rose with increased levels of problems with gambling (PGSI) among both the white British ethnic groups and the ethnic minority groups, in a similar pattern. The mean experienced stigma (GESS) score (for those who experience some problems from gambling (PGSI score of 1-2)) from white British ethnic groups was 17.0, and for participants from minority ethnic groups the score was 19.2. These both rose to a mean score of 34.5 (for people from white British backgrounds), and 36.3 (for people from ethnic minority backgrounds) for those who experience a high level of problems from gambling (PGSI score of 8+) (Figure 4.3).

Figure 4.3: Experienced stigma by ethnicity and by level of problems experienced from gambling (PGSI)

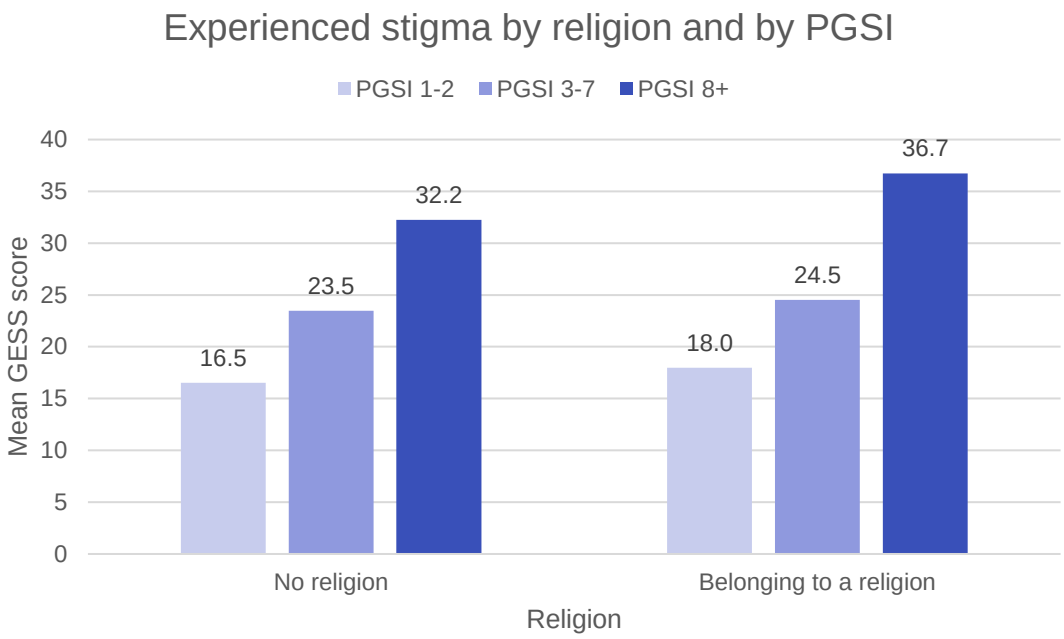


PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796).
Range of possible GESS scores is 13-52.

Experienced stigma by religion and by level of problems experienced from gambling (PGSI)
Participants were grouped into 'Belonging to a religion' (n=381) and 'No religion' (n=379). Due to small sample sizes, analysis comparing specific religious groups was not possible, however there is still strength in comparing the experiences of those with a shared characteristic of belonging to a religion. For people who experience problems from gambling (PGSI score of 1+), those who belong to a religion reported significantly higher levels of experienced stigma than those who do not belong to a religion ($p<0.001$). The mean experienced stigma (GESS) score among those who said they belong to a religion was 24.7, compared with 20.5 among those who said that they did not belong to a religion.

Reported mean experienced stigma (GESS) scores increased with level of problems experienced from gambling (PGSI scores) among both people who said they belong to a religion and people who said they do not. The increase was slightly steeper among those who belong a religion than among those who do not ($p=0.048$). (Figure 4.4). This finding supports the general trend that group differences in experienced stigma tend to be more pronounced amongst the those who experience higher levels of gambling harms (PGSI score 8+).

Figure 4.4: Experienced stigma by whether belongs to a religion and by PGSI



PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796).
Range of possible GESS score is 13-52.

Experienced stigma by nationality and by level of problems experienced from gambling (PGSI)
Migration status was a characteristic of interest to the study, since migrant communities are frequently subject to forms of stigmatisation and discrimination informed by racism and xenophobia.[45] The question on UK nationality (Yes, No) was used as a proxy for migration status. The mean experienced stigma (GESS) score among non-UK nationality participants was 28.0, and among UK nationality participants it was 22.3 (p=0.058).

Experienced stigma by sexuality and by level of problems experienced from gambling (PGSI)
Data on sexuality was grouped into two groups, reflecting heteronormativity in society and the collective marginalisation to which LGBTQIA+ communities are subject, and owing to some small samples sizes: 'heterosexual' and 'lesbian, gay, or bisexual' (LGB). The reported mean experienced stigma (GESS) score was 22.7 among both heterosexual and LGB participants (p=0.562), and strikingly there was no statistically significant relationship between sexuality and gambling-related stigma after taking level of gambling problems into account (p=0.264); this is notable given that these communities are subject to stigmatisation in normative British society.[46][47] Among all participants from both the heterosexual and LGB groups, the mean experienced stigma (GESS) score rose in a similar pattern along with increases in level of problems experienced from gambling (PGSI score).

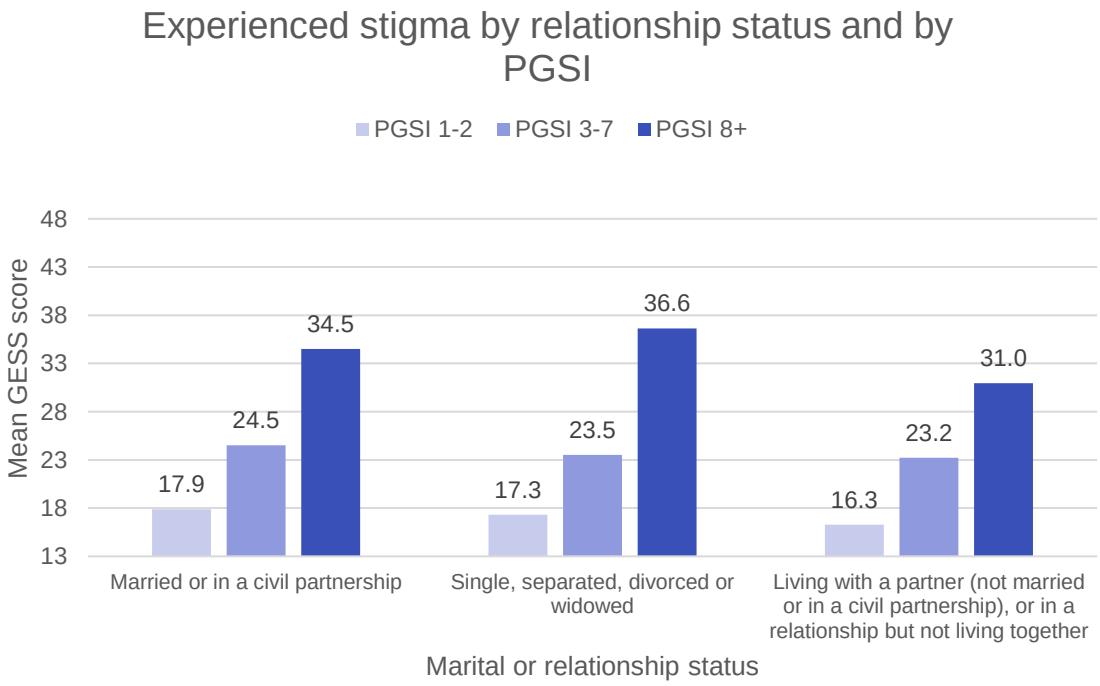
Experienced stigma by relationship status and by level of problems experienced from gambling (PGSI)
Marital or relationship status was grouped into three categories for this analysis. There were broadly: married or in a civil partnership; not in a relationship, for any reason; and in a relationship but not married or in a civil

[45] Fernández-Reino, M., (2020). Migrants and discrimination in the UK. The Migrant Observatory at the University of Oxford.
[46] Jaspal, R., Lopes, B. and Breakwell, G.M., (2023). Minority stressors, protective factors and mental health outcomes in lesbian, gay and bisexual people in the UK. Current Psychology, 42(28), pp.24918-24934.
[47] Ellis, S.J., (2007). Homophobia, rights and community: contemporary issues in the lives of LGB people in the UK. Out in psychology: Lesbian, gay, bisexual, trans and queer perspectives, pp.291-310.

partnership, whether living together or not. Among all participants who experience problems from gambling (PGSI score of 1+), the mean experienced stigma (GESS) score differed depending on relationship status and this was statistically significant (p=0.002). Single, separated, divorced, or widowed participants reported the highest mean experienced stigmatisation (GESS) score (24.4), compared with participants who were either living with a partner (not married or in a civil partnership) or in a relationship but not living together who reported the lowest mean GESS score (20.3) (Figure 4.5).

The mean experienced stigma (GESS) score rose among those with higher numbers of problems experienced from gambling (higher PGSI score) across participants from all relationship types. The increase among those who were in a relationship but not married or in a civil partnership was less pronounced than among those in the other two relationship groups, and most pronounced among those who were not in a relationship (p=0.039).

Figure 4.5: Experienced stigma by relationship status and by level of problems experienced from gambling (PGSI)

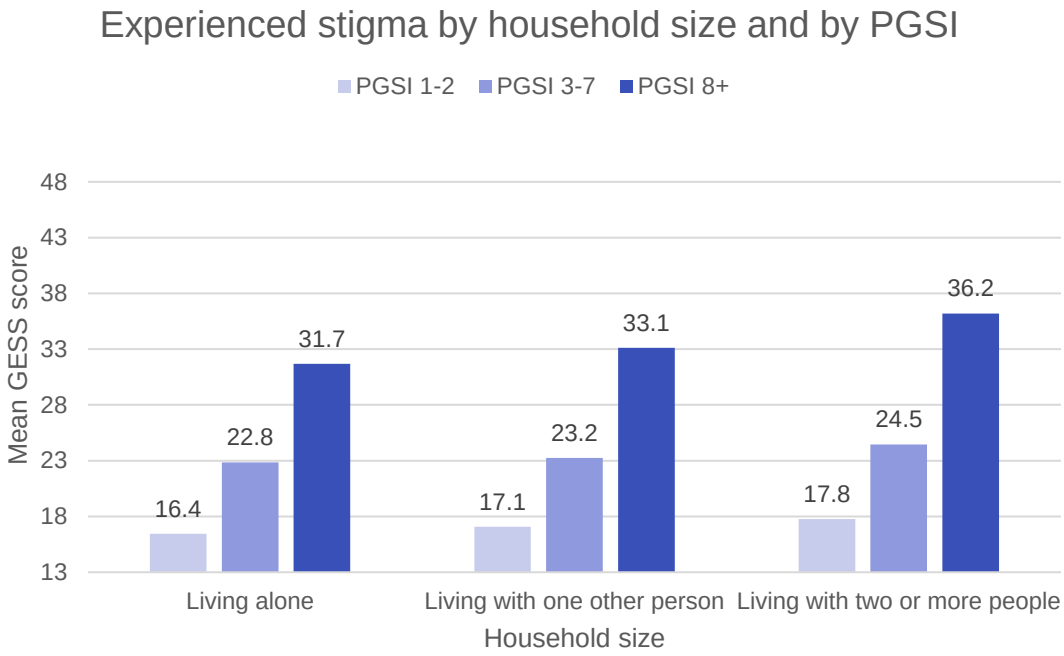


Source: PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796). Range of possible GESS score is 13-52.

Experienced stigma by household size and by level of problems experienced from gambling (PGSI)
Household size data was grouped into three categories, living alone, living with one other person, and living with two or more others. Among all participants who experience problems from gambling (PGSI score of 1+), mean scores of experienced stigma (GESS) were higher among participants who lived in larger households compared with those who lived with one other person, or alone (p=0.002). The mean experienced stigma (GESS) score was highest among participants living with two or more people (24.6) and lowest among participants living alone (20.2) (Figure 4.6).

The pattern of increase in mean experienced stigma (GESS) score along with higher numbers of problems experienced from gambling (higher PGSI scores) was similar among participants from each household size grouping, as the interaction effect between PGSI score and household size was not significant (p=0.416).

Figure 4.6: Experienced stigma by household size and by level of problems experienced from gambling (PGSI)

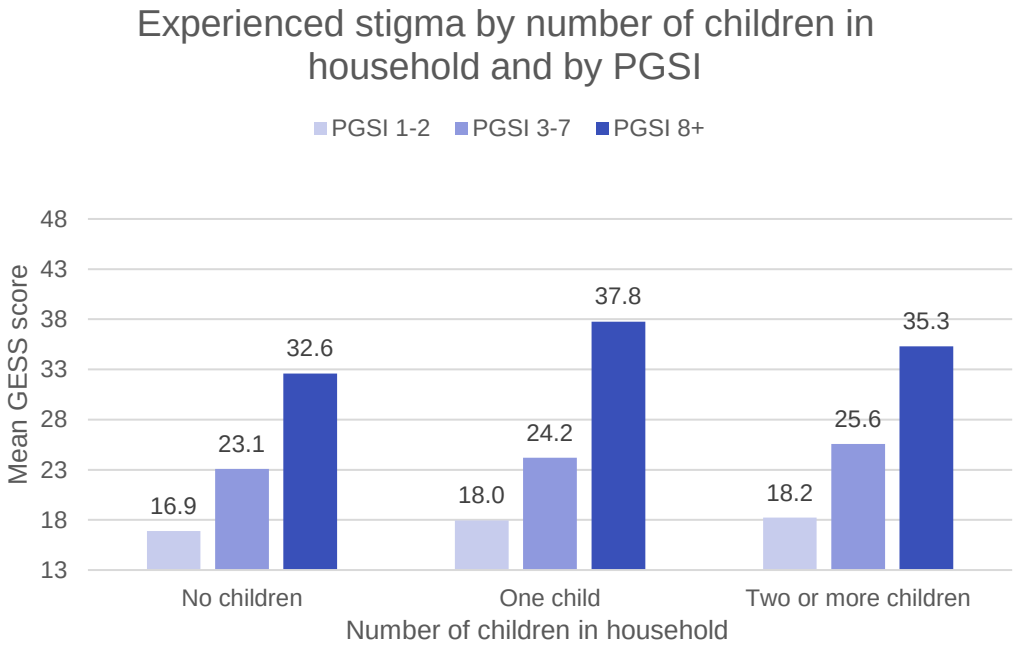


Source: PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796). Range of possible GESS score is 13-52.

Experienced stigma by number of children in household and by level of problems experienced from gambling (PGSI)

Among all participants experiencing gambling problems (PGSI score of 1+), experienced stigma was higher among those who lived with any children in the household compared with those who did not have any children living in the household, a significant difference ($p<0.001$). The mean experienced stigma (GESS) scores were 26.6 among those who had one child, 24.9 among those with more than one child, and 20.5 among those with no children in the household. The increase in experienced stigma as PGSI scores increased was similar across all groups by number of children in the household (Figure 4.7).

Figure 4.7: Experienced stigma by number of children in household and by level of problems experienced from gambling (PGSI)



Source: PGSI 1+ dataset. Base: GB adults who had gambled in past year with PGSI score of 1+ (n=796). Range of possible GESS score is 13-52.

Experienced stigma by gross household income

Three bands of gross annual household income were created, 'Under £5,000 to £34,999', £35,000 to £69,999', and £70,000 and over. Experienced stigma was similar among the three bands, taking PGSI into account and there were no statistically significant associations between income bands and experienced stigma mean score (p=0.247). Nor were there statistically significant differences in the pattern of variation in experienced stigma by income and level of problems experienced from gambling (PGSI score) (p=0.147).

Experienced stigma by Deprivation

The Index of Multiple Deprivation (IMD) measures relative deprivation by small geographic areas, with the first decile (tenth) representing areas of highest deprivation and the tenth decile representing areas of lowest deprivation. Experienced stigma was analysed by Index of Multiple Deprivation level, taking PGSI into account and there was a statistically significant association between reported mean experienced stigma (GESS) score and level of relative deprivation (IMD score) across all participants who experience problems from gambling (PGSI score of 1+) (p=0.008). The highest experienced stigma (GESS) score was reported by those in the third IMD decile (27.1) while the lowest GESS score was reported by those in the eighth IMD decile (19.4). Although the highest experienced stigma score was found in a lower relative deprivation decile and the lowest experienced stigma score was found in a higher deprivation decile, there is not a clear picture between area deprivation and experiences of stigma. This suggests that a number of other factors may be moderating the relationship between experienced stigma and level of relative deprivation.

Comparing participants across deprivation index deciles, there were no significant differences (p=0.831) in the pattern of increase in mean experienced stigma with increasing level of problems experienced from gambling. That is, relative level of deprivation did not have a notable impact on the relationship between experienced stigma and the level problems experienced from gambling. However, the base sizes per IMD decile are very

small when comparing scores within IMD decile and across PGSI grouped scores (for each subgroup unweighted base sizes ranged from 7 to 57) so this result should be treated with caution.

4.2 Gambling-related internalised stigma (GISS) among different population groups

Reported gambling-related internalised stigma (GISS) was analysed by the same sociodemographic characteristics as reported in section 4.1 above, and by level of problems experienced from gambling (PGSI). In this section, a brief report is given, highlighting any differences in these results compared with the results for experienced stigma (GESS) reported in section 4.1.

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported experiencing problems from gambling (PGSI score of 1+).

Broadly, the results of analyses for internalised stigma (GISS) among different population groups by levels of problems experienced from gambling (PGSI level) were similar to those for experienced stigma (GESS). However, unlike for experienced stigma, there were no significant differences in internalised stigma (GISS) by age group, by relationship status, or by level of relative deprivation (IMD) level after taking levels of problems experienced from gambling (PGSI) into account in each case. In contrast with externalised stigma (GESS), the interaction between PGSI and gender, and the interaction between PGSI and religion on the pattern of variation in internalised stigma (GISS) were not statistically significant.

4.3 Gambling-related perceived stigma (GPSS) among different population groups

Reported perceived stigma (GPSS) among people reporting experiences of gambling harms was analysed by the same sociodemographic characteristics as reported in section 4.1 above, and by level of problems experienced from gambling (PGSI). In this section, a brief report is given, highlighting any differences in results of perceived stigma (GPSS) among population groups and PGSI, compared with the results for experienced stigma (GESS) reported in section 4.1.

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported experiencing problems from gambling (PGSI score of 1+).

Broadly, perceived stigma (GPSS) among different population groups presented slightly different results compared with experienced stigma (GESS) among different population groups. In contrast with externalised stigma (GESS), there were no significant differences in perceived stigma (GPSS) by age group, by household size, by number of children in the household, or by level of relative deprivation (IMD level) after taking level of problems experienced from gambling (PGSI) into account in each case. In contrast to externalised stigma (GESS), the interaction between PGSI and religion and the interaction between PGSI and relationship status on the pattern of variation in perceived stigma (GPSS) were not statistically significant.

As described in section 4.1, there was a significant interaction between gender and PGSI score when looking at the outcome of experienced stigma among those experiencing a high level of problems from gambling (PGSI scores of 8+), with women in this group reporting higher experienced stigma than men, compared to among those reporting lower levels of problems experienced from gambling (lower PGSI scores) where men reported higher experienced stigma than women (p=0.007). There was also a difference in reported perceived stigma (GPSS) amongst men and women after taking PGSI into account (p=0.002). Mean reported perceived stigma (GPSS) scores were 36.3 among women and 34.7 among men, across all PGSI levels (PGSI scores of 1+). Perceived stigma scores increased as PGSI increased, more steeply among women than among men, to mean scores of 40.4 among women who experienced a high level of problems with gambling (PGSI score of 8+) and 36.4 among men who experienced a high level of problems with gambling (PGSI score of 8+) (p=0.010). This suggests that differences in both perceived and experienced stigma between men and women are more pronounced amongst those that report higher risks of gambling problems.

4.4 Stigmatisation by type of gambling activity

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported experiencing problems from gambling (PGSI score of 1+).

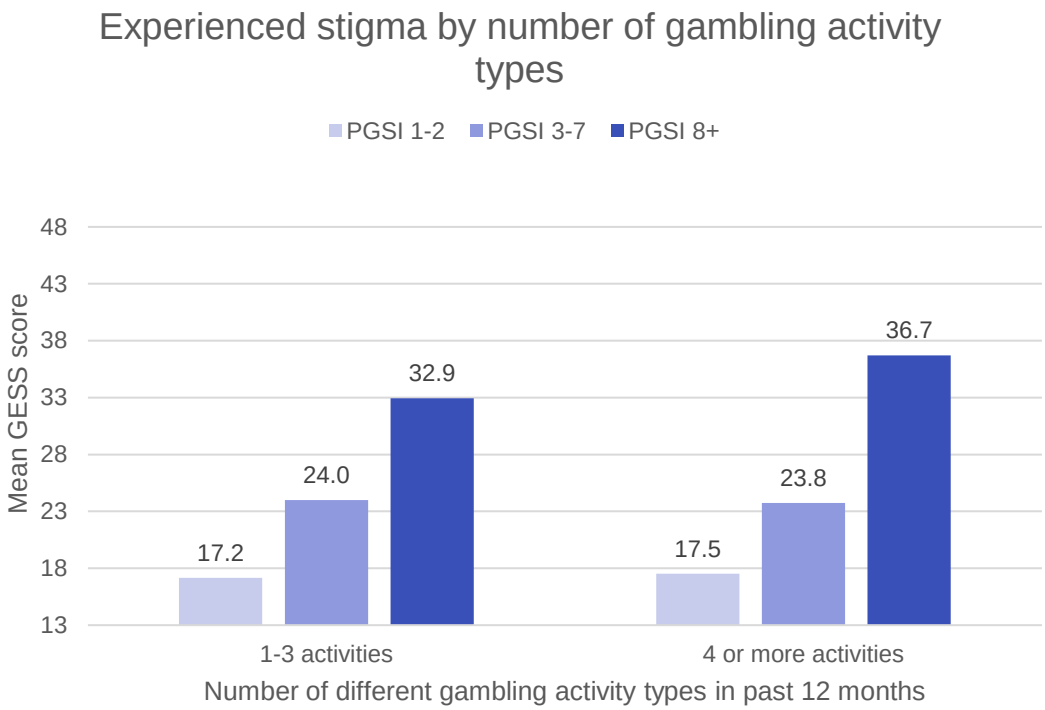
In this analysis, experienced gambling-related stigma (GESS) by the number of gambling activities engaged in over the past 12 months is reported, taking level of problems experienced from gambling (PGSI) into account. Stigma experienced by groups of people who only engaged in certain categories of gambling activity is then explored. Following earlier research into patterns of play among people who gambled, for GambleAware,[48] groupings were used for participants who spent money on the National Lottery only, betting only (e.g., horse racing, football), and gaming only (e.g., slot machines, casino). Because of low sample sizes, in the analyses by broad groupings of gambling type, level of problems experienced from gambling s grouped into two categories, PGSI 1-2, and PGSI 3+ allowing us to understand some differences between people experiencing different levels of gambling problems and participating in different gambling activities. Lastly, the level of experienced stigma in connection with single gambling activity types is reported for all participants (PGSI score of 1+).

Experienced stigma by the number of gambling activities

The number of gambling activity types that participants had spent money on in the past 12 months was grouped into two categories, one to three activity types, and four or more. The mean experienced stigma (GESS) score across all participants (PGSI score of 1+) was 25.9 among those who took part in four or more gambling activity types compared with 21.0 among those who took part in one to three different types. This was marginally statistically significant after taking level of problems experienced from gambling into account using the PGSI scale (p=0.052). Experienced stigma rose with increasing levels of problems experienced from gambling (PGSI), more steeply among those who spent money on four or more gambling activity types, a statistically significant difference in the pattern of variation (p=0.014). Those experiencing a high level of problems from gambling (PGSI scores of 8+) who had taken part in four or more activities had a mean experienced stigma (GESS) score of 36.7 compared with a mean GESS score of 32.9 among those experiencing a high level of problems from gambling (PGSI score of 8+) who had taken part in 1-3 gambling activity types (Figure 4.8).

[48] Forrest, D., McHale, I.G., Dinos, S., Ashford, R., Wilson, H., Toomse-Smith, M., & Martin, A. (2022). *Patterns of Play: Extended Executive Summary Report.* Prepared for GambleAware. National Centre for Social Research (NatCen) and University of Liverpool. https://www.gambleaware.org/sites/default/files/2022-06/Patterns%20of%20Play_Summary%20Report_final%5B2281%5D_1.pdf

Figure 4.8: Experienced stigma by number of gambling activity types and by level of problems experienced from gambling (PGSI)



Source: PGSI 1+ dataset. Base: n=796). Range of possible GESS score is 13-52.

For the analyses below, by gambling limited to National Lottery only, to betting only, and to gaming only, because of low sample sizes, level of problems experienced from gambling were grouped into two categories, PGSI score of 1-2 and PGSI score of 3+.

Experienced stigma by whether gambling was limited only to the National Lottery

Analysis of experienced stigma by those who took part in the National Lottery only, compared with those who did not was conducted. Those who did not report taking part in the National Lottery only, may have taken part in the National Lottery as well as one or more other activities, or only in one or more other activities apart from the National Lottery.

The level of experienced stigma (GESS) across all participants (PGSI score of 1+) was not significantly associated with taking part in the National Lottery only ('tickets for the National Lottery Draw, including Thunderball and EuroMillions and tickets bought online'), when taking PGSI score into account. Across all participants (PGSI score of 1+), those whose gambling participation was limited to the National Lottery reported a mean experienced stigma (GESS) score of 19.1 compared with 23.2 among those whose gambling was not limited to the National Lottery only, however this was not statistically significant when taking into account gambling harms (p=0.207).

The level of experienced stigma was higher among those with a higher level of problems from gambling (higher PGSI scores), rising more steeply among those who did not only play the National Lottery (29.6 among those experiencing several problems from gambling (PGSI score of 3+)) than among those who only played the National Lottery (25.7 among those experiencing several problems from gambling (PGSI score of 3+)), a

significant difference (p=0.030). It should be noted that the cell count for those that played the national lottery only and who had experienced several or more problems from gambling (PGSI score of 3+) was less than 30 so these findings should be interpreted with caution.

Experienced stigma by whether gambling was limited to betting only

Betting activities in the survey included betting on horse or dog races, football, or other sports, whether in person or online and whether participants spent money on betting activities only or not was significantly associated with experienced stigma, after taking level of problems experienced from gambling (PGSI) into account (p=0.022). Those who did not spend money on betting only may have spent money on betting activities as well as on other types of gambling, or may not have spent money on betting activities. Across all participants who had experienced problems from gambling (PGSI score of 1+), the mean experienced stigma (GESS) score among those who said they participated in one or more betting activities only was 19.6, compared with a mean score of 22.9 among those who had gambled but not exclusively on betting activities. Mean experienced stigma (GESS) scores increased similarly among those whose activities were on betting only and those whose gambling was not limited to betting only by level of problems experienced from gambling (PGSI level). It is important to note that cell counts for people whose gambling was limited to betting only were <30 for the two PGSI score splits so results should be interpreted carefully.

Experienced stigma by whether gambling was limited to gaming only

Activities grouped under gaming include a range of gambling types such as scratch cards, gaming machines in a bookmakers, fruit or slot machines, bingo (including online), casino games (in person and online), and online poker. It does not include National Lottery or betting activities. Note that those who had not spent money on gaming activities only in the past 12 months may have taken part in gaming activities as well as National Lottery or betting, or may not have spent money on any gaming activities.

Among all participants, the level of experienced stigma was similar among those who only gambled on gaming activities and those whose gambling was not limited to gaming activities. The level of experienced stigma was higher among those with a higher level of problems experienced from gambling (higher PGSI scores) and the reported mean experienced stigma (GESS) scores increased in a similar pattern among both those whose gambling was limited to gaming only and those whose gambling was not limited to gaming.

Experienced stigma by participation in specific gambling activities

In this section different specific gambling activities and the level of stigma reported by people who said they had taken part in the activity during the past 12 months are reported. Because of low sample sizes taking part in some of the activities, results across all levels of problems experienced from gambling (PGSI score of 1+) are reported in this sub-section.

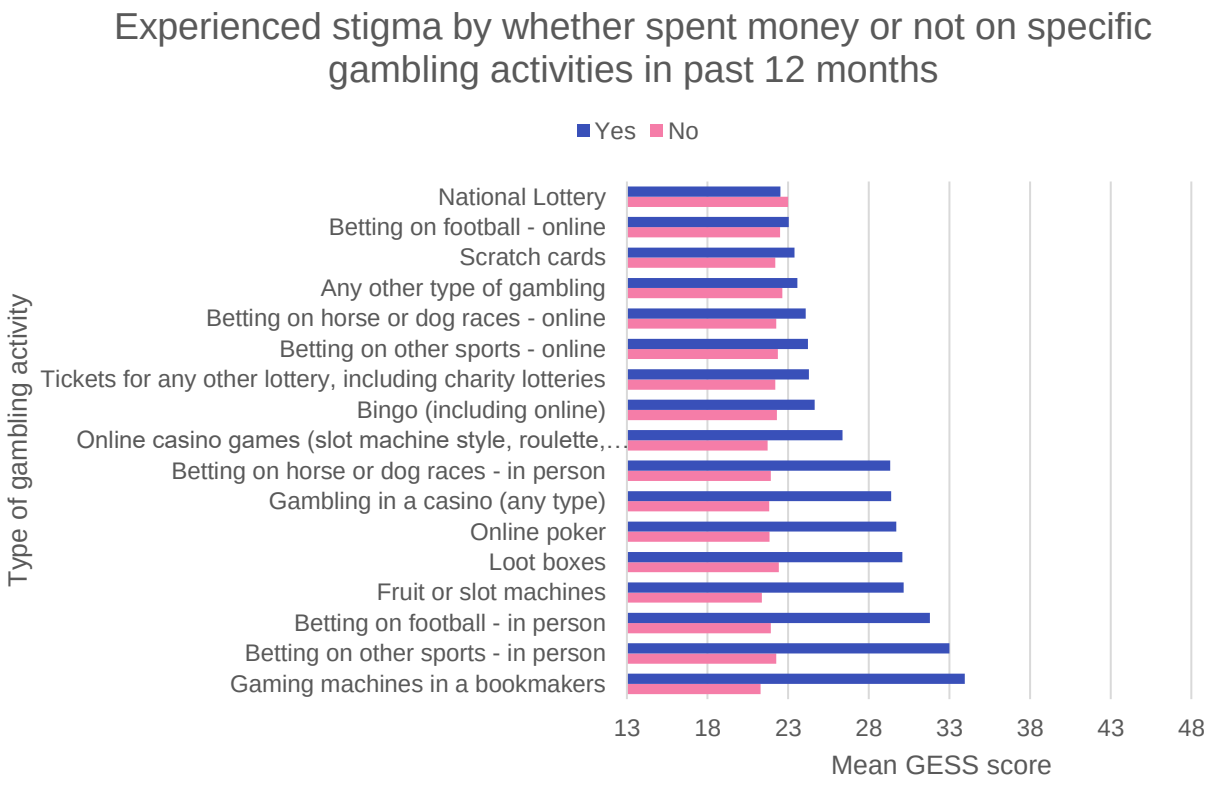
Survey participants may have taken part in more than one activity type and there may be patterns in types of activity that go together, with more or less stigma associated with those patterns. So, the level of stigma associated with a particular activity could be influenced by factors such as number and/or type of other activities that participants took part in. There can be a great volume of combinations of activities that someone may engage with and some combinations may have a stronger association with gambling harms than others. Combination of activities was out of scope for this project and sample sizes would not allow for testing combination. However, it is possible to identify some gambling activities which are associated with higher levels of experienced stigma than others, overall.

Across all participants experiencing problems from gambling (PGSI score of 1+), the activities associated with the highest mean experienced stigma (GESS) score were spending money on gaming machines in a bookmakers at 34.0, compared with 21.3 who did not take part in that activity, followed by betting on football in person at 31.8, compared with 21.9 among people who did not bet on football in person. The activity associated with the third highest mean experienced stigma (GESS) score was using fruit or slot machines at 30.2 compared with a mean GESS score of 21.4 among those who did not use fruit or slot machines. It is important to note that people who took part in these activities tended to report higher levels of problems with gambling. The numbers of people who took part in these three particular activities and reported a lower level of problems experienced from gambling (PGSI score of 1-2) was less than 30 across each of the activities.

Overall, in person activities were associated with higher levels of experienced stigma than the equivalent activity carried out online. The mean experienced stigma (GESS) score among those who bet on football in person was 31.8 as noted above, compared with a score of 23.0 among those who bet on football online. The mean experienced stigma (GESS) score among those who took part in betting on horse or dog racing in person was 29.3 compared with a score of 24.1 among those who bet on horse or dog races online.

Figure 4.9 below indicates the relative levels of experienced stigma reported by those who did and did not report taking part in specific gambling activities.

Figure 4.9: Experienced stigma by whether spent money on specific gambling activities or not in the past 12 months



Source: PGSI1+ Dataset. Base (n=796). Range of possible GESS score is 13-52

5. Attitudes towards people who experience gambling harms alongside other potentially stigmatised characteristics

This chapter explores participants' attitudes towards hypothetical individuals experiencing gambling harms alongside additional potentially stigmatised characteristics, depicted via one of 14 vignettes (representing a male and female version of an individual in seven different conditions (gambling without harms; gambling harms only; gambling harms + LGBTQ status; gambling harms + mental health difficulties; gambling harms + drug and alcohol use; gambling harms + minority ethnicity; and gambling harms + low income) - see section 2.3 for full explanation of the design and materials). It summarises findings regarding overall attitudes of the whole sample, and also presents a comparison of responses across those with and without lived experience of gambling harms, to explore how personal experience is related to attitudes towards others experiencing harm. Data on how stigma is related to people's beliefs about the causes of gambling harm, and their perceptions about its harmfulness, recoverability, noticeability and disruptiveness, are also presented.

Chapter five: Key findings

- Participants were significantly less willing to engage socially with (i.e. were more stigmatising of) someone experiencing gambling harms than someone who gambles without experiencing harm;
- The greatest desire for social distance (i.e. stigma) was apparent when participants were asked about their attitudes towards someone experiencing gambling harms alongside drug and alcohol use;
- People who had lived experience of gambling harms were, on average, less stigmatising of someone experiencing gambling harms, being more willing to engage socially with them than people who had no personal experience of gambling harm;
- People's perceptions about the cause of gambling harms impacted how stigmatising they were; in particular, those who believed gambling harms to be caused by bad character were less willing to engage socially with someone experiencing harms;
- The more disruptive, harmful, and difficult to recover from participants believed gambling harms to be, the less willing they were to engage with someone experiencing gambling harms.

The findings in this chapter are based on a dataset comprising the entire sample (i.e. those who have not gambled in the past year, those who have gambled and experienced no harms, and those who have gambled and report symptoms of 'problem gambling' (PGSI score of 1+). This full, merged dataset included both the main August 2023 YouGov Treatment and Support Survey and the 'boost' (total n=3567), without weightings. This

was because weightings are not appropriate for the merged sample, due to the main sample being weighted to the general population and the PGSI 1+ sample being weighted to the population of people experiencing problems from gambling (PGSI score of 1+), respectively, such that neither weighting algorithm appropriately captured the larger, merged sample. Maximising sample size and diversity for the vignette component was considered more important than preserving the weightings, as we were interested in understanding reactions to different types of hypothetical groups of people experiencing gambling harms, and did not need to estimate prevalence of particular experiences or characteristics in the sample per se. Scales and measures of gambling-related stigma and of gambling severity used in the analyses for this chapter include: the Problem Gambling Severity Index (PGSI); the social distance scale (SDS);[49] and items measuring perceived harmfulness (2 items), perceived noticeability (1 item), perceived disruptiveness (4 items), perceived recoverability (1 item), and perceived causes (6 items). Social distance scores and measures of other perceptions were analysed using mean continuous scores, and the PGSI has been used as a categorical variable with possible values of No problems experienced from gambling (0), Low level of problems from gambling (1-2), Moderate level of problems experienced from gambling (3-7), and High level of problems from gambling (8+). Further details about the scales and analyses are provided in Chapter 2 and Appendix B.

Participants were given a vignette which involved a character called AJ. AJ's characteristics (such as gender, ethnicity, sexuality, drug and alcohol use) and level of problems with gambling varied across the different scenarios that were presented to participants. An example of one of the vignettes is provided below:

AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.

Participants were then asked a set of questions about the character 'AJ'. Full wording of all 12 vignettes and questions can be found in Appendix A.

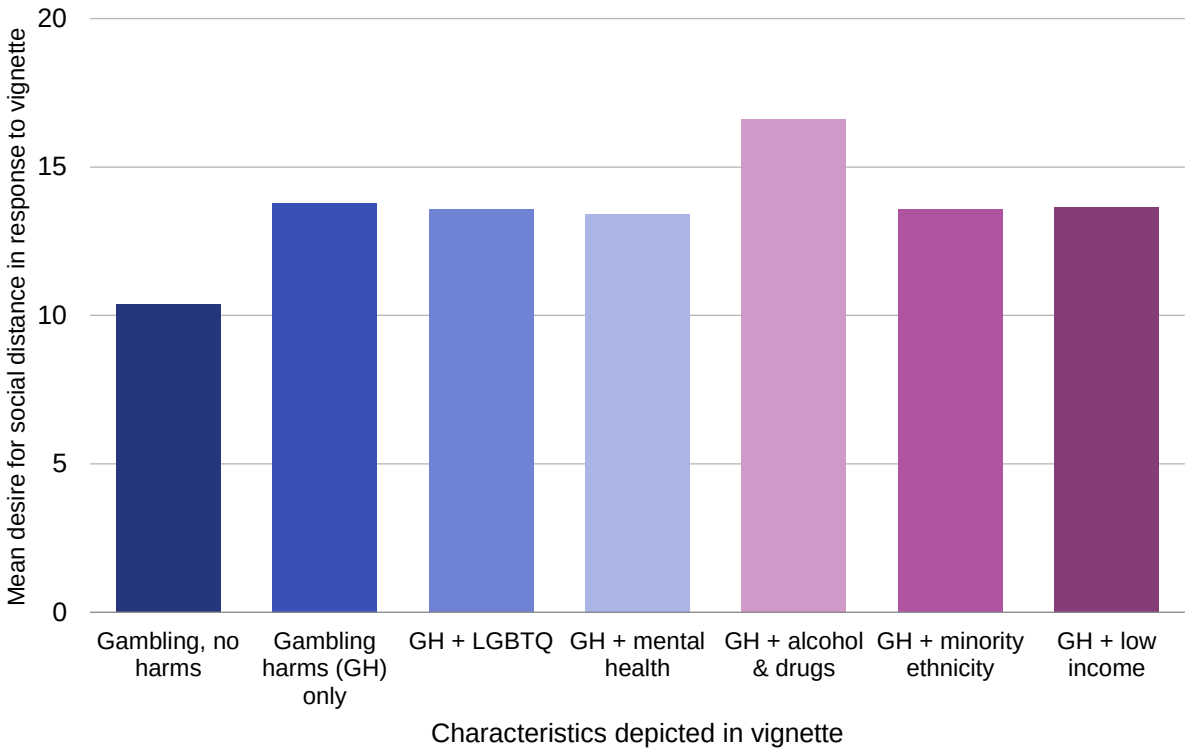
5.1 Stigma across different hypothetical scenarios

Desire for social distance from the hypothetical individuals in the vignettes ranged from 6-24, with higher scores representing greater desire for distance (a proxy for greater stigma). Robust 2-way ANOVA (where higher values of Q imply a more pronounced effect, and p-values of less than 0.05 indicate that the effect is statistically significant) indicated that there was a significant main effect of vignette (Q=593.47, p=.001) but no significant main effect of gender (Q=3.35, p=.068) and no significant interaction between gender and vignette (Q=3.43, p=.76). In other words, the degree of stigmatisation of AJ differed significantly depending on which characteristics were referred to within the vignette but did not differ depending on which gender AJ was referred to as, and the difference in stigma across characteristics wasn't influenced any further by whether AJ was described as a man or a woman, either.

[49] Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of Fear and Loathing: The Role of "Disturbing Behavior," Labels, and Causal Attributions in Shaping Public Attitudes toward People with Mental Illness. *Journal of Health and Social Behavior*, *41*(2), 208–208. https://doi.org/10.2307/2676306

Figure 5.1 summarises the mean desire for social distance across vignettes (data from the male and female vignettes are combined in this figure, as there were no significant differences based on gender of the protagonist).

Figure 5.1: Variation in levels of desire for social distance from an individual with different characteristics and levels of gambling problems



Post-hoc tests showed that ***people were significantly more stigmatising of individuals described as experiencing gambling harms than they were of people who were described as gambling without experiencing harms****,* as indicated by a greater desire for social distance from them. This applied to all vignettes describing someone experiencing gambling harms; i.e. compared to the 'gambling without harms' condition, there was significantly more stigma towards the vignettes describing gambling harms only; gambling harms in addition to information that the individual identified as LGBTQ; gambling harms alongside information that the individual was from a minority ethnic group in the UK; gambling harms alongside being from a low income family; gambling harms alongside having a mental health condition; and gambling harms alongside drug and alcohol use (all p-values <.001). In addition, the individual described as experiencing gambling related harms alongside drug and alcohol use was met with significantly more stigma (in the form of desire for social distance) than *all* other vignettes (all p values <.001), indicating that while the other characteristics did not result in pronounced additional stigma beyond that associated with gambling harms, ***those who experience gambling harms in combination with drug and alcohol use are at particularly elevated risk of stigma from the general population****.* Research into other populations has demonstrated that, where people "occupy multiple stigmatized identities, the processes of stigmatisation and scapegoating are particularly persistent and pernicious",[50] and amongst people who experience gambling harm, this finding suggests that those also experiencing harms

[50]Walters, S. M., Kerr, J., Cano, M., Earnshaw, V., & Link, B. (2023). Intersectional stigma as a fundamental cause of health disparities: A case study of how drug use stigma intersecting with racism and xenophobia creates health inequities for Black and Hispanic persons who use drugs over time. *Stigma and Health, 8(3),* 325.

related to drug and or alcohol use are likely to bear a disproportionate burden of societal stigma - particularly in the form of people being unwilling to engage socially with them.

As desire for social distance is calculated based on six items, depicting different social scenarios, Table 5.1 presents additional data about desire for social distance across these scenarios for three key conditions: 'gambling without harms' (as this acted as a baseline/control condition), the 'gambling harms + drug and alcohol use' condition (as this was the most highly stigmatised condition) and the 'gambling harms only' condition (as scores across all the other vignettes describing someone experiencing harms were comparable to this condition). Percentages in the table show what percentage of people who received each vignette were willing (i.e. selected either 'willing' or 'definitely willing') to engage with the individual in each scenario.

Table 5.1: Willingness to engage with someone who gambles in different social scenarios (proportion of entire sample indicating willingness)

		Vignette protagonist		
		Someone who gambles without experiencing harm	Someone experiencing gambling related harm	Someone experiencing gambling related harm alongside drug and alcohol use
Measure of desire for social distance	Willing to move next door to…	89%	78%	37%
	Willing to make friends with…	90%	70%	37%
	Willing to spend an evening with…	88%	69%	37%
	Willing to start working closely on a job with…	83%	58%	34%
	Willing to have a residential treatment centre in your neighbourhood for…	77%	77%	64%
	Willing to have… marry into your family	75%	31%	17%

Up to 90% of people asked would be willing to engage socially in at least some situations with someone who gambles without experiencing harm. When gambling harms are mentioned, this figure drops to 30-80% (depending on the scenario). When the person experiencing gambling harms is also described as being someone who uses drugs and alcohol, the rate drops further, to 17-64%.

People were most accepting of people experiencing gambling harms when it came to their willingness for a residential treatment centre to be located in their area, with most people expressing a willingness for this to happen (though even here, up to **one-third** of people were not accepting of this). The most pronounced desire for social distance was expressed in response to the question about having someone experiencing gambling harms marry into one's family. Here, **less than one-third** of people expressed a willingness to accept this, and this figure dropped to just **17%** for someone experiencing gambling harms alongside drug and alcohol use. Statistical testing confirms that these differences are statistically significant; Fisher's Exact Tests demonstrate that the proportions of people willing to engage with someone experiencing gambling harm were all significantly smaller ($p<.001$) than the proportions of people willing to engage with someone gambling without harm, with the

sole exception of having a treatment centre in the neighbourhood. Similarly, the proportion willing to engage with someone experiencing gambling harms alongside drug and alcohol use was significantly smaller than the proportion willing to engage with someone experiencing gambling harm alone, across all scenarios (all p-values <.001).

5.2 Relationships between lived experience of gambling harm and attitudes towards others experiencing gambling harms

People with lived experience of gambling harms (according to PGSI scores) were, on average, significantly less stigmatising of others experiencing harms than people who have no personal experience of harms: there was a significant inverse correlation between PGSI score and desire for social distance (r_s (2049) = -.113, p<0.001), i.e. ***the more problems a person experiences from gambling (higher PGSI score), the more willing they were to engage socially with someone experiencing gambling harms.***

Table 5.2, below, shows the percentage of participants with experience of gambling harms, percentage of participants with experience of gambling (but not of harms), and percentage of participants without experience of gambling, who indicated that they were willing to engage with someone experiencing gambling harms in six different scenarios. For comparison, Table 5.3 summarises the percentage of each group who were willing to engage with someone who gambles *without* experiencing harms.

Table 5.2: Willingness of participants to engage with someone experiencing gambling harms across six scenarios, by gambling status of participants

	Participant gambling status		
	Has not gambled in past 12 months	Has gambled in past 12 months but does not experience harms from gambling (PGSI score of 0)	Has gambled in past 12 months and experiences harms from gambling (PGSI score of 1+)
Willing to move next door to…	71%	81%	82%
Willing to make friends with…	61%	76%	72%
Willing to spend an evening with…	58%	73%	78%
Willing to start working closely on a job with…	50%	61%	64%
Willing to have a residential treatment centre in your neighbourhood for…	72%	80%	81%
Willing to have… marry into your family	21%	34%	41%

Table 5.3: Willingness of participants to engage with someone gambling <u>without</u> harms across six scenarios, by gambling status of participants.

	Participant gambling status		
	Has not gambled in past 12 months	Has gambled in past 12 months but does not experience harms from gambling (PGSI score of 0)	Has gambled in past 12 months and experiences harms from gambling (PGSI score of 1+)

Willing to move next door to…	81%	91%	88%
Willing to make friends with…	88%	92%	88%
Willing to spend an evening with…	87%	89%	87%
Willing to start working closely on a job with…	82%	86%	83%
Willing to have a residential treatment centre in your neighbourhood for…	76%	78%	72%
Willing to have… marry into your family	67%	80%	78%

Across all participant groups, there was greater desire for social distance from the person experiencing gambling harms than from the person gambling without harms, i.e. there is some degree of stigmatisation of those experiencing gambling harms regardless of one's own lived experience of gambling/gambling harms. However, the *increased desire for social distance was greatest in those without lived experience of gambling, intermediate in those who gamble but do not experience harms, and smallest in those with lived experience of harms*. For example, around 40% of people who experienced problems from gambling (PGSI score of 1+) would be willing to have someone who had experienced gambling harms marry into their family – compared with a rate of around 20% of those who do not gamble and 34% of those who gamble without experiencing harms. This reiterates the finding that *people who have experienced one or more harms from gambling themselves are, on average, less stigmatising of others experiencing such harms.* This implies a greater level of empathy, on average, from people with shared lived experience, compared with the general population. It aligns with findings from our analysis of online forum data (paper currently in review) where people with lived experience of gambling harm frequently demonstrated empathy towards others with shared experiences. It is the opposite effect to what we might expect if people with lived experience were engaging in stigma distancing – but it is important to note that there are still around 60% of people with lived experience who reported that they would not be willing to have someone else with lived experience marry into their family, and there may be people amongst that 60% who have a particularly pronounced desire for social distance.

5.3 Beliefs about the nature and origin of gambling harms, and their relationship with stigma.

In order to explore how various beliefs about gambling harms influence stigmatisation, a multiple linear regression using the 'enter' method was carried out in SPSS, with variables relating to beliefs about nature and origin of gambling harms as predictors, and desire for social distance from vignette protagonist as the outcome variable (using responses to all vignettes depicting someone experiencing gambling harms, n=3052). The model was statistically significant ($F(11,3041) = 89.34$), $p<.001$) and explained 24% of the variance in desire for social distance ($R^2=.244$). Table 5.4 below presents summary statistics for the predictor variables, including squared semi-partial correlation coefficients (sr^2), which give a standardised measure of effect size, indicating the amount of unique variance explained by each predictor.[51,52] In order of decreasing effect size, desire for social distance was predicted by: belief in bad character as a cause of harm; perceived irrecoverability (indicated by negative coefficient for recoverability); perceived disruptiveness; perceived harmfulness to others; disbelief in god's will as a cause of harm (as indicated by negative coefficient for belief in god's will as a cause); and perceived harmfulness to self. The other variables (belief that harms are caused by chemical imbalance, stressful circumstances, genetics, or upbringing; and perceived noticeability) did not significantly predict desire for social distance.

[51] Dudgeon P. (2016). A Comparative Investigation of Confidence Intervals for Independent Variables in Linear Regression. *Multivariate behavioral research*, 51(2-3), 139–153. https://doi.org/10.1080/00273171.2015.1121372

[52] Tabachnick, B.G. and Fidell, L.S. (2001) *Using Multivariate Statistics*. 4th Edition, Allyn and Bacon, Boston.

In summary, ***people were more likely to stigmatise someone experiencing gambling harms if they felt their scenario was caused by their bad character and less likely to stigmatise them if they believed it was due to divine will.*** A key factor here seems to be culpability – people are more stigmatising when they believe gambling harms are caused by the person experiencing them, and less stigmatising when they believe responsibility lies with an external agent. While promoting "divine will" as the cause of gambling harms is unlikely to be an appropriate stigma reduction approach for various reasons, this finding does suggest that education about the role of other external agencies (e.g. industry) could help reduce stigmatisation of individuals experiencing harm.

In addition, ***the more disruptive and harmful the scenario was perceived to be, and the less possible people thought it was to recover from, the greater the stigmatisation***. (Table 5.4 below.) This also has implications for educational interventions to reduce stigma; by emphasising the recoverability of gambling harms to those who lack awareness of this, it may be possible to reduce people's desire for social distance from people experiencing gambling harms. It also highlights how portrayals (e.g. within mainstream media) of people experiencing gambling harms as dangerous or harmful (to themselves and/or others) may exacerbate stigma.

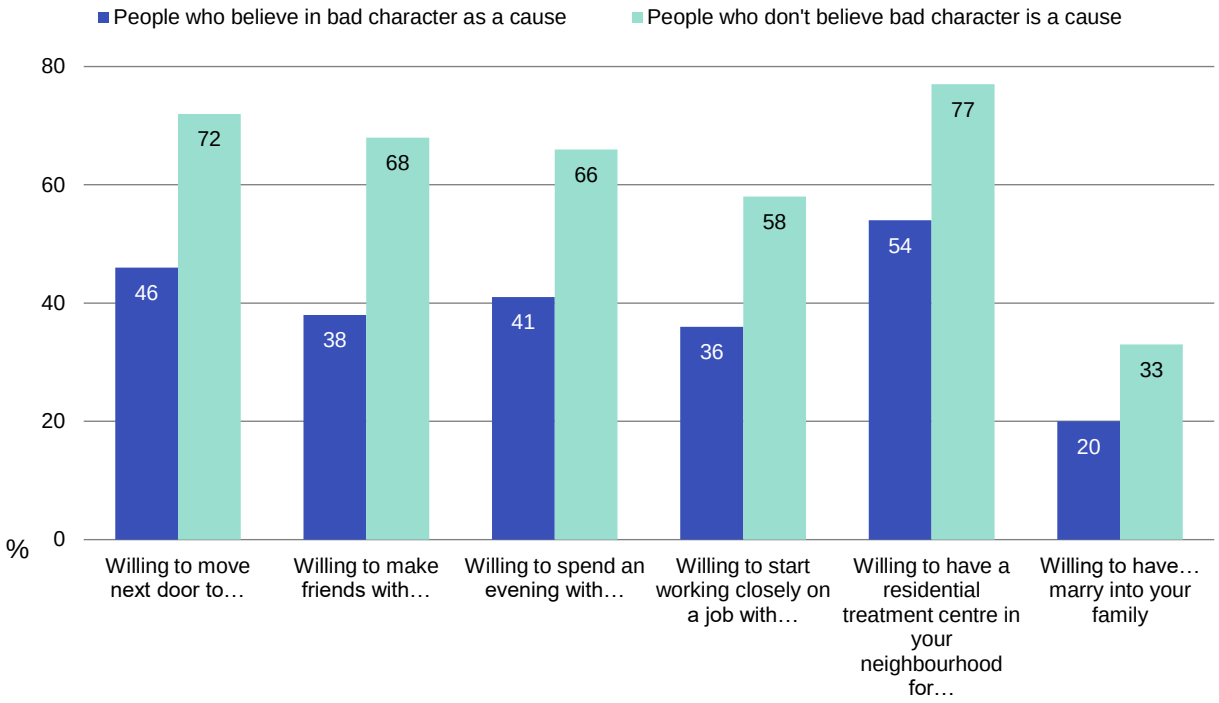
Table 5.4: Results of multiple linear regression to explore how beliefs about nature and origin of gambling harms predict desire for social distance

Model		Unstandardised Coefficients B	Std. Error	Std Coeff Beta	t	p-value.	95% CI	sr^2
F (11,3041)= 89.34, p<.001, R^2=.244.	**Belief in bad character cause**	**1.144**	**.073**	**.284**	**15.624**	**<.001**	**1.001, 1.288**	**0.061**
	Belief in chemical imbalance cause	-.088	.073	-.023	-1.207	.228	-0.232, 0.055	0.000
	Belief in stressful circumstances cause	.023	.090	.005	.259	.795	-0.153, 0.199	0.000
	Belief in genetic cause	.005	.075	.001	.067	.947	-0.143, 0.153	0.000
	Belief in divine will cause	**-.222**	**.065**	**-.058**	**-3.407**	**<.001**	**-0.349, -0.094**	**0.003**
	Belief in upbringing cause	.030	.070	.007	.426	.670	-0.108, 0.168	0.000
	Perceived harmfulness to others	**.519**	**.076**	**.128**	**6.799**	**<.001**	**0.370, 0.669**	**0.011**
	Perceived harmfulness to self	**.191**	**.085**	**.042**	**2.249**	**.025**	**0.025, 0.358**	**0.001**
	Perceived noticeability	.083	.075	.019	1.115	.265	-0.063, 0.229	0.000
	Perceived recoverability	**-.970**	**.082**	**-.201**	**-11.810**	**<.001**	**-1.131, -0.809**	**0.035**
	Perceived disruptiveness	**.222**	**.023**	**.165**	**9.548**	**<.001**	**0.177, 0.268**	**0.023**

a. Dependent Variable: Social distance scale score

Figure 5.2, below, presents a visualisation of the proportion of participants who were willing to engage with a person experiencing gambling harms (merging data across all vignettes depicting gambling related harms), among those who endorse bad character as a cause of harms and those who do not endorse it. While only a minority (**9.9%**) of the participants held this belief***, those who did believe bad character to be the cause of gambling harms were significantly less likely to engage with someone experiencing them, across all scenarios,*** indicating that this belief is associated with the greatest stigmatisation. Fisher's Exact tests were computed to test for statistical significance of these differences, and all p-values were <.001, i.e. highly significant, and remain so after correcting for multiple comparisons.

Figure 5.2: Willingness to engage with someone who experiences gambling harms, broken down by belief in bad character as the cause of harms



6. Treatment and support, and health

This chapter includes analyses of experienced, internalised and perceived stigma by whether participants had accessed treatment and support. This is followed by analysis of barriers to seeking support, looking at the involvement of stigma in reasons given by level of problems with gambling. Lastly, experienced stigma by a range of health and wellbeing, and health behaviours by level of problems with gambling is examined.

Chapter six: Key findings

- Across all participants who experience problems from gambling (PGSI score of 1+), higher experienced stigma (GESS) was reported by **those who had accessed treatment or support services**, compared with those who had not, taking PGSI level into account, a significant difference which was also found for reported internalised stigma (GISS), but not for reported perceived stigma (GPSS);
- The pattern of variation in experienced stigma (GESS) across different levels of problems experienced from gambling (PGSI scores) was significantly different depending on whether participants had accessed services or not, with the **steepest rise in GESS as PGSI increased** shown among the group who had not accessed services (although the highest mean GESS score was found among those who had accessed services and had experienced a high level of problems from gambling (PGSI score of 8+);
- **Anticipated stigma** was suggested by responses given to questions about why participants who experience problems from gambling (PGSI score of 1+) had not accessed services (**barriers to seeking support**). Despite the questions only being asked of those who said they did need to cut down their gambling, 45% of participants said they did not seek support because they did not feel they needed to access services. The next most common response was 'I feel too ashamed or embarrassed to talk about my gambling with anyone' (19%), followed by 'I did not think treatment or support would be helpful / effective' (10%);
- Among people experiencing a **high level of problems from gambling (PGSI score of 8+)**, the most common reason given was **'I feel too ashamed or embarrassed to talk about my gambling with anyone' (36%),** compared with 13% of participants who experience several problems from gambling (PGSI scores of 3-7), and 4% of participants who experience some problems from gambling (PGSI scores of 1-2);
- Across **all participants who had gambled in the past 12 months**, the mean experienced stigma (GESS) score, taking level of problems experienced from gambling (PGSI) into account was significantly associated with **mental distress (Kessler 6 – K6 scale)**. Higher mean experienced stigma (GESS) scores were reported among those who had higher mental distress (K6) scores across all participants experiencing problems from gambling.

6.1 Stigmatisation and accessing treatment and support

To assess stigma and access to treatment and support, in this section the focus was on two relevant questions. The first asked participants which, if any, sources of treatment, support, and advice they had used to reduce gambling within the previous 12 months. The second question presented a series of possible barriers to accessing services and asked participants which, if any, had stopped them from seeking support, advice or treatment to reduce their gambling in the last 12 months. The former question, around access to treatment and support, will be referred to as 'accessed services' and the latter, around reasons preventing access, as 'barriers to seeking support'.

PGSI 1+ dataset

GB adults (18+) who had gambled in the past 12 months and who reported a PGSI score of 1 or higher.

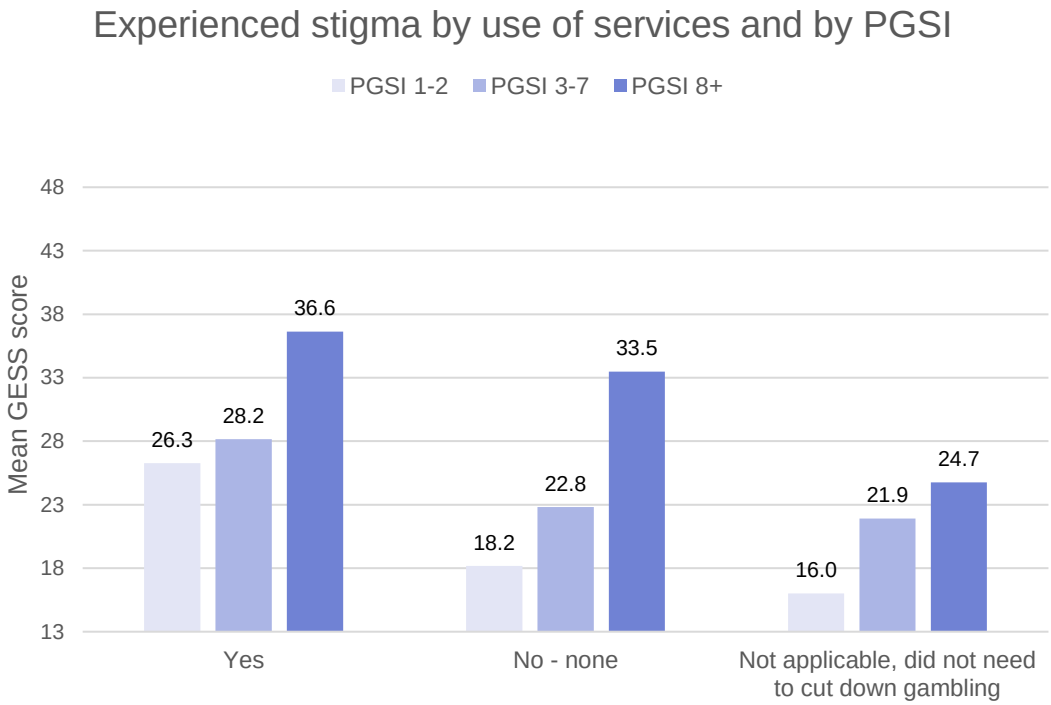
For the analyses reported in this section (6.1), the dataset of people who had gambled in the past 12 months and who also reported experiencing problems from gambling (PGSI score of 1+) was used (n=796).

Access to services and experienced stigma

Across all participants who had experienced problems from gambling (PGSI score of 1+), there was a significant association between whether people had accessed services or not and experienced stigma, after taking level of problems with gambling into account (PGSI). The mean experienced stigma (GESS) score was higher for those who had accessed services (33.0), than for those who had not (22.4), and lowest among those who said they did not require treatment, support, or advice (17.4) (Figure 6.1). We cannot determine, based on this cross-sectional data, whether this indicates that people encounter an increase of stigmatisation upon accessing services, or whether higher levels of stigmatisation prompt people to seek support, but we consider both possibilities and their implications in the discussion section.

Mean experienced stigma (GESS) score rose with increased level of problems experienced from gambling (PGSI score) among all groups of participants: those who had used treatment and support services, those who had not used any, and those who said they did not need to use services. The lowest mean experienced stigma (GESS) score (16.0) was reported by those who experience some problems from gambling (PGSI scores of 1-2) who said they did not need to cut down their gambling and the highest GESS score (36.6) was reported by those who had used services and had experienced a high level of problems from gambling (PGSI score of 8+). The most pronounced increase in experienced stigma (GESS) score with each PGSI level was reported by those who did not access treatment (mean GESS score of 18.2 in those experiencing some problems from gambling (PGSI scores of 1-2) rising to 33.5 in those experiencing a high level of problems from gambling (PGSI scores of 8+)).

Figure 6.1: Experienced stigma by past year use of treatment, support or advice services and by level of problems experienced from gambling (PGSI)



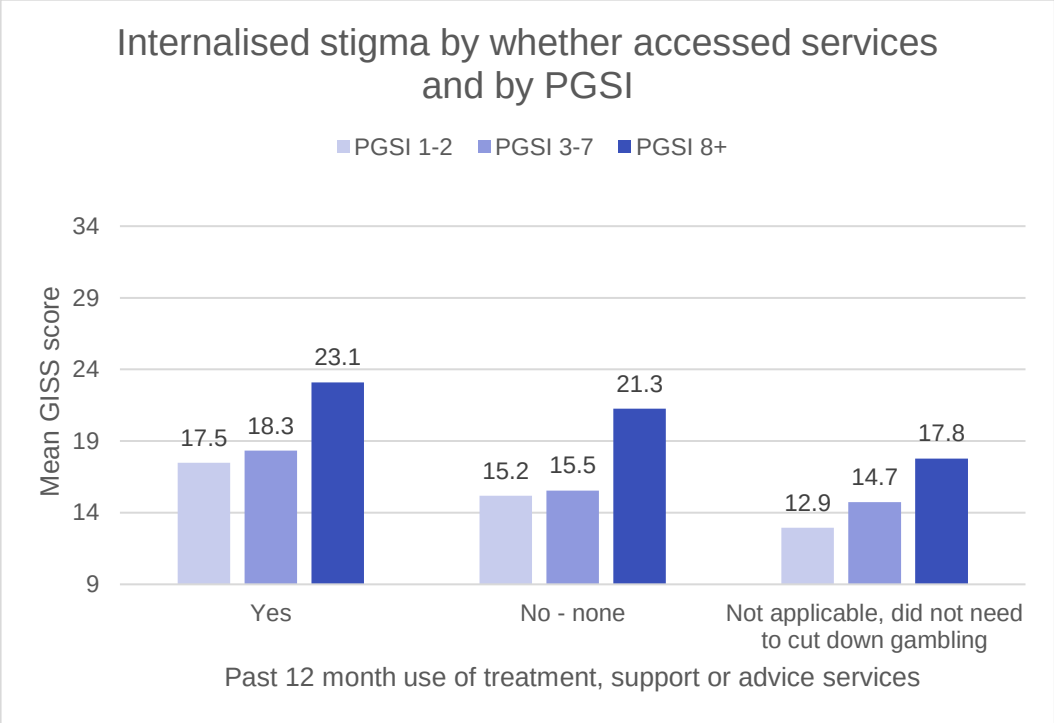
Source: PGSI 1+ dataset. Base: n=796. Range of possible GISS score is 9-36.

Access to services and internalised stigma

There was a statistically significant association between mean reported internalised stigma (GISS) score and whether participants who had experienced problems from gambling (PGSI score of 1+) had accessed services, after taking PGSI level into account. Internalised stigma (GISS) score was highest among those who had accessed services at 21.1 and lowest among those who said they did not need treatment, support or advice at 13.4.

Mean reported internalised stigma (GISS) score rose with increased levels of problems experienced from gambling (PGSI score) in a similar pattern among all participant groups: those who had used treatment and support services, those who had not used any, and those who said they did not need to use services and there were no statistically significant differences (Figure 6.2).

Figure 6.2: Internalised stigma by past year use of services and by level of problems experienced from gambling (PGSI)



Source: PGSI 1+ dataset. Base: n=796. Range of possible GISS score is 9-36.

Access to services and perceived stigma

The mean perceived stigma (GPSS) score was similar among those who had accessed services (37.0), those who had not (35.2) and those who said they did not require treatment, support, or advice (34.5). No significant association was found between perceived stigma (GPSS) and whether people had accessed services after taking level of problems experienced from gambling (PGSI) into account. Mean reported perceived stigma (GPSS) score rose with increased levels of problems experienced from gambling (PGSI scores) in a similar pattern among all groups of participants: those who had used treatment and support services, those who had not used any, and those who said they did not need to use services.

Barriers to seeking support

A question on barriers to seeking support was asked of participants who had and had not accessed services in the last 12 months (n=473), using the wording 'Have any of the following **stopped** you from seeking support, advice or treatment to cut down your gambling in the last 12 months?' Participants could select all that applied. Participants who had already said they had not needed to cut down their gambling were not asked the question about barriers.

Figure 6.3 shows the reasons given by participants for not seeking support from services by level of problems experienced from gambling (PGSI score). Overall, among all participants who experience problems from gambling (PGSI score of 1+), the main reason for not seeking support from services, given by 45% of participants, was 'I did not think my gambling was a problem / did not feel the need for support, advice or treatment'. The next most common reason was 'I feel too ashamed or embarrassed to talk about my gambling with anyone' (19%), followed by 'I did not think treatment or support would be helpful / effective' (10%).

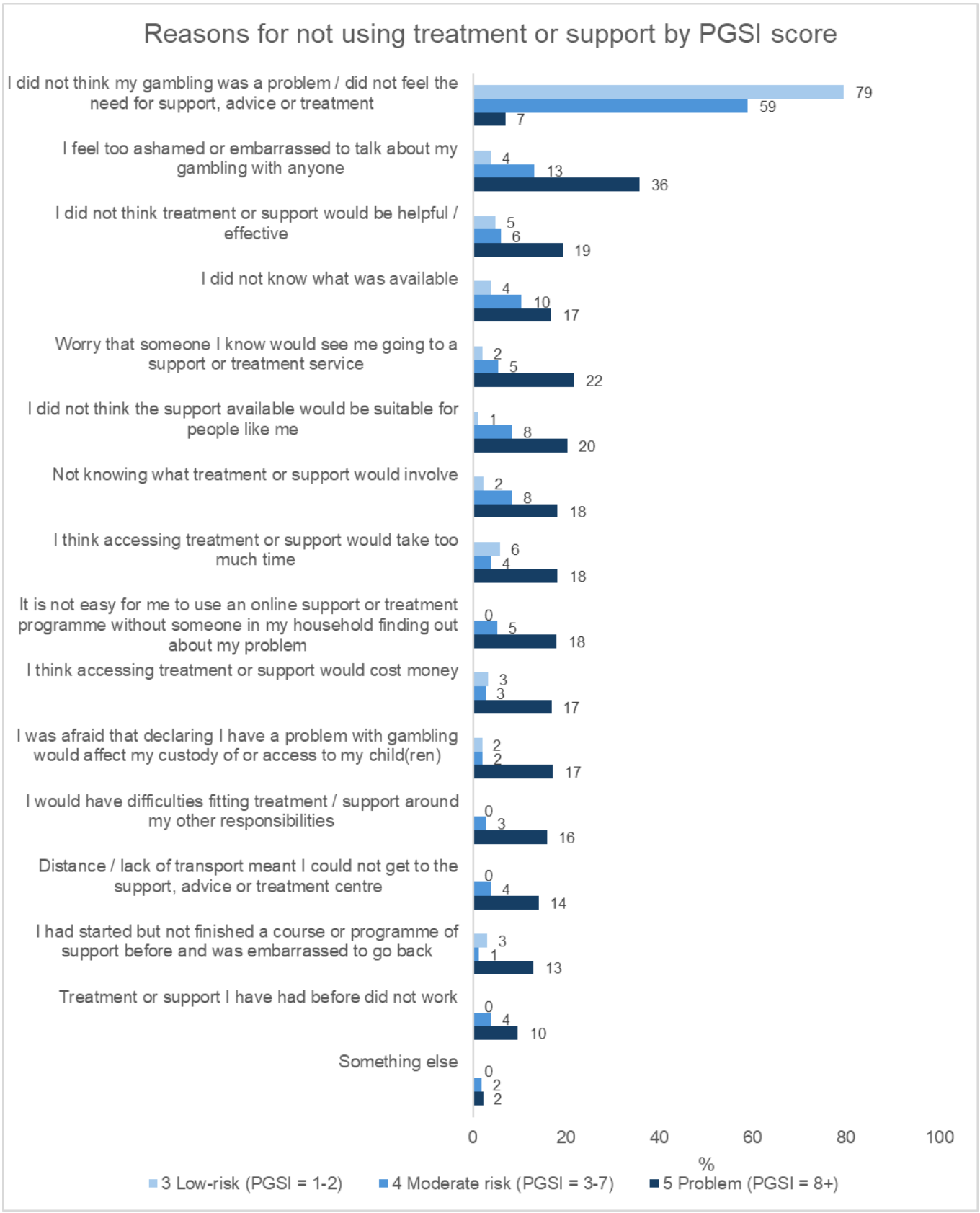
Among people experiencing the highest level of problems with gambling (PGSI score of 8+), the most common reason for not seeking support was feeling 'too ashamed or embarrassed to talk about my gambling with anyone' (36%) (compared with 13% of participants who experience several problems from gambling (PGSI scores of 3-7), and 4% of participants who experience some problems from gambling (PGSI scores of 1-2)). The second most common reason for not seeking support in this group, at 22%, was 'worry that someone I know would see me going to a support or treatment service' (compared with 5% of those who experience several problems from gambling (PGSI score of 3-7), and 2% of those who experience some problems from gambling (PGSI score of 1-2)). Among those experiencing a high level of problems from gambling (PGSI score of 8+), 'I did not think the support available would be suitable for people like me', was the next most common response, at 20%. This was higher than those experiencing several or some problems from gambling (PGSI scores of 3-7 and 1-2; 8% and 1%, respectively). Statistical significance testing was not carried out on these comparisons due to low base sizes (n<5). Percentages are presented as an illustration but we cannot comment on statistical significance.

Among participants who experience several problems from gambling (PGSI score of 3-7), the most common reasons for not seeking support were 'I did not think my gambling was a problem / did not feel the need for support, advice or treatment' (59%), 'I feel too ashamed or embarrassed to talk about my gambling with anyone' (13%), and 'I did not know what was available' (10%).

Among participants who experience some problems from gambling (PGSI score of 1-2), the most common reasons for not seeking support were 'I did not think my gambling was a problem / did not feel the need for support, advice or treatment' (78%), 'I think accessing treatment or support would take too much time' (6%), and 'I did not think treatment or support would be helpful / effective' (5%).

Although 'I did not think my gambling was a problem / did not feel the need for support, advice or treatment' was the most common reason for not seeking support for participants who experienced some or several problems from gambling (PGSI scores of 1-2 and 3-7; 78% and 59%, respectively), this was the second least common response for those experiencing a high level of problems from gambling (PGSI score of 8+) (7%).

Figure 6.3: Reasons for not using treatment or support by level of problems experienced from gambling (PGSI)



6.2 Health and wellbeing and gambling-related experienced stigma

The analyses in this section are drawn from the GB general population dataset, to allow for comparison between those who experience problems from gambling (PGSI scores of 1+) and those who gamble with no reported problems (PGSI score of 0). The focus in this section (6.2) is on experienced stigma (GESS) across various health, health behaviours, and wellbeing measures, taking level of problems experienced from gambling (PGSI score) into account. Because the experienced stigma scale (GESS) was only completed by those who had gambled in the past 12 months, the analysis relates only to those who had gambled.

Main dataset

GB adults aged 18+ including people who gambled and people who did not gamble.

Base: People who had gambled in the past 12 months.

Experienced stigma and health problem or disability lasting 12 months or more

The question about health and disability asked participants 'Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?' with possible responses: 'Yes, limited a lot', 'Yes, limited a little', and 'No'.

Across all participants, the mean experienced stigma (GESS) score was similar among the three groups (17.3 among those whose activities were limited a lot, 16.6 among those whose activities were limited a little, and 16.1 among those who did not report any limiting health problem or disability), with no significant differences (p=0.646), taking level of problems experienced from gambling (PGSI score) into account.

The mean experienced stigma (GESS) score rose similarly across all three groups of self-reported health problem or disability as level of problems experienced from gambling (PGSI score) increased and there was no significant difference in the pattern of variation by PGSI between those with or without self-reported limiting health problems or disabilities (p=0.744).

Experienced stigma and diagnosed mental health or emotional disability

'Mood disorders or schizophrenia' were given as examples of condition types covered by the question about whether participants had a diagnosis of a 'mental health or emotional disability'.

Across all participants, the mean experienced stigma (GESS) score was similar among both those who did and did not have a diagnosis of a mental health or emotional disability (17.5 and 16.2 respectively), taking level of problems experienced from gambling (PGSI score) into account (p=0.355). The pattern of increase in experienced stigma with higher level of problems from gambling was also similar between the diagnosed and undiagnosed groups (p=0.680).

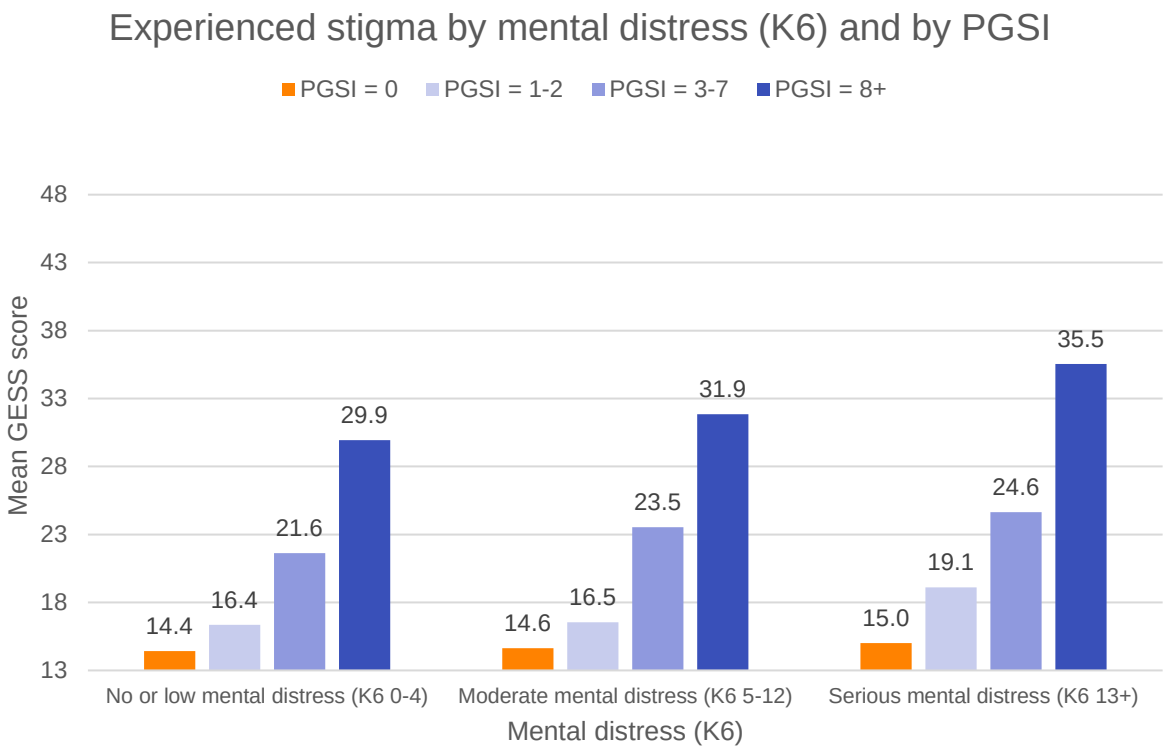
Experienced stigma and mental distress (Kessler 6 scale)

As outlined in the methodology (see Appendix B), we applied three groupings for the Kessler 6-item scale (K6) which measures the level of mental distress: 'No or low mental distress'; 'Moderate mental distress'; and 'Serious mental distress'.

Across all participants, the reported mean experienced stigma (GESS) score, taking level of problems experienced from gambling (PGSI) into account was significantly associated with mental distress (p=0.001). The mean GESS score was higher at 20.1 among those with higher levels of reported mental distress, compared with a mean GESS score of 16.6 among those with moderate mental distress, and 15.0 among those with no or low mental distress (Figure 6.3).

Mean experienced stigma (GESS) scores increased similarly among those in all groups by level of mental distress as the level of problems experiences from gambling (PGSI scores) rose (p=0.136).

Figure 6.4: Experienced stigma by mental distress (K6) and by level of problems experienced from gambling (PGSI)



Experienced stigma by average weekly alcohol consumption in units

Among all participants, mean experienced stigma (GESS) score was similar among those with different levels of average weekly alcohol consumption: 16.2 among those who drank no alcohol, 16.5 among those who drank 1-15 units on average, and 16.1 among those who drank an average of 16 units or more weekly. There was a marginal statistically significant difference in experienced stigma (GESS score) by alcohol consumption, taking level of problems experienced from gambling (PGSI) into account (p=0.052).

As level of problems experienced from gambling (PGSI scores) rose, the mean experienced stigma (GESS) score rose similarly across those with different levels of average weekly alcohol consumption. There was a marginal statistically significant differences in the pattern of variation in GESS across alcohol consumption and PGSI scores (p=0.055). These findings should be approached cautiously due to small cell counts (<30) for some of the subgroups.

Experienced stigma by past year drug use

Participants were asked 'How often in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?'. Possible responses were: 'Never', Yes, but not in the past year', 'Yes, once or twice in the past year', or 'Yes, many times in the past year'. Because of small sample sizes, the two categories which mentioned using drugs in the past year were combined, giving three categories overall.

Across participants who answered the question, mean experienced stigma (GESS) score was similar among those who had never used drugs (15.8), those who had used drugs but not in the past year (18.2), and those

who had used drugs, either once or twice in the past year or many times in the past year (18.9). There was no significant association between drug use and experienced stigma, taking level of problems experienced from gambling (PGSI) into account.

The mean experienced stigma (GESS) score increased similarly among all participants with all levels of drug use as level of problems experienced from gambling (PGSI scores) rose, and there was no significant difference in the pattern of variation in GESS score across levels of drug use and PGSI.

7. Discussion and conclusion

7.1 Discussion of findings

Through self-reports of experienced, perceived, and internalised stigma, and ratings of desired social distance from a hypothetical individual experiencing gambling harms, by those with and without lived experience of gambling harms, we explored how, and to what extent, people experiencing gambling related harms within Great Britain experience stigmatisation and discrimination. Below, we summarise findings across the seven main research questions. We then discuss limitations of the research and propose areas for further investigation.

RQ1: The extent to which people who experience gambling harms encounter stigmatisation and discrimination

This study replicated previous findings of a significant relationship between level of problems experienced from gambling harms, measured via PGSI scores, and various manifestations of gambling-related stigma,[53] demonstrating that higher PGSI scores are associated with higher levels of perceived, experienced, and internalised stigma. This was most pronounced among those experiencing a high level of problems from gambling (PGSI score of 8+), whose stigma scale scores indicate that they had typically experienced several examples of being and feeling stigmatised.

A similar pattern was seen in scores on a measure of discrimination (InDI-D), with scores for those experiencing a high level of problems from gambling (PGSI score of 8+) being significantly higher than those who experience several, some, or no problems from gambling (PGSI score of 0-7), indicating that they experienced greater discrimination. Researchers vary in whether/how they differentiate between discrimination and stigmatisation. Measures of stigmatisation are often conceptualised as capturing experiences of both stigmatisation and discrimination, with relatively little differentiation between the constructs.[54] As such, our findings about experiences of perceived, experienced and internalised stigma can also be thought of as broadly indicative of both stigmatisation and discrimination. However, some reserve the term 'discrimination' to refer to illegal acts, such as evicting someone due to a stigmatised condition, and conceptualise behaviours such as social exclusion or verbal abuse as stigmatisation.[55] The measure of discrimination we used was more in keeping with the former approach and covers experiences such as people being called names or treated as though they are less smart/capable than others. While this means we are unable to draw conclusions about experiences of discrimination that meet the legal definition, it is likely that numbers of participants reporting concrete instances of such discrimination meeting this criterion would have been small, due to people being reluctant to disclose gambling harms to those in a position to discriminate against them, such as housing service providers, in the first place.[56] Furthermore, some forms of discrimination (such as harsher legal treatment, which one study reported as a risk for people who were convicted of gambling-related offences)[57] may be difficult for an individual to recognise and self-report without a benchmark against which to compare their treatment. The measure we used

[53] Andrà, C., Priolo, G., Merlin, F., & Chiavarino, C. (2022). Differences in Perceived and Experienced Stigma Between Problematic Gamblers and Non-gamblers in a General Population Survey. *Journal of Gambling Studies*, 38(2), 333–351. https://doi.org/10.1007/s10899-021-10048-9

[54] Brohan, E., Slade, M., Clement, S., & Thornicroft, G. (2010). Experiences of mental illness stigma, prejudice and discrimination: A review of measures. *BMC Health Services Research*, 10(1), 80–80. https://doi.org/10.1186/1472-6963-10-80

[55] Pliakas, T., Stangl, A., & Siapka, M. (2022). *Building Knowledge of Stigma Related to Gambling and Gambling Harms in Great Britain.*

[56] Holdsworth, L., & Tiyce, M. (2012). Exploring the Hidden Nature of Gambling Problems among People Who Are Homeless. *Australian Social Work*, 65(4), 474–489. https://doi.org/10.1080/0312407X.2012.689309

[57] Carroll, A., Rodgers, B., Davidson, T., & Sims, S. (2013). *Stigma and Help-Seeking for Gambling Problems.* ACT Government. Gambling and Racing Commission. Australian National University. https://www.gamblingandracing.act.gov.au/__data/assets/pdf_file/0005/745034/Stigma-and-help-seeking-for-gambling-problems-Report-November-2013.pdf

enabled us to explore the prevalence of the more commonplace, but nonetheless distressing and harmful, experiences of interpersonal stigmatisation and discrimination.

In contrast to those experiencing a high level of problems from gambling (PGSI score of 8+), there was less striking evidence of experiences of stigmatisation and discrimination among those experiencing some or several problems from gambling (PGSI score of 1-7). While experiences of stigmatisation and discrimination were typically higher than those experiencing no harms, indicating less confident disagreement, this group still tended on average to disagree with most of the stigma-related statements. This could be attributable to the fact that those with intermediate levels of harm had often not disclosed gambling harms to anyone (as supported by their responses to questions about treatment/support seeking), which could have moderated their potential exposure to experienced stigma. Findings from the vignette component of the study support this interpretation, as they suggest the general population do tend to hold stigmatising views of someone experiencing gambling harms when the harms are made apparent, being less willing to engage socially with them than with someone who gambles without harm. Again, this is consistent with findings from previous research into desired social distance from people who experience gambling harms.[58]

The vignette data also provided some useful insights into the processes which contribute to stigmatisation and discrimination. Specifically, people were less willing to engage with someone experiencing gambling harms (e.g. to work or socialise with them, or have them marry into their family) if they believed them to be likely to cause harm to themselves or others, if they thought the harms were disruptive or difficult to recover from, and if they thought their difficulties were caused by the individual's bad character. All of these findings are consistent with those of previous research carried out in Australia,[59] indicating that these are also pertinent in the UK context, and can be useful in informing stigma reduction interventions, as they highlight key drivers of stigma. They also suggest that when discussing those experiencing gambling harms, it is important to focus messaging around hope and the possibility of recovery for anyone.

We also found evidence that stigma is experienced by those affected by another person's gambling, with some affected others indicating experiences of 'associated stigma', such as feeling the need to hide the gambling of the person they were close to. While associated stigma (or 'courtesy stigma') has been reported in the wider stigma literature,[60] there is little research into associated stigma in relation to gambling harms,[61] so the finding that a notable proportion of participants in this study do experience this phenomenon to some extent provides an important insight into another group who are affected by gambling-harms related stigma. Associated stigma was particularly elevated among those who also had experience of gambling harms themselves, and slightly lower among those who gambled without experiencing harms, even compared with those who did not gamble. This suggests that a harm-free experience of gambling may be protective against associated stigma. In comparison, those who have experienced gambling harms themselves tend to experience higher levels of associated stigma, potentially compounded by experienced and/or internalised stigma related to their own gambling harms.

[58] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. *Journal of Behavioral Addictions*, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[59] Hing, N., & Russell, A. M. T. (2017). How Anticipated and Experienced Stigma Can Contribute to Self-Stigma: The Case of Problem Gambling. *Frontiers in Psychology*, 08. https://doi.org/10.3389/fpsyg.2017.00235
[60] Maldonado, D. A. C., Ronzani, T. M., & Martins, L. F. (2023). Courtesy stigma and health conditions: Systematic literature review. *Psicologia Em Estudo*, 28. https://doi.org/10.4025/psicolestud.v28i0.52111
[61] Sanscartier, M., Edgerton, J., Chadee, D., & Roberts, L. (2019). Tarred with the same brush: An initial inquiry into courtesy stigma and problem gambling. *Journal of Health and Social Sciences*, *4*(1), 101–123.

RQ2: Experiences and perceptions of stigmatisation by those with and without lived experience of gambling and gambling harms

In terms of people's perceptions of general societal views about those who experience gambling harms, perceived stigma scores for the sample as a whole implied that people tended to agree with at least some of the statements, indicating that most people perceived at least some degree of societal stigma in the general population. This was also reflected in the vignette segment findings, where people were less willing to socialise with someone experiencing gambling harms than with someone gambling without harms, particularly when they had no lived experience of harms themselves and/or a low level of prior contact with someone who has experienced harms. These findings demonstrate more needs to be done to tackle public stigma around gambling harms – and that stigma reduction interventions should particularly seek to educate those who have had little to no prior contact with anyone who has experienced gambling harms. On a positive note, the desire for social distance reported, on average, by participants in the current study was markedly lower than that seen in an Australian sample[62] – using virtually identical measures – under a decade ago. For example, approximately 70% of our sample said they would be willing to make friends with someone experiencing gambling harms, compared with just 36% of participants in the study by Hing and colleagues (cited above). This could be, in part, a cultural difference, but could also reflect a reduction in stigma over the past 8 years.

Perceived stigmatisation of gambling harms varied based on gambling experience, being lowest among people who gamble without harms (PGSI score of 0), similar among those who do not gamble and who gamble with low to moderate harms (PGSI score of 1-7), and highest for those experiencing a high level of problems from gambling (PGSI scores of 8+). In other words, in addition to reporting higher levels of experienced and internalised stigma, those with a higher level of problems experienced from gambling also perceived general societal attitudes towards people experiencing gambling harms to be more stigmatising.

Interestingly, however, the vignette reactions demonstrated that people with lived experience of gambling harms were least likely to stigmatise others experiencing gambling harms – indicated by lower desired social distance scores. More accepting attitudes among peers with lived experiences of harms may be one of the reasons why people value peer support during recovery from gambling harms.[63] This contrast between high levels of self-stigma and supportive/accepting attitudes towards peers experiencing harms replicates findings from our analysis of online forum posts, which is discussed further in the synthesis report.

We also found that people with higher ratings on a measure of prior level of contact with someone experiencing gambling harms had lower desire for social distance. This is consistent with previous research that found an inverse correlation between level of contact and desire for social distance,[64] and supports the idea that encouraging familiarity, via contact interventions, may help to reduce stigmatisation; though see Quigley for a discussion of differential success of such approaches.[65] Further investigation into the potential of different kinds of contact interventions for reducing stigmatisation and discrimination would, therefore, be valuable.

[62] Hing, N., Russell, A. M., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. *Journal of Behavioral Addictions, 5(3),* 448-456.
[63] Nilsson, A., Simonsson, O., & Hellner, C. (2023). Reasons for dropping out of internet-based problem gambling treatment, and the process of recovery – a qualitative assessment. *Current Psychology*, 42(13), 10987–10998. https://doi.org/10.1007/s12144-021-02368-1
[64] Dhillon, J., Horch, J. D., & Hodgins, D. C. (2011). Cultural Influences on Stigmatization of Problem Gambling: East Asian and Caucasian Canadians. *Journal of Gambling Studies*, 27(4), 633–647. https://doi.org/10.1007/s10899-010-9233-x
[65] Quigley, L. (2022). Gambling Disorder and Stigma: Opportunities for Treatment and Prevention. *Current Addiction Reports*, 9(4), 410–419. https://doi.org/10.1007/s40429-022-00437-4

RQ3: Relationships between different types of stigmatisation of gambling harms

Consistent with prior research,[66] we found that experienced and perceived stigma were significantly correlated, as were experienced and internalised stigma; and internalised and perceived stigma. Notably, this effect persisted when controlling for level of problems experienced from gambling (PGSI score), i.e. is not simply an artefact of the fact that all of these things are associated with higher levels of problems experienced from gambling. The strongest of these relationships was between experienced and internalised stigma, which could suggest that people's direct experience of feeling/being stigmatised by others has a more dramatic effect on their feelings of internalised stigma than their perception about public attitudes in general. While we cannot conclusively determine causality due to the cross-sectional nature of the study, theoretical models and preliminary evidence from wider literature on stigma processes suggest that internalised stigma, resulting from experienced/perceived stigma, is an important mediator of negative psychosocial outcomes.[67] It is also worth noting, however, that some of the items in the externalised stigma scale (the GESS) overlap with those used to measure internalised stigma (e.g. 'I don't think I can be trusted because I gamble'), which could contribute to the strength of the correlation.

RQ4: Stigmatisation of people across demographic groups, and with additional potentially stigmatised characteristics

Self-reported experienced stigma reduced with age, i.e. younger people experienced the greatest stigma, and a similar pattern was seen across all levels of experienced harm from gambling (PGSI level), suggesting this is not simply an artefact of lower levels of experienced harm from gambling (lower PGSI scores) at older ages. Perceived and internalised stigma scores did not differ significantly across age groups, however. This was somewhat surprising, given that previous research has found a positive correlation between age and self-stigma related to gambling harms,[68] highlighting a need for further research to establish whether the inverse relationship between age and experienced stigma that we identified is a robust effect, and if so, what may be driving it. In the meantime, those working with young people who gamble should be alert to the likelihood of experienced stigma being relatively high within this group.

While there was no difference in participants' desired social distance from a male compared with a female vignette character experiencing gambling harms, and no pronounced gender difference in participants' reports of their own experienced, perceived or internalised stigma overall, females who gambled did show a more pronounced rise in experienced and perceived stigma within increasingly high levels of problems experienced from gambling (higher levels of PGSI category). This suggests women experiencing particularly high levels of gambling harm may be disproportionately affected by experienced and perceived stigma. Drawing on prior research identifying greater self-stigma among females,[69, 70] and recommendations to prioritise interventions for

[66] Andrà, C., Priolo, G., Merlin, F., & Chiavarino, C. (2022). Differences in Perceived and Experienced Stigma Between Problematic Gamblers and Non-gamblers in a General Population Survey. *Journal of Gambling Studies*, 38(2), 333–351. https://doi.org/10.1007/s10899-021-10048-9

[67] Bidstrup, H., Brennan, L., Kaufmann, L., & de la Piedad Garcia, X. (2022). Internalised weight stigma as a mediator of the relationship between experienced/perceived weight stigma and biopsychosocial outcomes: A systematic review. *International Journal of Obesity*, 46(1), 1–9. https://doi.org/10.1038/s41366-021-00982-4

[68] Hing, N., & Russell, A. M. T. (2017). How Anticipated and Experienced Stigma Can Contribute to Self-Stigma: The Case of Problem Gambling. *Frontiers in Psychology*, 08. https://doi.org/10.3389/fpsyg.2017.00235

[69] Hing, N., Russell, A., Nuske, E., & Gainsbury, S. (2015). *The stigma of problem gambling: Causes, characteristics and consequences*. Research report. Victorian Responsible Gambling Foundation. https://responsiblegambling.vic.gov.au/resources/publications/the-stigma-of-problem-gambling-causes-characteristics-and-consequences-351/

[70] Hing, N., & Russell, A. M. T. (2017). How Anticipated and Experienced Stigma Can Contribute to Self-Stigma: The Case of Problem Gambling. *Frontiers in Psychology*, 08. https://doi.org/10.3389/fpsyg.2017.00235

those who are more prone to internalise stigma,[71] females experiencing multiple harms from gambling may be another vulnerable demographic group to consider in stigma reduction interventions.

In terms of relationship status, single people (including those who were separated, divorced or widowed) reported the highest levels of experienced stigma on average, while those who were in a cohabiting relationship reported the lowest – perhaps reflecting a protective effect of having a partner. Interestingly, participants who lived with two or more other people had higher levels of experienced stigma than those living alone or with one other person. This could be because those living in households with several other people are more likely to be carers/parents – which aligns with our finding that experienced stigma was significantly greater for those who had one or more children in the household. This could increase stigma due to the potential for those with caring responsibilities to be more stigmatised when they experience gambling harms.[72] Recent qualitative research shed light on some of the challenges encountered by mothers experiencing gambling harms, in particular, who described feelings of shame, anxiety and stigma related to gambling's impact on their family and their perceived ability to fulfil their role as a mother.[73]

Experienced stigma was higher in minority ethnicity groups than in white British non-minority participants, and higher in people who identified as following a religion than those who were not religious. This is consistent with Moss et al.'s recent report on gambling in minority communities in Great Britain,[74] and highlights the importance of recognising and addressing the intersectional stigma experienced by individuals within these communities. Interestingly, the vignette component of the survey did not indicate a higher reported desire for social distance from an individual experiencing gambling harm when they were described as being from a minority ethnicity, compared with someone experiencing gambling harm where ethnicity was not referenced. However, it is possible that socially desirable responding may have obscured the presence of intersectional stigma here, whereby people were reluctant to disclose stigmatising attitudes towards individuals from minority demographic groups. In order to explore whether this is the case, future research could benefit from including implicit attitudinal measures (which can be beneficial where impression management may be preventing people from expressing their beliefs transparently).[75]

No significant differences in experienced or perceived stigma scores were found across three broad gross annual household income categories (up to £34,999; between £35,000-£69,999, over £70,0000). The vignette component of the survey found that someone described as experiencing gambling harms along with being from a 'low-income household' was not stigmatised significantly more than someone whose income was not mentioned. Further research to explore this in more depth by using a more sophisticated measure of socio-economic status or poverty would, nevertheless, be valuable. Compound challenges for those who experience gambling harms alongside poverty have been identified in the literature. For example, findings from a scoping review of gambling harms in the context of poverty indicated that gambling problems were associated with several poverty measures including employment/unemployment, housing instability, homelessness, low income,

[71] Quigley, L. (2022). Gambling Disorder and Stigma: Opportunities for Treatment and Prevention. *Current Addiction Reports*, 9(4), 410–419. https://doi.org/10.1007/s40429-022-00437-4
[72] Estévez, A., Macía, L., Ontalvilla, A., & Aurrekoetxea, M. (2023). Exploring the psychosocial characteristics of women with gambling disorder through a qualitative study. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1294149
[73] IFF Research (2023) Building Knowledge of Women's Lived Experience of Gambling and Gambling Harms Across Great Britain. GambleAware.
[74] Moss, N. J., Wheeler, J., Sarkany, A., Selvamanickam, K., & Kapadia, D. (2023). *Minority Communities & Gambling Harms: Qualitative and Synthesis Report. Lived, Experience, Racism, Discrimination & Stigma*. Ipsos UK. https://www.gambleaware.org/sites/default/files/2024-01/Minority%20communities%20%26%20gambling%20harm%2C%20qualitative%20and%20synthesis%20analysis.pdf
[75] Anderson, J. R. (2019). The moderating role of socially desirable responding in implicit–explicit attitudes toward asylum seekers. *International Journal of Psychology*, *54*(1), 1–7. https://doi.org/10.1002/ijop.12439

and neighbourhood disadvantage.[76] Those experiencing homelessness, have also been identified as being at risk of stigmatisation and discrimination.[77]

Self-reported experienced stigma scores did not differ significantly across those who reported different levels of alcohol consumption, or those who had and had not used drugs in the past year. This contrasts with findings from the vignette component of the survey, which highlighted people with long term use of drugs and alcohol alongside gambling harms were significantly more stigmatised than those who experienced gambling harms without this comorbidity. This could be attributable to the fact that the vignette mentions both drug and alcohol use in parallel, but could also be partly explained by the fact that the cutoff for 'high' alcohol consumption in the main survey was 16+ units per week; a figure based on government recommendations, but which would not necessarily be perceived as high/problematic by the general population, given lack of public endorsement of these guidelines.[78] The vignette, by contrast, described a person 'consuming large amounts of alcohol for the past 8 years', which is, arguably, more indicative of someone experiencing difficulties/harms related to alcohol use.

Experienced stigma did not differ significantly across participants with disabilities than those without, nor across those with and without mental health conditions, though small base sizes meant statistical power to detect such differences was limited. The vignette component of the study also found no evidence of elevated stigmatisation of someone experiencing gambling harms alongside mood related mental health difficulties, when compared with a similar individual experiencing gambling harms without mental health difficulties. There were no differences in experienced stigma between UK/non-UK nationals, nor between participants identifying as heterosexual and as LGB, and in the vignette component of the study there was also no significant difference in desire for social distance between someone experiencing harms who identified as lesbian, gay or bisexual vs someone whose sexuality was not mentioned. Though again, as mentioned above, there is a possibility of socially desirable responding obscuring some effects in responses to the vignette.

In summary, findings suggest that groups at particular risk of stigma include younger people, women at high levels of harm, minority ethnic groups, people who follow a religion, those who are single, those who live in a household with more than one other person, and those who are perceived as having chronic difficulties with use of alcohol and drugs.

The number of people within the sample who reported being an affected other was too small to allow statistical comparisons between different demographic groups and identify those at particular risk of harms from someone else's gambling, but further research to explore this with a larger sample of affected others would be valuable in order to glean similar insights into at-risk groups within this population.

RQ5: Stigmatisation of people who engage with different kinds of gambling activities

In terms of relationships between gambling activity type and stigma, we found that overall, face to face gambling was associated with higher experienced stigma than online gambling – likely because this is a more visible means of gambling. In particular, the highest experienced stigma was reported by those who had used gaming machines in bookmakers. This could be related to the higher prevalence of gambling harms among those who

[76] Hahmann, T., Hamilton-Wright, S., Ziegler, C., & Matheson, F. I. (2021). Problem gambling within the context of poverty: A scoping review. *International Gambling Studies, 21*(2), 183-219. https://doi.org/10.1080/14459795.2020.1819365

[77] Holdsworth, L., & Tiyce, M. (2012). Exploring the Hidden Nature of Gambling Problems among People Who Are Homeless. *Australian Social Work*, 65(4), 474–489. .https://doi.org/10.1080/0312407X.2012.689309

[78] Stautz, K., Bignardi, G., Hollands, G. J., & Marteau, T. M. (2017). Reactions on Twitter to updated alcohol guidelines in the UK: a content analysis. *BMJ Open*, *7*(2), e015493–e015493. https://doi.org/10.1136/bmjopen-2016-015493

participate in this form of gambling,[79] perhaps also exacerbated by media coverage of these machines, which have on multiple occasions been badged 'the crack cocaine of gambling' (BBC News, 2013).[80] Betting on football in-person and playing fruit/slot machines were also associated with relatively high levels of experienced stigma, again possibly due to the visibility of these activities, and/or media coverage, with recent media publicity critiquing gambling sponsorship of football teams (e.g. The Guardian, 2023).[81] The least stigmatised activity appeared to be the National Lottery, with those who only played the lottery reporting lowest levels of experienced stigma; again likely to be due partly to relatively low levels of gambling harms among this group,[82] but also potentially driven by the fact that this tends to be a socially accepted form of gambling.

RQ6: Stigma and treatment/support seeking

While stigma has been consistently identified as a key barrier to treatment seeking,[83, 84, 85, 86] overall, experienced and internalised stigma scores within our sample were higher among those who had accessed services than among those who had not accessed them (even when omitting those who said they did not access services because they did not need them from the comparison). This could indicate that people encountered increased experienced and internalised stigma during the process of disclosure and support seeking, or that at high levels, stigma can act as a catalyst prompting people to seek treatment. In order to mitigate potential exposure to further stigmatisation during support seeking and disclosure, it is important that approaches to service provision incorporate strategies to minimise stigmatisation and that service providers provide or signpost clients to support to help with the distress that stigma can cause. This may be of particular salience for those supporting individuals who may be experiencing, or who may have historically experienced, intersectional stigma (contributed to by reasons beyond gambling) and/or systemic stigma, such as those from minority ethnic or religious backgrounds.[87]

While it is possible that stigma acts as a catalyst for some to seek help, it is important not to interpret this as a hidden 'benefit' of stigma. The tendency for people experiencing gambling harms to only seek support once harms have become severe is problematic.[88, 89] Rather than rely on people reaching a crisis point in terms of level of harms and/or stigma being experienced, it is important to encourage people who could benefit from support to feel comfortable to seek it, without fear of shame or judgement, at lower, as well as higher, levels of harm. It has been highlighted that due to the greater prevalence of low to moderate harms in the population, a

[79] Ronzitti, S., Soldini, E., Lutri, V., Smith, N., Clerici, M., & Bowden-Jones, H. (2016). Types of gambling and levels of harm: A UK study to assess severity of presentation in a treatment-seeking population. *Journal of Behavioral Addictions*, *5*(3), 439–447. https://doi.org/10.1556/2006.5.2016.068

[80] BBC News (2013). *High stakes casino games are 'crack cocaine of gambling'*. 30 September 2013. https://www.bbc.co.uk/news/av/uk-england-24231926

[81] The Guardian (2023). *Premier League clubs ban gambling sponsors on front of shirts from 2026-27*. https://www.theguardian.com/football/2023/apr/13/premier-league-clubs-ban-gambling-sponsors-on-front-of-shirts-from-2026-27

[82] Costes, J.-M., Kairouz, S., Monson, E., & Eroukmanoff, V. (2018). Where Lies the Harm in Lottery Gambling? A Portrait of Gambling Practices and Associated Problems. *Journal of Gambling Studies*, *34*(4), 1293–1311. https://doi.org/10.1007/s10899-018-9761-3

[83] Evans, L., & Delfabbro, P. H. (2005). Motivators for change and barriers to help-seeking in Australian problem gamblers. *Journal of Gambling Studies*, *21*(2), 133–155. https://doi.org/10.1007/s10899-005-3029-4

[84] Gainsbury, S., Hing, N., & Suhonen, N. (2014). Professional Help-Seeking for Gambling Problems: Awareness, Barriers and Motivators for Treatment. *Journal of Gambling Studies*, *30*(2), 503–519. https://doi.org/10.1007/s10899-013-9373-x

[85] Leslie, R. D., & McGrath, D. S. (2024). Stigma-related predictors of help-seeking for problem gambling. *Addiction Research & Theory*, *32*(1), 38–45. https://doi.org/10.1080/16066359.2023.2211347

[86] Suurvali, H., Cordingley, J., Hodgins, D. C., & Cunningham, J. (2009). Barriers to Seeking Help for Gambling Problems: A Review of the Empirical Literature. *Journal of Gambling Studies*, *25*(3), 407–424. https://doi.org/10.1007/s10899-009-9129-9

[87] Moss, N. J., Wheeler, J., Sarkany, A., Selvamanickam, K., & Kapadia, D. (2023). *Minority Communities & Gambling Harms: Qualitative and Synthesis Report. Lived, Experience, Racism, Discrimination & Stigma*. Ipsos UK. https://www.gambleaware.org/sites/default/files/2024-01/Minority%20communities%20%26%20gambling%20harm%2C%20qualitative%20and%20synthesis%20analysis.pdf

[88] Bijker, R., Booth, N., Merkouris, S. S., Dowling, N. A., & Rodda, S. N. (2022). Global prevalence of help-seeking for problem gambling: A systematic review and meta-analysis. *Addiction*, *117*(12), 2972–2985. https://doi.org/10.1111/add.15952

[89] Evans, L., & Delfabbro, P. H. (2005). Motivators for change and barriers to help-seeking in australian problem gamblers. *Journal of Gambling Studies*, *21*(2), 133–155. https://doi.org/10.1007/s10899-005-3029-4

considerable aggregate burden of harms occurs within these groups (i.e, prevention paradox),[90] in addition to the fact that those experiencing 'moderate risk' of gambling problems (PGSI score of 3-7) are at increased risk of progressing to experiencing greater harm over time.[91, 92] Furthermore, there was also a high level of experienced stigma reported by those experiencing higher levels of problems from gambling (PGSI scores of 8+) who had not sought treatment, suggesting that there is a subset of people who are experiencing both high levels of harm and high levels of stigma, who are not seeking support – so while stigma may eventually contribute to treatment seeking for some, it remains a barrier for others.

The role of stigma as a barrier to support seeking is reiterated by the fact that almost one-fifth of people who gambled (and over one-third of those experiencing a high level of problems from gambling (PGSI score of 8+)) cited feelings of shame or embarrassment as the reason for not seeking treatment/support, and almost one-quarter of people who experience a high level of problems from gambling (PGSI score of 8+) cited worry about being seen going to a treatment/support service as a barrier.

While barriers related to stigma (i.e. feelings of shame/embarrassment and concerns about being seen) were mentioned somewhat less often by those experiencing several problems from gambling (PGSI scores of 3-7), and even less by those experiencing some problems from gambling (PGSI scores of 1-2), it is also possible that stigmatising beliefs and/or stigma distancing play a role in reluctance to seek treatment for people within these categories. Common reasons for not seeking treatment in these groups were not feeling they needed help, and not thinking treatment would be helpful/effective. While we did not directly evaluate this, and further study is required to substantiate this possibility, it is conceivable that participants with a lower level of problems experienced from gambling (lower PGSI score) were sceptical about the helpfulness of treatment because they did not consider themselves to be similar to others who experience gambling harms, and felt treatment was targeted towards people with stereotypical characteristics of someone experiencing gambling harms. Challenging discourses around gambling harms – the importance of which has been emphasised in recent literature[93] – may, therefore, be a key step in encouraging people to recognise and seek support with gambling harms at all levels of severity.

RQ7: Relationship between stigma and mental health

We found experienced stigma to be significantly associated with psychological distress, i.e. higher experienced stigma scores were seen at higher levels of mental distress. This was a predicted finding, being consistent with the extant literature demonstrating an inverse relationship between stigma and wellbeing, both within the gambling harms literature,[94] and the wider literature, where stigma has been linked with poorer quality of life.[95] This finding, though not surprising, reiterates the importance of interventions to tackle stigmatisation of gambling harms, not only because it is a barrier to treatment seeking, as discussed above, but also because stigma is a significant harm in and of itself.

[90] Browne, M., & Rockloff, M. J. (2018). Prevalence of gambling-related harm provides evidence for the prevention paradox. *Journal of Behavioral Addictions*, *7*(2), 410–422. https://doi.org/10.1556/2006.7.2018.41

[91] Currie, S. R., Hodgins, D. C., Williams, R. J., & Fiest, K. (2021). Predicting future harm from gambling over a five-year period in a general population sample: A survival analysis. *BMC Psychiatry*, *21*(1), 15–15. https://doi.org/10.1186/s12888-020-03016-x

[92] Luce, C., Nadeau, L., & Kairouz, S. (2016). Pathways and transitions of gamblers over two years. *International Gambling Studies*, *16*(3), 357–372. https://doi.org/10.1080/14459795.2016.1209780

[93] Marko, S., Thomas, S. L., Robinson, K., & Daube, M. (2022). Gamblers' perceptions of responsibility for gambling harm: A critical qualitative inquiry. *BMC Public Health*, *22*(1), 725–725. https://doi.org/10.1186/s12889-022-13109-9

[94] Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2015). Understanding gambling related harm: A proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, *16*(1), 80–80. https://doi.org/10.1186/s12889-016-2747-0

[95] Degnan, A., Berry, K., Humphrey, C., & Bucci, S. (2021). The relationship between stigma and subjective quality of life in psychosis: A systematic review and meta-analysis. *Clinical Psychology Review*, *85*, 102003–102003. https://doi.org/10.1016/j.cpr.2021.102003

7.2 Limitations

This study has a number of strengths, including the large and nationally representative sample, and use of several validated measures of different types of stigma and associated constructs. However, there are also limitations that must be acknowledged. The survey was relatively long in duration, and as with all extensive surveys, it is possible that some participants' attention, energy, or motivation may have waned before the end of the survey, impacting the validity of their responses. In addition, the vignette component of the study is subject to the usual limitations of this design, i.e. questions about feelings towards a hypothetical individual may not comprehensively capture attitudes/behaviours towards 'real' people, and there may be an element of socially desirable responding. This could have obscured the magnitude of apparent stigmatisation in some cases. A further limitation with the vignette analysis was not being able to distinguish between drug and alcohol as the vignette mentioned a situation where the individual was using both alcohol and drugs. There may be different levels of stigma associated with the type of substance use and it would be insightful to explore this further.

Another limitation is that the base sizes for some analyses were small – particularly when exploring effects at the intersection of two groups that were both relatively small in size, e.g. participants of a minority demographic group who experience a high level of problems from gambling (PGSI score of 8+). This sometimes necessitated the consolidation of several categories into one to allow for statistical analysis and preserve anonymity of participants. For example, all minority ethnicity groups were merged into a single category. This limits our ability to draw nuanced conclusions about factors such as ethnicity, and it is important to note that minority groups are heterogeneous and will not necessarily share the same experiences (a limitation shared by the recent study by Moss et al.[96]). Further research exploring experiences of stigmatisation and discrimination in minority groups with larger samples is needed; (a) to explore significant findings (e.g. greater experienced stigma in minority ethnicity groups and in those who follow a religion) in greater depth to better understand the experiences of individual groups within these very broad categories, and (b) to confirm whether non-significant findings (e.g. no difference in stigmatisation of LGBTQ vs heterosexual participants) are replicated when more highly-powered analyses of larger groups are possible.

7.3 Areas for further research

While this study provides useful insights into current levels of stigmatisation of gambling harms within Great Britain, identifying groups who bear a particular burden of stigma, and outlining some of the relationships between different kinds of stigmatisation, there are many areas that merit further investigation.

For demographic groups that we have identified as being at greater risk of stigma, we recommend further research to inform the development and/or evaluation of interventions to reduce public and self-stigma of these groups, and to facilitate treatment/support seeking. For under-represented demographic groups where sample sizes were insufficient to allow analysis of different subgroups, focused research with larger samples of minority groups would be beneficial. Similarly, we identified that associated stigma was experienced by some affected others, but we did not have a sufficient subsample of people in this group to allow for a comparison of stigmatisation experienced by affected others from different demographics. Further research could address this, perhaps making use of the bespoke scale we used to measure experienced stigma in affected others based on relevant items from the experienced stigma scale (the GESS), which demonstrated good reliability. There are also many more characteristics that we were unable to represent within the vignette component of the survey, due to pragmatic constraints, which may be associated with intersectional stigma. Further vignette research into

[96] Moss, N. J., Wheeler, J., Sarkany, A., Selvamanickam, K., & Kapadia, D. (2023). *Minority Communities & Gambling Harms: Qualitative and Synthesis Report. Lived, Experience, Racism, Discrimination & Stigma*. Ipsos UK. https://www.gambleaware.org/sites/default/files/2024-01/Minority%20communities%20%26%20gambling%20harm%2C%20qualitative%20and%20synthesis%20analysis.pdf

attitudes towards these groups (e.g. migrant groups; people with intellectual or physical disabilities; people with other kinds of mental health conditions) would be of value.

Further research into the inverse relationship we found between age and stigma would also be worthwhile, given the fact that it contrasts with some prior findings.[97] Qualitative work to explore what may drive greater levels of stigma among younger people and/or reduced stigma in older people, for example, would be helpful. Similarly, further research could explore factors that contribute towards high levels of self-stigma and experienced stigma among females experiencing gambling harms.[98,99] Our data indicated that while there was no significant difference in level of experience stigma in general when taking level of problems experienced from gambling (PGSI score) into account, women were more likely to experience stigma than men if they had higher reported experience with problems from gambling but were more likely to experience lower stigma than men if they had lower reported experience with problems from gambling. A study of women's lived experience of gambling carried out by GambleAware showed that women were often concerned about being seen as "bad mothers" and having their children taken away if they opened up around their gambling. Women also described stigma and shame relating to the impact of their gambling on family duties and experts added that guilt and shame experienced by women could be thought of as a "gendered phenomenon that stemmed from the burden carried by women to stay in control and keep the household together".[100] Further research would be needed to examine the relationship between stigma, gender and family situation to understand the interplay between gender and caring responsibilities and the impact this has on experience of stigma from gambling.

As acknowledged above, socially desirable responding may have diluted the magnitude of stigmatisation of gambling harms identified – particularly when people were reporting on their own perceptions about others (i.e. in the vignette component of the research). Future research using implicit measures, though somewhat more challenging to administer, would be valuable in confirming whether the levels of stigma identified in this study are indicative of people's true perceptions, or whether masked and/or subconscious/implicit stigma is also operating.

7.4 Conclusion

This survey has confirmed that people experiencing gambling-related harms in Great Britain in 2023, particularly those experiencing high levels of harm, are subject to several kinds of stigmatisation and discrimination, which is, in turn, associated with psychological distress. Such stigma, for some, acts as a barrier to seeking treatment, even when harms are severe. We have identified several demographic groups who are at particular risk of stigma, and we have confirmed the influence of particular beliefs about the nature and origin of gambling-related harms. These findings have implications for those working in education, treatment and support services with people experiencing gambling harms, and for those involved in stigma-reduction efforts. They also have implications for wider society, given the fact that discourses around gambling harms contribute to the creation and maintenance of stigma.[101]

[97] Hing, N., & Russell, A. M. T. (2017). How Anticipated and Experienced Stigma Can Contribute to Self-Stigma: The Case of Problem Gambling. *Frontiers in Psychology*, *08*. https://doi.org/10.3389/fpsyg.2017.00235

[98] Hing, N., Russell, A., Nuske, E., & Gainsbury, S. (2015). *The stigma of problem gambling: Causes, characteristics and consequences*. Research report. Victorian Responsible Gambling Foundation. https://responsiblegambling.vic.gov.au/resources/publications/the-stigma-of-problem-gambling-causes-characteristics-and-consequences-351/

[99] Hing, N., & Russell, A. M. T. (2017). How Anticipated and Experienced Stigma Can Contribute to Self-Stigma: The Case of Problem Gambling. *Frontiers in Psychology*, *08*. https://doi.org/10.3389/fpsyg.2017.00235

[100] IFF research, University of Bristol and Gamcare (2023). Building knowledge of women's lived experience of gambling and gambling harms across Great Britain. https://www.gambleaware.org/sites/default/files/2023-05/Building%20Knowledge%20of%20Women%E2%80%99s%20Lived%20Experience%20of%20Gambling%20and%20Gambling%20Harms%20Across%20Great%20Britain.pdf

[101] E. Miller, H., & L. Thomas, S. (2018). The problem with 'responsible gambling': impact of government and industry discourses on feelings of felt and enacted stigma in people who experience problems with gambling. *Addiction Research & Theory, 26*(2), 85-94. https://doi.org/10.1080/16066359.2017.1332182

Appendix A: Survey Questionnaire

YouGov®

GambleAware_NGTS_August_2023

Question type: ***Pdl***
#Question display logic:
if 0 or gryphon.interview_type=="test" and updated

[ethnicity_new] What ethnic group best describes you? Please select one option only. (We ask the question in this way so that it is consistent with Census definitions.)

<1>	English / Welsh / Scottish / Northern Irish / British	<11>	Bangladeshi
<2>	Irish	<12>	Chinese
<3>	Gypsy or Irish Traveller	<13>	Any other Asian background
<4>	Any other White background	<14>	African
<5>	White and Black Caribbean	<15>	Caribbean
<6>	White and Black African	<16>	Any other Black / African / Caribbean background
<7>	White and Asian	<17>	Arab
<8>	Any other Mixed / Multiple ethnic background	<18 fixed>	Any other ethnic group
<9>	Indian	<19 fixed>	Prefer not to say
<10>	Pakistani		

Question type: ***Multiple***

[Q_intro] Welcome to this survey about social issues. For more details about this survey, please read the participant information sheet here.

<1>	I confirm that I have read and understood the information sheet for this study, including details of how the data will be used and shared, and agree to take part.

Question type: ***Text***

Thank you for your participation in this study.

We hope that this research will help us to better understand who is at greatest risk of stigmatisation due to gambling harms. It may also help to identify which groups of people are likely to be the most important to deliver stigma-reduction interventions to. Reducing stigmatisation of gambling harms is important because stigma is one of the biggest barriers to people seeking help.

If you have any questions about the research or want to make a complaint, please email

joanne.lloyd@wlv.ac.uk or imogen.martin@natcen.ac.uk.

If you are concerned about your gambling or that of someone you know, you can find free, confidential advice, tools and support at www.GambleAware.org, or the National Gambling Helpline is available on 0808 8020 133 and operates 24 hours a day, seven days a week.

For information and signposting to sources of support for mental health or substance use related difficulties, please visit www.mind.org.uk

Question type: ***Multiple***

[Q1] Which, if any, of these have you spent money on in the _past 12 months?_ Please tick all that apply.

<1>	Tickets for the National Lottery Draw, including Thunderball and EuroMillions and tickets bought online	<10>	Betting on horse or dog races – in person
<2>	Tickets for any other lottery, including charity lotteries	<11>	Betting on football – online
<3>	Scratch cards	<12>	Betting on football – in person
<4>	Gaming machines in a bookmakers	<13>	Betting on other sports – online
<5>	Fruit or slot machines	<14>	Betting on other sports – in person
<6>	Bingo (including online)	<18>	Loot boxes
<7>	Gambling in a casino (any type)	<15>	Any other type of gambling
<16>	Online casino games (slot machine style, roulette, instant wins)	<99 xor>	None of the above
<17>	Online poker	<98 xor>	Don't know
<9>	Betting on horse or dog races – online		

#Question display logic:
if Q1.has_any([1,2,3,4,5,6,7,16,17,9,10,11,12,13,14,15,18])

Question type: ***Multiple***

[Q2] And which, if any, of these have you spent money on in the _past 4 weeks?_ Please tick all that apply.

<1 if 1 in Q1>	Tickets for the National Lottery Draw, including Thunderball and EuroMillions and tickets bought online	<10 if 10 in Q1>	Betting on horse or dog races – in person
<2 if 2 in Q1>	Tickets for any other lottery, including charity lotteries	<11 if 11 in Q1>	Betting on football – online
<3 if 3 in Q1>	Scratch cards	<12 if 12 in Q1>	Betting on football – in person
<4 if 4 in Q1>	Gaming machines in a bookmakers	<13 if 13 in Q1>	Betting on other sports – online
<5 if 5 in Q1>	Fruit or slot machines	<14 if 14 in Q1>	Betting on other sports – in person
<6 if 6 in Q1>	Bingo (including online)	<18 if 18 in Q1>	Loot boxes
<7 if 7 in Q1>	Gambling in a casino (any type)	<15>	Any other type of gambling
<16 if 16 in Q1>	Online casino games (slot machine style, roulette, instant wins)	<99 xor>	None of the above
<17 if 17 in Q1>	Online poker	<98 xor>	Don't know

<9 if 9 in Q1>	Betting on horse or dog races – online

#option display logic:
<15> - If [Q1] - Any other type of gambling is selected [if 15 in Q1]

Question type: ***Text***

The following questions are about **gambling, including the National Lottery and scratch cards as well as sports betting, casino games, gaming machines and bingo.**

For the purposes of this survey, please consider 'gambling' and 'betting' to mean the same thing.

Question type: ***Single***

[P2_Q4] Thinking about _all_ the gambling activities covered in the previous questions, would you say you spend money on these activities…

<1>	Everyday/6-7 days a week
<2>	4-5 days a week
<3>	2-3 days a week
<4>	About once a week
<7>	About once a fortnight
<8>	About once a month
<9>	Every 2-3 months
<10>	Once or twice a year

Question type: ***Dyngrid***
#row order: randomize

[Q5] Thinking about the last 12 months:

-[Q5_1]	Have you bet more than you could really afford to lose?
-[Q5_2]	Have you needed to gamble with larger amounts of money to get the same excitement?
-[Q5_3]	When you gambled, did you go back another day to try and win back the money you lost?
-[Q5_4]	Have you borrowed money or sold anything to get money to gamble?
-[Q5_5]	Have you felt that you might have a problem with gambling?
-[Q5_6]	Has gambling caused you any mental health problems, including stress or anxiety?
-[Q5_7]	Have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
-[Q5_8]	Has your gambling caused any financial problems for you or your household?
-[Q5_9]	Have you felt guilty about the way you gamble or what happens when you gamble?
<1>	Never
<2>	Sometimes
<3>	Most of the time
<4>	Almost always

Question type: ***Dyngrid***
#Question display logic:
if Q1.has_any([1,2,3,4,5,6,7,16,17,9,10,11,12,13,14,15,18])

[QNC1] Thinking about the past 12 months, have you experienced any of the following issues as a result of your gambling?

-[QNC1_1]	Reduction of my available spending money
-[QNC1_2]	Reduction of my savings
-[QNC1_3]	Less spending on recreational expenses such as eating out, going to movies or other entertainment
-[QNC1_4]	Had regrets that made me feel sorry about my gambling
-[QNC1_5]	Felt ashamed of my gambling
-[QNC1_6]	Sold personal items
-[QNC1_7]	Increased personal debt
-[QNC1_8]	Spent less time with people I care about
-[QNC1_9]	Felt distressed about my gambling
-[QNC1_10]	Felt like a failure
<1>	Yes
<2>	No

Question type: ***Grid***
#row order: randomize

[Q44] In the last 4 weeks how often, if at all, have you felt…

-[Q44_1]	Worried about your gambling?
-[Q44_2]	That gambling was always on your mind?
-[Q44_4]	Embarrassed or ashamed about your gambling?
-[Q44_9]	Like you couldn't talk to healthcare professionals about your gambling?
-[Q44_10]	Like you couldn't talk to friends or family about your gambling?
-[Q44_7]	Like you wanted advice and support to help gain more control of your gambling?
<1>	Never
<2>	Sometimes
<3>	Most of the time
<4>	Almost always
<5>	Don’t know

Question type: ***Single***

[P2_Q6a] In the last 12 months, has the _amount of money you have spent on gambling_ increased, decreased or stayed about the same as previously?

<1>	Increased a lot
<2>	Increased a little
<3>	Stayed about the same
<4>	Decreased a little
<5>	Decreased a lot

Question type: ***Single***

[P2_Q6b] And in the last 12 months, has the _amount of time you have spent gambling_ increased, decreased or stayed about the same as previously?

<1>	Increased a lot
<2>	Increased a little
<3>	Stayed about the same
<4>	Decreased a little
<5>	Decreased a lot

Question type: ***Text***

This next section is about support, advice and treatment with regards to cutting down your gambling.

Question type: ***Multiple***

[Q7] In the last 12 months, which, if any, of the following have you used for support, advice or treatment with cutting down your gambling? Please tick all that apply.

Treatment

<1>	GP or other primary health provider	<11>	Your employer
<18>	Mental health services (e.g. counsellor, therapist) – NHS (online and face-to-face)	<12>	Books, leaflets or other printed materials
<20>	Mental health services (e.g. counsellor, therapist) – Private (online and face-to-face)	<13>	Websites (e.g. GambleAware, Citizen's Advice, GamCare)
<3>	Social worker, youth worker or support worker	<14>	Online forum or group
<22>	National Gambling Support Network (NGSN)	<23>	National Gambling Helpline
<21>	Other specialist gambling specific services (e.g. AnonyMind and Therapy Route)	<24>	Another telephone helpline
<5>	Other addiction service (e.g. drug or alcohol)	<16>	Self-help apps or other self-help tools
	Support and advice		
<8>	A support group (e.g. Gamblers Anonymous)	<17>	Self-exclusion (e.g. blocking software or blocking bank transactions)
<19>	A faith group	<95 fixed>	Another source of support, advice or treatment (open [Q7_open]) [open] please specify
<9>	Your spouse/partner	<99 fixed xor>	None of these
<10>	Friends or family members	<97 fixed xor>	Not applicable – I have not needed to cut down my gambling

Question type: ***Multiple***
#row order: randomize #Columns: 2
#Question display logic:
if Q7 and not Q7.has_any([97,99])

[P2_Q10] What, if anything, _prompted_ you to seek support, advice or treatment to cut down your gambling? Please tick all that apply.

<1>	Advice from a friend, family member or someone else	<15>	An advertising campaign or news story related to gambling support services and/or helplines
<2>	Mental health problems	<18 fixed>	A negative change in my personal life (e.g. bereavement)
<4>	I saw that my gambling was having significant financial impacts (e.g. couldn't pay rent, bills, afford food etc)	<19 fixed>	A positive change in my personal life (e.g. new relationship)
<5>	My relationship was affected by my gambling	<20>	A major change in my work life (e.g. redundancy, job loss, retirement or change of career)

<6>	My family was affected by my gambling	<21>	A change in my financial situation
<7>	Threat of criminal proceedings	<22>	Moving to a different location
<8>	My level of gambling was making me anxious or concerned	<23>	Physical illness or injury
<10>	I was at risk of being made homeless/losing my home	<24>	My partner/family demanded that I change my behaviour or took action to make me change my behaviour
<13>	I felt overwhelmed by the situation	<95 fixed>	Something else (open [P2_Q10_open]) [open] please specify
<14>	I was at risk of losing my job/employment	<97 fixed xor>	N/A – Nothing in particular prompted me to seek support, advice or treatment

Question type: ***Multiple***
#row order: randomize #Columns: 2 #Response Options Layout: horizontal
#Question display logic:
if Q7.has_any([1,3,5,8,9,10,11,12,13,14,16,17,18,19,20,21,22,23,24,95,99])

[QNC2] Have any of the following _stopped_ you from seeking support, advice or treatment to cut down your gambling in the last 12 months? Please tick all that apply.

<1>	I did not think treatment or support would be helpful / effective	<9>	I did not think the support available would be suitable for people like me
<2>	Treatment or support I have had before did not work	<10>	I would have difficulties fitting treatment / support around my other responsibilities
<3>	Not knowing what treatment or support would involve	<11>	Worry that someone I know would see me going to a support or treatment service
<4>	I feel too ashamed or embarrassed to talk about my gambling with anyone	<12>	It is not easy for me to use an online support or treatment programme without someone in my household finding out about my problem
<5>	I think accessing treatment or support would take too much time	<13>	I had started but not finished a course or programme of support before and was embarrassed to go back
<6>	I think accessing treatment or support would cost money	<14>	I was afraid that declaring I have a problem with gambling would affect my custody of or access to my child(ren)
<7>	Distance / lack of transport meant I could not get to the support, advice or treatment centre	<95 fixed>	Something else (open [QNC2_open]) [open] please specify
<8>	I did not know what was available	<97 fixed xor>	N/A – I did not think my gambling was a problem / did not feel the need for support, advice or treatment

Question type: ***Multiple***

[Q8] Would you currently _want_ to receive support, advice or treatment with cutting down your gambling from any of the following? Please tick all that apply.

Treatment

<1>	GP or other primary health provider	<11>	Your employer
<18>	Mental health services (e.g. counsellor, therapist) – NHS (online and face-to-face)	<12>	Books, leaflets or other printed materials
<20>	Mental health services (e.g. counsellor, therapist) – Private (online and face-to-face)	<13>	Websites (e.g. GambleAware, Citizen's Advice, GamCare)
<3>	Social worker, youth worker or support worker	<14>	Online forum or group
<22>	National Gambling Support Network (NGSN)	<23>	National Gambling Helpline
<21>	Other specialist gambling specific services (e.g. AnonyMind and Therapy Route)	<24>	Another telephone helpline
<5>	Other addiction service (e.g. drug or alcohol)	<16>	Self-help apps or other self-help tools
	Support and advice		
<8>	A support group (e.g. Gamblers Anonymous)	<17>	Self-exclusion (e.g. blocking software or blocking bank transactions)
<19>	A faith group	<95 fixed>	Another source of support, advice or treatment (open [Q8_open]) [open] please specify
<9>	Your spouse/partner	<99 fixed xor>	None of these
<10>	Friends or family members	<97 fixed xor>	Not applicable – I do not need to cut down my gambling

Question type: ***Multiple***
#row order: randomize
#Question display logic:
If [Q8] - None of these is selected [if 99 in Q8]

[P2_Q13] Which, if any, of the following are reasons why you would not currently want treatment, support or advice to cut down your gambling? Please tick all that apply.

<1>	Gambling is part of my social life or leisure time	<10>	I think accessing treatment or support would cost money
<2>	I make money through gambling	<11>	I don't think treatment or support would be available in my area/in a convenient location
<3>	The activities I participate in are not risky	<12>	I've received treatment or support before and it didn't work
<4>	I only gamble/bet small amounts	<13>	I don't think the support available would be suitable for people like me
<5>	I don't think treatment or support would be helpful/effective	<14>	Accessing treatment or support wouldn't fit into my schedule
<6>	I don't think treatment or support is relevant to me	<15>	I don't want anyone to find out (socially or professionally)
<7>	I don't know enough about what treatment or support would involve	<16>	Accessing treatment or support seems too daunting/overwhelming
<8>	I would be embarrassed or ashamed to receive treatment or support for cutting down gambling	<95 fixed>	Other (open [P2_Q13_open]) [open] please specify
<9>	I think accessing treatment or support would take too much time	<98 fixed xor>	Not sure

Question type: ***Multiple***
#row order: randomize
#Question display logic:
if Q8 and not Q8.has_any([97])

[P2_Q14] What, if anything, might motivate you to seek treatment, support or advice with cutting down your gambling? Please tick all that apply.

<1>	My partner speaking to me about it	<8>	Knowing that treatment and support would be completely confidential
<2>	My family member or friend speaking to me about it	<9>	Knowing that I could see someone face to face
<3>	My GP suggesting that it might be helpful	<10>	Knowing that I could get help online
<4>	Being aware that support was available	<11>	Knowing that I could get help by phone
<5>	Knowing that I could refer myself for support without going through a GP	<95 fixed>	Other (open [P2_Q14_open]) [open] please specify
<6>	Knowing that support was easy to access	<98 fixed xor>	Not sure
<7>	Knowing that support was free of charge	<99 fixed xor>	Nothing would motivate me to do this

Question type: ***Text***

Now thinking about other people, including family members, friends and work colleagues...

Question type: ***Single***

[Q10] Do you think anyone you know has or previously had a problem with their gambling? This could include family members, friends, work colleagues or other people you know.

<1>	Yes
<2>	No
<3>	Not sure
<4>	Prefer not to say

Question type: ***Single***
#Question display logic:
If [Q10] - Yes is selected [if Q10 == 1]

[Q11] And do you feel you have _personally_ been negatively affected in any way by this person / these people's gambling behaviour? This could include financial, emotional or practical impacts.

<1>	Yes
<2>	No
<4>	Prefer not to say

Question type: ***Text***

Moving on...

Question type: ***Multiple***
#Question display logic:
if Q1.has_any([1,2,3,4,5,6,7,16,17,9,10,11,12,13,14,15,18])

[Q53_new] In the past 12 months, have you attempted (either successfully or unsuccessfully) to stop gambling, or reduce your level of gambling? Please select all that apply.

<1>	Yes – I have tried to stop gambling completely
<2>	Yes – I have tried to reduce the amount of _time_ I spend on gambling
<3>	Yes – I have tried to reduce the amount of _money_ I spend on gambling
<6>	Yes – I have tried to reduce the number of _different types of gambling activities_ I gamble on
<7>	Yes – I have tried to reduce my frequency of gambling in certain situations (e.g. gambling alone, gambling after midnight, gambling when drinking alcohol)
<8>	Yes – I have tried to reduce my gambling in another way (open [Q53_new_other]) [open] please specify
<4 xor>	No
<97 xor>	Don't know
<99 xor>	Prefer not to say

Question type: ***Text***

Moving on...

Question type: ***Multiple***
#row order: randomize(rand20)

[Q35] Below is a list of organisations which offer information, help and support to people suffering problems as a result of gambling. Which, if any, had you heard of before this survey?

<null>	||Q35_list||
<9 fixed>	Other (please specify) (open [Q35_other]) [open]
<10 fixed xor>	None of these
<11 fixed xor>	Don't know

Question type: ***Multiple***
#row order: randomize(rand20)

[Q35a] Which of the following, if any, would you be likely to contact if you or someone close to you needed information, help or support with gambling-related problems?

<null>	||Q35_list||
<9 fixed>	Other (please specify) (open [Q35a_other]) [open]
<10 fixed xor>	None of these
<11 fixed xor>	Don't know

Question type: ***Grid***
#row order: randomize

#Question display logic:
if Q35 and not Q35.has_any([10,11])

[Q35c] And which, if any, have you contacted for yourself or for someone close to you for information, help or support with gambling-related problems?

-[Q35c_1 if 1 in Q35]	GambleAware	-[Q35c_20 if 20 in Q35]	North East Council on Addictions (NECA)
-[Q35c_2 if 2 in Q35]	Gamblers Anonymous UK	-[Q35c_21 if 21 in Q35]	RCA Trust
-[Q35c_12 if 12 in Q35]	GamCare	-[Q35c_22 if 22 in Q35]	Betknowmore
-[Q35c_13 if 13 in Q35]	Addiction Recovery For All (ARA)	-[Q35c_23 if 23 in Q35]	Young Gamers & Gamblers Education Trust (YGAM)
-[Q35c_14 if 14 in Q35]	Adferiad Recovery	-[Q35c_4 if 4 in Q35]	National Gambling Helpline
-[Q35c_15 if 15 in Q35]	Aquarius	-[Q35c_5 if 5 in Q35]	Gordon Moody Association
-[Q35c_16 if 16 in Q35]	Beacon Counselling Trust (BCT)	-[Q35c_6 if 6 in Q35]	National Gambling Support Network (NGSN)
-[Q35c_17 if 17 in Q35]	Breakeven	-[Q35c_7 if 7 in Q35]	London/ National Problem Gambling Clinic
-[Q35c_18 if 18 in Q35]	Derman	-[Q35c_8 if 8 in Q35]	NHS Northern Gambling Service
-[Q35c_19 if 19 in Q35]	Krysallis Counselling		

<1>	Have used in the last 12 months
<2>	Have used, but not in the last 12 months
<3>	Have never used
<96>	Don’t know / prefer not to say

Question type: ***Multiple***
#row order: randomize
#Question display logic:
if 6 in Q35

[Q35b] Where did you hear about the National Gambling Support Network (NGSN)?

<1>	Advertising (e.g. on TV, radio, social media, online, or out and about)
<2>	Word of mouth (e.g. from a friend, relative, or healthcare professional)
<3>	An event (e.g. conference, talk)
<4 fixed>	Other (please specify) (open [Q35b_other]) [open]
<5 fixed xor>	Don’t know

Question type: ***Text***

This next section is about people’s opinions and feelings about gambling, including your own opinions.

Question type: ***Dyngrid***

[QNC3] We are interested in your thoughts about _people who gamble_. For each of the following statements, please consider how you think people who gamble are generally perceived by others.

-[QNC3_1]	Most people think people who experience problems with gambling are liars	-[QNC3_8]	Many people would be uncomfortable communicating with a person who experiences problems with gambling
-[QNC3_2]	Once they know a person is a person who experiences problems with gambling, most people will take his or her opinion less seriously	-[QNC3_9]	Most people think less of a person who experiences problems with gambling
-[QNC3_3]	Most people think that people who experience problems with gambling tend to be unreliable	-[QNC3_10]	Most people would not hire a person who experiences problems with gambling to take care of their children
-[QNC3_4]	Most people think that people who experience problems with gambling are unable to handle responsibility	-[QNC3_11]	Most people would be suspicious of a person if they knew they were a person who experiences problems with gambling
-[QNC3_5]	Most people think that people who experience problems with gambling are lazy	-[QNC3_12]	Most people would not want to enter into a committed relationship with someone they knew was a person who experiences problems with gambling
-[QNC3_6]	Most people think that people who experience problems with gambling are greedy	-[QNC3_13]	Many people would avoid a person who experiences problems with gambling
-[QNC3_7]	Most people believe that people who experience problems with gambling have no self control		

<1>	Strongly disagree
<2>	Somewhat disagree
<3>	Somewhat agree
<4>	Strongly agree

Question type: ***Text***

The next questions are about your own experiences of gambling.

Question type: ***Dyngrid***
#Question display logic:
if Q1.has_any([1,2,3,4,5,6,7,16,17,9,10,11,12,13,14,15,18])

[QNC4] We are interested in your thoughts about _your own gambling experiences_. Please indicate how much you agree with each of the following statements.

-[QNC4_1]	I feel the need to hide my gambling from my friends	-[QNC4_8]	I sometimes have the thought that I deserve the bad things that have happened to me in life because I gamble
-[QNC4_2]	I sometimes have the thought that I've screwed up my life by gambling	-[QNC4_9]	I feel the stress in my life is what causes me to gamble
-[QNC4_3]	Most people would always suspect that I'd returned to gambling, even if I didn't gamble anymore	-[QNC4_10]	Others view me as morally weak because I am a person who gambles

-[QNC4_4]	People have insulted me because of my gambling
-[QNC4_5]	I have the thought that I should be ashamed of myself for my gambling
-[QNC4_6]	People can tell that I am a person who gambles by the way I look
-[QNC4_7]	Others think I am not worth the investment of time and resources because I am a person who gambles
-[QNC4_11]	I avoid situations where another person might have to depend on me
-[QNC4_12]	I don't think I can be trusted because I gamble
-[QNC4_13]	Once they know I'm a person who gambles, most people will take my opinion less seriously

<1>	Strongly disagree
<2>	Somewhat disagree
<3>	Somewhat agree
<4>	Strongly agree

Question type: ***Grid***
#Question display logic:
If [Q11] - Yes is selected [if Q11 == 1]

[QNC5] Earlier, you told us that you feel you have _personally_ been negatively affected by the gambling behaviour of a person or people you know. Please indicate how much you agree with each of the following statements.

-[QNC5_1]	I feel the need to hide the person's gambling from my friends
-[QNC5_2]	People have criticised or insulted me because of the person's gambling
-[QNC5_3]	Once they know that someone close to me is a person who gambles, most people will take my opinion less seriously
-[QNC5_4]	People think less of me for maintaining a relationship with the person who gambles
<1>	Strongly disagree
<2>	Somewhat disagree
<3>	Somewhat agree
<4>	Strongly agree

Question type: ***Text***

These next questions are about experiences related to _who you are_. This includes both _how you describe yourself and how others might describe you_. For example, your skin colour, ancestry, nationality, religion, gender, sexuality, age, weight, disability or mental health issue, gambling-related problems, or income.

Question type: ***Dyngrid***

[QNC6] _Because of who you are_, have you ...

-[QNC6_1]	Heard, seen or read others joking or laughing about you (or people like you)?
-[QNC6_2]	Been treated as if you are unfriendly, unhelpful, or rude?
-[QNC6_3]	Been called names or heard / saw your identity used as an insult?
-[QNC6_4]	Been treated as if others are afraid of you?
-[QNC6_5]	Been stared or pointed at in public?
-[QNC6_6]	Been told that you should think, act, or look more like others?
-[QNC6_7]	Heard that you or people like you don't belong?
-[QNC6_8]	Been asked inappropriate, offensive or overly personal questions?
-[QNC6_9]	Been treated as if you are less smart or capable than others?

<1>	Never
<2>	Yes, but not in the past year
<3>	Yes, once or twice in the past year
<4>	Yes, many times in the past year

#Question display logic:
if Q1.has_any([1,2,3,4,5,6,7,16,17,9,10,11,12,13,14,15,18])

Question type: ***Text***

The next question includes statements about how you may feel about your gambling and about other people's opinions on your gambling. These are not our opinions about gambling or about people who gamble.

Question type: ***Dyngrid***

[QNC7] For each statement, please mark whether you strongly disagree, disagree, agree, or strongly agree.

-[QNC7_1]	Stereotypes about people who gamble apply to me
-[QNC7_2]	In general, I am able to live life the way I want to
-[QNC7_3]	Negative stereotypes about gambling keep me isolated from the 'normal' world
-[QNC7_4]	I feel out of place in the world because I gamble
-[QNC7_5]	Being around people who don't gamble makes me feel out of place or inadequate
-[QNC7_6]	People who don't gamble could not possibly understand me
-[QNC7_7]	Nobody would be interested in getting close to me because I gamble
-[QNC7_8]	I can't contribute anything to society because I gamble
-[QNC7_9]	I can have a good, fulfilling life, despite my gambling
<1>	Strongly disagree
<2>	Disagree
<3>	Agree
<4>	Strongly agree

Question type: ***Text***

Please read the brief description about a person named AJ, below, and answer the questions that follow. Please be honest in your responses; remember your answers are completely anonymous, and there are no right or wrong answers.

Question type: ***Single***
#Question display logic:
if gryphon.interview_type=="test"

[AJ_intro_selection] VISIBLE IN TEST MODE

AJ intro Selection

<1>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. During the last year, AJ has started to gamble occasionally. He usually bets the same amount of money and never bets more than he intends. He stops gambling when he is losing and doesn't lose very much money. He often goes long periods without gambling and does other leisure activities instead. He doesn't find he misses gambling and he doesn't think about gambling while he is away from it. AJ's family and friends know that he sometimes gambles.	<8>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ was hospitalized due to mental health problems (including depression and anxiety) about 6 months ago. During the last twelve months, she has started to gamble more than her usual amount of money. She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.
<2>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. During the last year, AJ has started to gamble occasionally. She usually bets the same amount of money and never bets more than she intends. She stops gambling when she is losing and doesn't lose very much money. She often goes long periods without gambling and does other leisure activities instead. She doesn't find she misses gambling and she doesn't think about gambling while she is away from it. AJ's family and friends know that she sometimes gambles.	<9>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ has been using heroin and consuming large amounts of alcohol for the past 8 years. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.
<3>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he	<10>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ has been using heroin, and consuming large amounts of alcohol for the past 8 years. During the last twelve months, she has started to gamble more than her usual amount of money.

	became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.		She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.
<4>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. During the last twelve months, she has started to gamble more than her usual amount of money. She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.	<11>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ Identifies as a member of an ethnic minority group in the UK. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.
<5>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ identifies as LGBTQ. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.	<12>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ identifies as a member of an ethnic minority group in the UK. During the last twelve months, she has started to gamble more than her usual amount of money. She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to

			try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.
<6>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ identifies as LGBTQ. During the last twelve months, she has started to gamble more than her usual amount of money. She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.	<13>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ is from a low income household. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.
<7>	AJ is a man who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ was hospitalized due to mental health problems (including depression and anxiety) about 6 months ago. During the last twelve months, he has started to gamble more than his usual amount of money. He has even noticed that he needs to gamble much more than he used to in order to get the same feeling of excitement. Several times, he has tried to cut down, or stop gambling, but he can't. Each time he has tried to cut down, he became agitated and couldn't sleep, so he gambled again. He is often preoccupied by thoughts of gambling and gambles more to try to recover his losses. AJ has also hidden the extent of his gambling from his family and friends.	<14>	AJ is a woman who lives in your community, who enjoys watching movies, reading, and spending time with friends and family. AJ is from a low-income household. During the last twelve months, she has started to gamble more than her usual amount of money. She has even noticed that she needs to gamble much more than she used to in order to get the same feeling of excitement. Several times, she has tried to cut down, or stop gambling, but she can't. Each time she has tried to cut down, she became agitated and couldn't sleep, so she gambled again. She is often preoccupied by thoughts of gambling and gambles more to try to recover her losses. AJ has also hidden the extent of her gambling from her family and friends.

Question type: ***Text***

$AJ_intro_selection

Question type: ***Grid***

[QWV1b] How willing would you be to…

-[QWV1b_1]	Move next door to AJ
-[QWV1b_2]	Make friends with AJ
-[QWV1b_3]	Spend an evening socializing with AJ
-[QWV1b_4]	Start working closely with AJ on a job
-[QWV1b_5]	Have a residential treatment centre in your neighbourhood for people like AJ
-[QWV1b_6]	Have AJ marry into your family
<1>	Definitely willing
<2>	Probably willing
<3>	Probably unwilling
<4>	Definitely unwilling

Question type: ***Grid***
#Question display logic:
if AJ_intro_selection not in [1,2]

[QWV1c] How likely do you think it is that AJ's situation is caused by…

-[QWV1c_1]	Their bad character
-[QWV1c_2]	A chemical imbalance in their brain
-[QWV1c_3]	Stressful circumstances in their life
-[QWV1c_4]	A genetic or inherited problem
-[QWV1c_5]	God's will
-[QWV1c_6]	The way they were raised
<1>	Extremely unlikely
<2>	Unlikely
<3>	Neither likely nor unlikely
<4>	Likely
<5>	Extremely likely

Question type: ***Single***

[QWV1d] How likely do you think it is that AJ would cause hurt or harm to other people?

<1>	Extremely unlikely
<2>	Unlikely
<3>	Neither likely nor unlikely
<4>	Likely
<5>	Extremely likely

Question type: ***Single***

[QWV1e] How likely do you think it is that AJ would cause hurt or harm to themself?

<1>	Extremely unlikely
<2>	Unlikely
<3>	Neither likely nor unlikely
<4>	Likely
<5>	Extremely likely

Question type: ***Single***
#Question display logic:
if AJ_intro_selection not in [1,2]

[QWV1f] How noticeable would AJ's situation be to their family and friends if they hadn't told them about it?

<1>	Not at all noticeable
<2>	Somewhat noticeable
<3>	Moderately noticeable
<4>	Very noticeable
<5>	Extremely noticeable

Question type: ***Single***
#Question display logic:
if AJ_intro_selection not in [1,2]

[QWV1g] How strongly do you agree or disagree that people can recover from AJ's situation?

<1>	Strongly disagree
<2>	Disagree
<3>	Neither agree nor disagree
<4>	Agree
<5>	Strongly agree

Question type: ***Grid***
#Question display logic:
if AJ_intro_selection not in [1,2]

[QWV1h] How much do you think AJ's situation would affect their ability to…

-[QWV1h_1]	Live independently
-[QWV1h_2]	Be in a serious relationship
-[QWV1h_3]	Work or study
-[QWV1h_4]	Be successful
<1>	Not at all
<2>	A small amount
<3>	A moderate amount
<4>	A large amount

Question type: ***Multiple***

[QWV2] After you have read all the statements below, please select those that best describe your exposure to those experiencing gambling harms.

<3>	I have come across a character experiencing gambling harms on TV, in a film or in a book
<7>	My job involves providing services/treatment for persons experiencing gambling harms
<2>	I have seen, in passing, a person I believe may have been experiencing gambling harms
<5>	I regularly see people experiencing gambling harms
<11>	I have first-hand personal experience of gambling harms
<6>	I have worked with someone who was experiencing gambling harms
<8>	A friend of the family has experience of gambling harms

<9>	I have a relative who has experience of gambling harms
<4>	I have seen or read about a real person experiencing gambling harms in a documentary, on social media, or in an article
<10>	I live with a person who has experience of gambling harms
<1 fixed xor>	Not applicable / none of the above

Question type: ***Text***

Finally, some more questions about you ...

Question type: ***Single***

[QNC8] How often in the past year have you used an illegal drug, or used a prescription medication for non-medical reasons?

<1>	Never
<2>	Yes, but not in the past year
<3>	Yes, once or twice in the past year
<4>	Yes, many times in the past year
<99>	Prefer not to say

Question type: ***Grid***

[QNC9] The following questions ask about how you have been feeling during the past 30 days. For each question, please select the option that best describes how often you had this feeling. During the past 30 days, about how often did you feel …

-[QNC9_1]	nervous
-[QNC9_2]	hopeless
-[QNC9_3]	restless or fidgety
-[QNC9_4]	so depressed that nothing could cheer you up
-[QNC9_5]	that everything was an effort
-[QNC9_6]	worthless
<1>	All of the time
<2>	Most of the time
<3>	Some of the time
<4>	A little of the time
<5>	None of the time

Question type: ***Multiple***
#row order: randomize #max number of choices: 3

[Q47] In your experience, which, if any, of the following groups are _most judgemental_ towards those who have problems with their gambling? Please select a maximum of three

<1>	Yourself
<2>	Friends
<3>	Family
<4>	Colleagues
<5>	Local community
<6>	Service / healthcare providers (e.g. doctors, nurses and therapists)
<7>	The wider public

<10>	The media
<8 fixed>	Other (open [Q47_open]) [open] please specify
<9 fixed xor>	Don't know

Question type: ***Multiple***
#row order: randomize #max number of choices: 3

[Q46] Which, if any, of the following words do you feel best represent how society views those who have problems with their gambling? Please select a maximum of three

<1>	Sympathetic
<2>	Understanding
<3>	Judgemental
<4>	Accepting
<5>	Critical
<6>	Concerned
<7>	Indifferent
<8 fixed>	Other (open [Q46_open]) [open] please specify
<9 fixed xor>	Don't know

Question type: ***Pdl***
#Question display logic:
if pdl.sexuality.last > months(6) and updated

[sexuality] Which of the following best describes your sexuality?

<1>	Heterosexual
<2>	Gay or lesbian
<3>	Bisexual
<4>	Other
<5>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if not pdl.sex_at_birth_feb19 and updated

[sex_at_birth_feb19] At birth were you described as:

<1>	Male
<2>	Female
<3>	Intersex
<97>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if not pdl.gender_how_identify_feb19 and updated

[gender_how_identify_feb19] Which of the following describes how you think of yourself?

<2>	Male
<1>	Female
<8>	In another way [open] please specify
<991>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if pdl.disability.last > months(12) or gryphon.interview_type=="test" and updated

[disability] Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?

<1>	Yes, limited a lot
<2>	Yes, limited a little
<3>	No

Question type: ***Pdl***
#Question display logic:
if pdl.profile_work_stat.last > months(12) or gryphon.interview_type=="test" and updated

[profile_work_stat] Which of these applies to you?

<1>	Working full time (30 or more hours per week)
<2>	Working part time (8-29 hours a week)
<3>	Working part time (Less than 8 hours a week)
<4>	Full time student
<5>	Retired
<6>	Unemployed
<7>	Not working
<8>	Other

Question type: ***Pdl***
#Question display logic:
if pdl.profile_gross_household.last > months(12) or gryphon.interview_type=="test" and updated

[profile_gross_household] Gross HOUSEHOLD income is the combined income of all those earners in a household from all sources, including wages, salaries, or rents and before tax deductions. What is your gross household income?

<1>	under £5,000 per year	<10>	£45,000 to £49,999 per year
<2>	£5,000 to £9,999 per year	<11>	£50,000 to £59,999 per year
<3>	£10,000 to £14,999 per year	<12>	£60,000 to £69,999 per year
<4>	£15,000 to £19,999 per year	<13>	£70,000 to £99,999 per year
<5>	£20,000 to £24,999 per year	<14>	£100,000 to £149,999 per year
<6>	£25,000 to £29,999 per year	<15>	£150,000 and over
<7>	£30,000 to £34,999 per year	<16>	Don't know
<8>	£35,000 to £39,999 per year	<17>	Prefer not to answer
<9>	£40,000 to £44,999 per year		

Question type: ***Pdl***
#Question display logic:
if not pdl.sdb_nationality_oct17 or gryphon.interview_type=="test" and updated

[sdb_nationality_oct17] For the following question, by 'national', we mean being a registered member of a nation or sovereign state.
Which, if any, of the following countries are you a national of? (Please select all that apply. If you would prefer not to say, please select that option)

<1>	United Kingdom	<123>	Libya
<2>	Afghanistan	<124>	Liechtenstein
<3>	Aland Islands	<125>	Lithuania
<4>	Albania	<126>	Luxembourg

<5>	Algeria
<6>	American Samoa
<7>	Andorra
<8>	Angola
<9>	Anguilla
<10>	Antarctica
<11>	Antigua and Barbuda
<12>	Argentina
<13>	Armenia
<14>	Aruba
<15>	Australia
<16>	Austria
<17>	Azerbaijan
<18>	Bahamas
<19>	Bahrain
<20>	Bangladesh
<21>	Barbados
<22>	Belarus
<23>	Belgium
<24>	Belize
<25>	Benin
<26>	Bermuda
<27>	Bhutan
<28>	Bolivia
<29>	Bosnia and Herzegovina
<30>	Botswana
<31>	Bouvet Island
<32>	Brazil
<33>	British Indian Ocean Territory
<34>	Brunei
<35>	Bulgaria
<36>	Burkina Faso
<37>	Burundi
<38>	Cambodia
<39>	Cameroon
<40>	Canada
<41>	Cape Verde
<42>	Cayman Islands
<43>	Central African Republic
<44>	Chad
<45>	Chile
<46>	China
<47>	Christmas Island
<48>	Cocos Islands
<49>	Colombia
<50>	Comoros
<51>	Congo
<52>	Congo, Democratic Republic of the
<53>	Cook Islands
<54>	Costa Rica
<55>	Cote d'Ivoire
<56>	Croatia
<57>	Cuba
<58>	Cyprus
<59>	Czech Republic
<60>	Denmark
<61>	Djibouti
<62>	Dominica
<63>	Dominican Republic
<64>	Ecuador
<127>	Macao
<128>	Macedonia
<129>	Madagascar
<130>	Malawi
<131>	Malaysia
<132>	Maldives
<133>	Mali
<134>	Malta
<135>	Marshall Islands
<136>	Martinique
<137>	Mauritania
<138>	Mauritius
<139>	Mayotte
<140>	Mexico
<141>	Micronesia
<142>	Moldova
<143>	Monaco
<144>	Mongolia
<145>	Montenegro
<146>	Montserrat
<147>	Morocco
<148>	Mozambique
<149>	Myanmar
<150>	Namibia
<151>	Nauru
<152>	Nepal
<153>	Netherlands
<154>	Netherlands Antilles
<155>	New Caledonia
<156>	New Zealand
<157>	Nicaragua
<158>	Niger
<159>	Nigeria
<160>	Niue
<161>	Norfolk Island
<162>	North Korea
<163>	Northern Mariana Islands
<164>	Norway
<165>	Oman
<166>	Pakistan
<167>	Palau
<168>	Palestinian Territories
<169>	Panama
<170>	Papua New Guinea
<171>	Paraguay
<172>	Peru
<173>	Philippines
<174>	Pitcairn
<175>	Poland
<176>	Portugal
<177>	Puerto Rico
<178>	Qatar
<179>	Reunion
<180>	Romania
<181>	Russia
<182>	Rwanda
<183>	Saint Helena
<184>	Saint Kitts and Nevis
<185>	Saint Lucia
<186>	Saint Pierre and Miquelon

<65>	Egypt	<187>	Saint Vincent and the Grenadines
<66>	El Salvador	<188>	Samoa
<67>	Equatorial Guinea	<189>	San Marino
<68>	Eritrea	<190>	Sao Tome and Principe
<69>	Estonia	<191>	Saudi Arabia
<70>	Ethiopia	<192>	Senegal
<71>	Falkland Islands	<193>	Serbia
<72>	Faroe Islands	<194>	Seychelles
<73>	Fiji	<195>	Sierra Leone
<74>	Finland	<196>	Singapore
<75>	France	<197>	Slovakia
<76>	French Guiana	<198>	Slovenia
<77>	French Polynesia	<199>	Solomon Islands
<78>	French Southern Territories	<200>	Somalia
<79>	Gabon	<201>	South Africa
<80>	Gambia	<202>	South Georgia and the South Sandwich Islands
<81>	Georgia	<203>	South Korea
<82>	Germany	<204>	Spain
<83>	Ghana	<205>	Sri Lanka
<84>	Gibraltar	<206>	Sudan
<85>	Greece	<207>	Suriname
<86>	Greenland	<208>	Svalbard and Jan Mayen
<87>	Grenada	<209>	Swaziland
<88>	Guadeloupe	<210>	Sweden
<89>	Guam	<211>	Switzerland
<90>	Guatemala	<212>	Syria
<91>	Guernsey	<213>	Taiwan
<92>	Guinea	<214>	Tajikistan
<93>	Guinea-Bissau	<215>	Tanzania
<94>	Guyana	<216>	Thailand
<95>	Haiti	<217>	Timor-Leste
<96>	Heard Island and McDonald Islands	<218>	Togo
<97>	Honduras	<219>	Tokelau
<98>	Hong Kong	<220>	Tonga
<99>	Hungary	<221>	Trinidad and Tobago
<100>	Iceland	<222>	Tunisia
<101>	India	<223>	Turkey
<102>	Indonesia	<224>	Turkmenistan
<103>	Iran	<225>	Turks and Caicos Islands
<104>	Iraq	<226>	Tuvalu
<105>	Ireland	<227>	Uganda
<106>	Isle of Man	<228>	Ukraine
<107>	Israel	<229>	United Arab Emirates
<108>	Italy	<230>	United States
<109>	Jamaica	<231>	United States minor outlying islands
<110>	Japan	<232>	Uruguay
<111>	Jersey	<233>	Uzbekistan
<112>	Jordan	<234>	Vanuatu
<113>	Kazakhstan	<235>	Vatican City
<114>	Kenya	<236>	Venezuela
<115>	Kiribati	<237>	Vietnam
<300>	Kosovo	<238>	Virgin Islands, British
<116>	Kuwait	<239>	Virgin Islands, U.S.
<117>	Kyrgyzstan	<240>	Wallis and Futuna
<118>	Laos	<241>	Western Sahara
<119>	Latvia	<242>	Yemen
<120>	Lebanon	<243>	Zambia
<121>	Lesotho	<244>	Zimbabwe

<122>	Liberia	<997 xor>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if not pdl.profile_religion or gryphon.interview_type=="test" and updated

[profile_religion] Do you regard yourself as belonging to any particular religion, and if so, to which of these do you belong?

<1>	No, I do not regard myself as belonging to any particular religion.	<8>	Yes - Free Presbyterian
<2>	Yes - Church of England/Anglican/Episcopal	<9>	Yes - Brethren
<3>	Yes - Roman Catholic	<10>	Yes - Judaism
<4>	Yes - Presbyterian/Church of Scotland	<11>	Yes - Hinduism
<5>	Yes - Methodist	<12>	Yes - Islam
<6>	Yes - Baptist	<13>	Yes - Sikhism
<17>	Yes – Orthodox Christian	<14>	Yes - Buddhism
<18>	Yes - Pentecostal (e.g. Assemblies of God, Elim Pentecostal Church, New Testament Church of God, Redeemed Christian Church of God)	<15>	Yes - Other
<19>	Yes - Evangelical – independent/non-denominational (e.g. FIEC, Pioneer, Vineyard, Newfrontiers)	<16>	Prefer not to say
<7>	Yes - United Reformed Church		

Question type: ***Pdl***
#Question display logic:
if pdl.profile_household_type.last > months(12) or gryphon.interview_type=="test" and updated

[profile_household_type] Which of the following, if any, best describes your current living arrangements?

<1>	Living with a spouse or partner
<2>	Living with friend(s) or housemate(s)
<3>	Living with parent(s) or other adult family member(s)
<4>	Not living with any other adults
<99>	None of these

Question type: ***Pdl***
#Question display logic:
if pdl.profile_household_size.last > months(12) or gryphon.interview_type=="test" and updated

[profile_household_size] How many people, including yourself, are there in your household? Please include both adults and children.

<1>	1
<2>	2
<3>	3
<4>	4
<5>	5
<6>	6
<7>	7
<8>	8 or more
<9>	Don't know
<10>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if pdl.profile_household_children.last > months(12) or gryphon.interview_type=="test" and updated

[profile_household_children] How many of the people in your household are under 18?

<1>	0
<2>	1
<3>	2
<4>	3
<5>	4
<6>	5 or more
<8>	Don't know
<9>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if pdl.profile_marital.last > months(12) or gryphon.interview_type=="test" and updated

[profile_marital] What is your current marital or relationship status?

<7>	Divorced
<2>	In a civil partnership
<5>	In a relationship, but not living together
<4>	Living with a partner but neither married nor in a civil partnership
<1>	Married
<3>	Separated but still legally married or in a civil partnership
<6>	Single
<8>	Widowed

Question type: ***Pdl***
#Question display logic:
if pdl.disabilities_diagnosed.last > months(12) or gryphon.interview_type=="test" and updated

[disabilities_diagnosed] Which, if any, of the following types of disabilities have you been diagnosed with? By disability we mean if you have a physical or mental impairment that has a 'substantial' and 'long-term' effect on your day-to-day life. Please select all that apply.

<1>	Developmental disability (e.g. Down's Syndrome)
<2>	Learning difficulty, such as reading and writing (e.g. Dyslexia)
<3>	Mental health or emotional disability (e.g. Mood Disorders or Schizophrenia, etc.)
<4>	Unseen disability (e.g. Diabetes or Crohn's disease.)
<5>	Physical disability (e.g. Spinal cord injury or Cerebral Palsy, etc.)
<6>	Sensory disability (e.g. visual or hearing impairment)
<7>	Speech/language disability (e.g. Developmental Language Disorder)
<97 fixed>	Other
<98 fixed xor>	Don't know
<99 fixed xor>	Not applicable – I have not been diagnosed with a disability
<999 fixed xor>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if pdl.smoker.last > months(12) or gryphon.interview_type=="test" and updated

[smoker] Which, if any, of the following statements BEST applies to you, when it comes to smoking?

<1>	I smoke every day

<2>	I smoke but I don't smoke every day
<3>	I used to smoke but I have given up now
<4>	I have never smoked
<99>	Prefer not to say

Question type: ***Pdl***
#Question display logic:
if pdl.alcohol_consumption.last > months(12) or gryphon.interview_type=="test" and updated

[alcohol_consumption] How many units of alcohol do you drink in an average week? As a guide, a large glass of wine is around 3 units, a pint of lager around 2.5 units and 25ml of 40% spirit is 1 unit

<1>	None	<8>	26-30
<2>	1-2	<9>	31-35
<3>	2-5	<10>	36-40
<4>	6-10	<11>	40+
<5>	11-15	<99 fixed xor>	Prefer not to say
<6>	16-20	<96 fixed xor>	Don't know
<7>	21-25		

Question type: ***Text***

Thank you for your participation in this study.

We hope that this research will help us to better understand who is at greatest risk of stimatisationg due to gambling harms. It may also help to identify which groups of people are likely to be the most important to deliver stigma-reduction interventions to. Reducing stimatisationg of gambling harms is important because stigma is one of the biggest barriers to people seeking help.

If you have any questions about the research or want to make a complaint, please email joanne.lloyd@wlv.ac.uk or imogen.martin@natcen.ac.uk.

If you are concerned about your gambling or that of someone you know, you can find free, confidential advice, tools and support at www.GambleAware.org, or the National Gambling Helpline is available on 0808 8020 133 and operates 24 hours a day, seven days a week.

For information and signposting to sources of support for mental health or substance use related difficulties, please visit www.mind.org.uk

Appendix B: Methodology

This appendix presents how quantitative analysis of survey data relating to people who experience harms from gambling was conducted. It first sets out the details of the data on which analysis was based and presents an overview of who is in the samples, by relationship to gambling harms and key demographic characteristics. Subsequently, the appendix outlines the main variables for the validated and novel indexes, as well as scales of gambling harms, stigmatisation, and discrimination used. The design of the vignettes analysis is presented. The section then outlines the produced derived variables, both for the stigma scales and for sociodemographic characteristics. Finally, it describes the analyses conducted. This appendix provides additional detail to support the overview of the methodological approach described in Chapter 2.

B1. Data

The analysis presented here is drawn from YouGov's August 2023 Mini-dip Treatment and Support Survey conducted for GambleAware. GambleAware commissions an annual Treatment and Support Survey from YouGov.[102] The annual surveys are supplemented by several shorter Mini-dip Treatment and Support Surveys of around 3,000 GB adults, which can accommodate additional modules of questions.

NatCen and University of Wolverhampton developed and tested a set of questions, which were based on scales and vignettes, and these were included in the August 2023 Wave of the Mini-dip survey. Following fieldwork (16-29 August 2023), YouGov provided two cleaned and weighted datasets for analysis as shown below.

- **Main dataset:** a sample of adults (18+), weighted to be representative of the GB general population (n=3,276). The sample was made up of people who had not gambled in the past 12 months (n=1,174), and people who had gambled in the past 12 months (n=2,102). Of those in the sample who had gambled in the past 12 months, the majority had a PGSI score of 0 (n=1,604). Among the main sample there were people affected by the gambling of others (n=250), made up of those who had gambled in the past 12 months (n=169) and those who had not gambled (n=81);

- **PGSI 1+ dataset (Dataset of participants who scored PGSI 1 +):** a boost sample (n=796) of people who had gambled in the past 12 months, with PGSI score (1+). Some of the sample are people who reported being negatively affected by the gambling of others (n=118), as well as gambling themselves. The PGSI 1+ dataset includes the people who gambled with PGSI 1+ from the main dataset (n=498) as well as some additional boost sample of people with PGSI scores of 1+. That is, there were 498 cases that are present in both datasets.

To reiterate, the two datasets have some overlap of cases: participants who had gambled in the past 12 months and scored PGSI 1+ (n=498) in the main dataset are also included in the dataset of people who had gambled in the past 12 months with PGSI 1+. See the descriptions of the analyses below for more detail on how this overlap in the data has been approached. The findings chapters also highlight which dataset has been used.

Appendix Table B.1 below sets out the samples making up the two datasets in terms of whether gambled in the past 12 months, PGSI score, and whether participants were affected by the gambling of others.

[102] GambleAware. (Ongoing). Annual GB Treatment & Support Survey. [Webpage]. https://www.begambleaware.org/annual-gb-treatment-support-survey

Appendix Table B.1: Composition of the samples by relationship to gambling harms

Gambling status, PGSI score, and whether affected by the gambling of others	Main dataset - number of participants		PGSI 1+ dataset - number of participants	
	Unweighted	Weighted	Unweighted	Weighted
Gambling status and PGSI score				
People who have not gambled (past 12 months)	1,167	1,174	0	0
People who gamble – PGSI = 0	1,604	1,604	0	0
People who gamble – PGSI = 1-2	261	255	438	438
People who gamble – PGSI = 3-7	144	144	183	183
People who gamble – PGSI = 8+	100	99	175	175
Total	**3,276**	**3,276**	**796**	**796**
Net - PGSI 1+	**505**	**498**	**796**	**796**
People affected by the gambling of others				
	Unweighted	Weighted	Unweighted	Weighted
Affected others who do not gamble	84	81	0	0
Affected others who gamble – PGSI = 0	109	107	0	0
Affected others who gamble – PGSI = 1+	63	62	131	118
Net - Affected others	**256**	**250**	**131**	**118**

Appendix Table B.2 below provides details of the samples in the datasets by key demographic characteristics before any derived variables were created. For age and ethnicity derived variables were created to group participants into larger categories for analysis, as described below. YouGov collects and periodically refreshes data on a wide range of sociodemographic characteristics from their online panellists. Chapter 4 explores stigma among participants across a range of sociodemographic variables, controlling for PGSI level. Data on gender identities, such as trans or non-binary identities were collected by YouGov, but the sample sizes were too low to allow for any analyses.

Appendix Table B.2: Demographic characteristics of the sample provided

	Main dataset (general population)			Dataset of people who experience gambling harms (PGSI1 +)		
Age						
	Ages 18-34	**Ages 35-54**	**Age 55+**	**Ages 18-34**	**Ages 35-54**	**Age 55+**
Unweighted base	956	1,157	1,163	331	307	158
Weighted base	920	1,098	1,258	309	320	167
Gender						
	Male	**Female**		**Male**	**Female**	
Unweighted base	1,599	1,677		414	382	
Weighted base	1,603	1,673		496	300	
Sexuality						
	Heterosexual	**LGB+**		**Heterosexual**	**LGB+**	
Unweighted base	2,738	380		671	85	
Weighted base	2,747	372		675	81	
Ethnicity						
	White ethnicities	**Ethnic minorities (excluding White ethnic minorities)**		**White ethnicities**	**Ethnic minorities (excluding White ethnic minorities)**	
Unweighted base	2,895	381		677	119	
Weighted base	2,908	368		686	110	
Limiting health condition or disability expected to last 12 months or more						
	Yes, limited a lot	**Yes, limited a little**	**No**	**Yes, limited a lot**	**Yes, limited a little**	**No**
Unweighted base	301	637	2,329	100	161	532
Weighted base	304	646	2,318	91	161	541

Notes

Weighting

Both datasets were weighted by YouGov to allow for generalisability of the findings, using Random Iterative Method (RIM) weighting, whereby weights were recalculated iteratively until the required level of accuracy reached. See below for how each dataset was weighted:

- The main dataset was weighted to be representative of the general population of Great Britain adults. Weights were applied on a cross of age / gender / ethnicity, socioeconomic group and region. Additionally a country weighting was applied so that the sample was proportionate to the populations of England, Scotland and Wales;

- The PGSI 1+ dataset was weighted to be representative of those in the Great Britain population who gamble with a score of PGSI 1+. Weights were applied by gender, age and socioeconomic status.

B2. Variables

The datasets included variables for the questions asked regularly in this survey concerning gambling participation, the Problem Gambling Severity Index (PGSI), access to and awareness of treatment and support services, and some questions about harms from the gambling of others. In addition to these regular questions, NatCen and University of Wolverhampton contributed a module of questions relating to stigmatisation and discrimination for the August 2023 Mini-dip. Finally, a range of sociodemographic variables were included, which YouGov's online panel members are asked when they first join and then at periodic intervals to keep the data updated.

Data preparation was carried out on the variables of interest, including gambling stigma-related variables, access to treatment and support, gambling types, and selected sociodemographic variables. Derived variables created for the analyses are outlined in the next section.

Specific variables relating to gambling harms, stigmatisation, and discrimination, used in this research

Problem Gambling Severity Index (PGSI)

This widely-used 9-item scale is routinely included in the YouGov Mini-dip survey. It is asked of people who have gambled in the last 12 months. Response options are scored on a range from 1 to 4: 1 = 'Never', 2 = 'Sometimes', 3 = 'Most of the time', 4 = 'Almost Always'.

The PGSI undergoes frequent analysis using a categorical variable based on groupings by score. Those who answer 'Never' to all nine items score 0 and are classed as 'non-problem', those who score 1-2 total are classed as 'low-risk' or low level of problems, those who score 3-7 total are classed as 'moderate-risk', and finally those who score 8 or above are classed as having 'problem' gambling.[103] Some studies use PGSI as a continuous measure and there has been research which has compared results when using PGSI as both a categorical and continuous variable.[104]

[103] Victorian Responsible Gambling Foundation. Problem Gambling Severity Index (PGSI). Webpage. Available from: https://responsiblegambling.vic.gov.au/for-professionals/health-and-community-professionals/problem-gambling-severity-index-pgsi/. [Accessed 11 January 2024].
[104] Butler, N., Quigg, Z., Bates, R. et al. Gambling with Your Health: Associations Between Gambling Problem Severity and Health Risk Behaviours, Health and Wellbeing. J Gambl Stud 36, 527–538 (2020). https://doi.org/10.1007/s10899-019-09902-8

Indexes and scales selected or developed for this research

Following the results from the Rapid Evidence Assessment conducted at the start of this study, and further discussions between NatCen and the University of Wolverhampton, the following measures were selected or modified for use in the survey and analysis.

Where validated or bespoke scales have been used, tests were conducted for internal consistency (reliability) using Cronbach's alpha. These are reported with each of the scales below.

Gambling Perceived Stigma Scale (GPSS)[105]

GPSS is a 13-item question that aims to assess how individuals (the general public) think people who gamble are generally perceived by others (perceived stigma). The question was presented to all participants. The response categories are on a scale of 1–4 from Strongly Disagree, Somewhat Disagree, Somewhat Agree, Strongly Agree.

The Cronbach's Alpha scores for GPSS were: Dataset of people who had gambled in the past 12 months and who had a score of PGSI 1+ (13 items, α = .90); General population dataset (13 items, α =.90).

Gambling Experienced Stigma Scale (GESS)[106]

A 13-item scale that assesses individual thoughts of people who gamble, about their own experiences of stigma (experienced stigma). This scale was presented to people who had gambled in the past 12 months. The response categories are as for the GPSS above.

The Cronbach's Alpha scores for the GESS were: Dataset of people who had gambled in the past 12 months and who had a PGSI score of 1+ (13 items, α = .95); General population dataset (13 items, α = .95).

People experiencing indirect gambling harms – stigma scale (Affected Others Experienced Stigma Scale (AOESS))

To measure the level of stigma among people who experience harms from the gambling of someone close to them who gambles (also referred to as 'affected others'), a novel short scale consisting of four items derived from the GESS was developed. This is referred to as the Affected Others Experienced Stigma Scale (AOESS).

This mini-scale was presented to participants who had responded 'Yes' to two core questions regularly presented in the YouGov/GambleAware survey, firstly: 'Do you think anyone you know has or previously had a problem with their gambling? This could include family members, friends, work colleagues or other people you know.' Participants who answered 'Yes' were then asked: 'And do you feel you have **personally** been negatively affected in any way by this person / these people's gambling behaviour? This could include financial, emotional or practical impacts.'

Participants who answered 'Yes' to both the above two questions were later presented with the following introductory text and four statements:

[105] Donaldson, P., Langham, E., Best, T., & Browne, M. (2015). Validation of the gambling perceived stigma scale (GPSS) and the gambling experienced stigma scale (GESS). Journal of Gambling Issues.
[106] *Ibid.*

'Earlier, you told us that you feel you have **personally** been negatively affected by the gambling behaviour of a person or people you know. Please indicate how much you agree with each of the following statements.

1. I feel the need to hide the person's gambling from my friends.
2. People have criticised or insulted me because of the person's gambling.
3. Once they know that someone close to me is a person who gambles, most people will take my opinion less seriously.
4. People think less of me for maintaining a relationship with the person who gambles.'

The response categories were the same as for GPSS and GESS that is a 4-point scale from Strongly disagree through to Strongly agree.

We did not specify 'past 12 months' or any time period, in line with the two lead-in questions above. However, the wording of three of the four items shown above implicitly invites participants to consider experiences of stigma from the other person's current gambling.

The Cronbach's Alpha scores for the AOESS were: Dataset of people who had gambled in the past 12 months and who had a PGSI score of 1+ (4 items, α = .74); General population dataset (4 items, α = .81).

Internalised stigma – gambling – adapted from ISMI-9 (GISS)

The brief 9-item form of the Internalized Stigma of Mental Illness Scale was adapted,[107] to produce a 9-item scale for use in this study of gambling harms and stigmatisation. The items were modified by replacing phrases such as 'the mentally ill' with 'people who gamble', and 'because I have a mental illness' with 'because I gamble'. The question was asked of people who had gambled in the past 12 months. Response options were Strongly Disagree, Disagree, Agree, Strongly Agree.

The Cronbach's alpha scores for the GISS scale were: Dataset of people who gambled with a PGSI score of 1+: (9 items, α =.84); General population dataset (9 items, α =.76).

Intersectional Discrimination Index – Day to Day (InDI-D)

A 9-item scale used to measure discrimination across a range of characteristics was also included in the analysis.[108] This question was presented to all participants and is not overtly related to gambling. The question stem was modified to include gambling-related problems as one characteristic that might lead people to experience discrimination:

> *These next questions are about experiences related to **who you are.** This includes both **how you describe yourself and how others might describe you.** For example, your skin colour, ancestry, nationality, religion, gender, sexuality, age, weight, disability or mental health issue, gambling-related problems, or income.*

Response options ranged from 'Never' through to 'Yes, many times in the past year'.

[107] Hammer, J. H., & Toland, M. D. (2017). Internal structure and reliability of the Internalized Stigma of Mental Illness Scale (ISMI-29) and brief versions (ISMI-10, ISMI-9) among Americans with depression. Stigma and Health, 2, 159-174. doi: 10.1037/sah0000049

[108] Scheim, A. I., & Bauer, G. R. (2019). The Intersectional Discrimination Index: Development and validation of measures of self-reported enacted and anticipated discrimination for intercategorical analysis. Social Science & Medicine, 226, 225–235. https://doi.org/10.1016/j.socscimed.2018.12.016

Cronbach's alpha scores for InDI-D were: Dataset of people who had gambled in the past 12 months and who had a PGSI score of 1+ (4 items, α = .92); General population dataset (4 items, α = .91).

Drug use

There was no regular question in the YouGov online panel relating to use of illegal drugs, so a question on past year use of an illegal drug or of prescription medication for non-medical reasons was included.[109] For the present study, the response options provided were: 'Never', 'Yes, not in past year', 'Yes, once or twice in past year', Yes, many times in past year', 'Prefer not to say'.

The K6 Kessler scale

The short 6-item Kessler scale (K6) is designed to monitor population prevalence in non-specific psychological distress.[110] There are five response options ranging from 'None of the time' to 'All of the time', coded 0–4. This gives a range of total scores giving a range for the total score of 0-24.

Vignettes

Vignettes (short stories about hypothetical individuals), followed by multiple choice questions, were used to gauge people's attitudes towards people experiencing gambling harms. The vignettes covered seven different scenarios, with two versions of each - one describing a male protagonist, and the other a female protagonist; all conditions are summarised in Appendix Table B.3, and the full text of the vignettes can be found in Appendix A. The main body of each vignette (i.e. the description of the protagonist's gambling experiences) was based on Hing et al. (2016):[111] vignettes 1 and 2 described someone gambling without harms, and the remainder described someone experiencing gambling harms, with descriptions suggesting that the person was showing five of the DSM symptoms of 'gambling disorder'. Initials ('AJ') were used rather than a forename for the protagonist, to avoid biasing participants' assumptions about age, social class or ethnicity.

A between-subjects design was used for the vignette component of the study, in order to avoid participant burden, as well as to avoid the possibility of different vignette combinations influencing participants' responses across scenarios. This resulted in approximately 250 participants receiving each of the 14 vignette conditions.

Appendix Table B.3: Summary of vignette conditions

Vignette conditions	
(1) Gambling, no harms, male	(2) Gambling, no harms, female
(3) Gambling harms, male	(4) Gambling harms, female
(5) Gambling harms + identifies as LGBTQ, male	(6) Gambling harms + identifies as LGBTQ, female
(7) Gambling harms + mental health problems, male	(8) Gambling harms + mental health problems, female
(9) Gambling harms + substance use, male	(10) Gambling harms + substance use, female
(11) Gambling harms + minority ethnicity, male	(12) Gambling harms + minority ethnicity, female
(13) Gambling harms + low income, male	(14) Gambling harms + low income, female

[109] Smith, P. C., Schmidt, S. M., Allensworth-Davies, D., & Saitz, R. (2010). A single-question screening test for drug use in primary care. Archives of internal medicine, 170(13), 1155–1160. https://doi.org/10.1001/archinternmed.2010.140

[110] Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological medicine, 32(6), 959–976. https://doi.org/10.1017/s0033291702006074

[111] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. Journal of Behavioral Addictions, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057

After being presented with one of the vignettes, questions probing participants about their attitudes towards the hypothetical individual described included a validated measure of social distance (a proxy for stigma), and items that have been used to measure constructs associated with, or predictive of, stigma in other studies (i.e. perceptions of harmfulness, noticeability, recoverability and disruptiveness, and beliefs about origins of harm). The specific measures used were as follows:

The Social Distance Scale (SDS; Martin et al 2000)

This is a 6-item measure of desire for social distance (with a Cronbach's alpha of >.85 when applied to gambling (Hing et al., 2016)),[112] where participants rate how willing they would be to do things like 'be friends with' or 'live next door' and individual described (e.g. in a vignette). Each item is scored from 1 (definitely willing) to 4 (definitely unwilling), giving a total score out of 24, with higher scores indicating greater desire for social distance from the hypothetical person (- a proxy measure for stigmatisation and discrimination). Cronbach's alpha for this scale in the current study was .893.

Perceived harmfulness

Two items probed about perceived harmfulness of the individual described (based loosely on Horch & Hodgins' (2008) 'perceived dangerousness' item, adjusted in consultation with our lived experience panel to better apply to gambling).[113] The first asked 'How likely do you think it is that X would cause hurt or harm to other people?' and the second 'How likely do you think it is that X would cause hurt or harm to themselves'. They were scored from 1 (extremely unlikely) to 5 (extremely likely), with higher scores indicating greater perceived harmfulness of the individual in the vignette.

Perceived noticeability

A single item probed about the perceived noticeability/concealability of the individual's situation (taken from Hing et al., 2016). Responses were scored from 1 (not at all noticeable) to 5 (extremely noticeable), i.e. higher scores indicated a belief that the situation was more noticeable. Due to the wording of this item ('How noticeable would X's situation be to their family and friends if they hadn't told them about it?') this was only presented after vignettes 3-14 (i.e. not after the vignette describing a person not experiencing harm).

Perceived disruptiveness

A 4-part item was adapted from the 'Key Informants' Questionnaire (Alem et al, 1999)[114] to apply to gambling (Hing et al., 2016),[115] to assess perceived disruptiveness of the situation, which asks participants to rate how much they think the individual's situation would impact their ability to live independently, be in a serious relationship, work/study, or be successful. The last option ('be successful') was added, in response to lived experience panel input. Responses were scored from 1 (not at all) to 4 (a large amount), with higher scores indicating higher perceived disruptiveness. Again, this was only presented to those receiving vignettes 3-14 (as it does not make sense to ask about the individual described in the 'no harms' vignette conditions).

[112] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. Journal of Behavioral Addictions, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057
[113] Horch, J. D., & Hodgins, D. C. (2008). Public Stigma of Disordered Gambling: Social Distance, Dangerousness, and Familiarity. Journal of Social and Clinical Psychology, 27(5), 505–528. https://doi.org/10.1521/jscp.2008.27.5.505
[114] Alem, A., Jacobsson, L., Araya, M., Kebede, D., & Kullgren, G. (1999). How are mental disorders seen and where is help sought in a rural Ethiopian community? A key informant study in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, 100(S397), 40–47. https://doi.org/10.1111/j.1600-0447.1999.tb10693.x
[115] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. Journal of Behavioral Addictions, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057

Perceived Causes

A 6-part question asked participants (who received vignette 3-14) to rate the extent to which they attribute the hypothetical individual's circumstances to each of six different causes ('bad character'; 'chemical imbalance in the brain'; 'stressful life circumstances'; 'genetic/inherited problem'; 'god's will'; and 'the way they were raised'). This was based on the 'Perceived Causes' scale developed by Link et al. (1999)[116] and used in relation to gambling by Hing et al (2016).[117] Responses were scored from 1 (extremely unlikely) to 5 (extremely likely), i.e. a higher score on a given item indicated greater belief in that cause having been the reason for the gambling harms.

Perceived recoverability

A single item (presented to those receiving vignettes 3-14) probed about the perceived recoverability of the individual from their situation (taken from Hing et al., 2016). Responses to the question 'How strongly do you agree or disagree that people can recover from X's situation?' were scored from 1 ('strongly disagree') to 5 ('strongly agree'), i.e. higher scores indicated a greater belief that the hypothetical individual could recover from their situation.

Level of prior contact measure

This was adapted from Holmes' (1999) 'level of contact report' and was included to allow us to explore the idea that level of prior contact with people with experience of gambling harm may be associated with reduced stigma.[118] In order to measure the degree of familiarity/contact participants had with people experiencing gambling harms, they were asked to tick off which of 12 types of contact they have had (options include things like having had contact with a colleague/relative/member of the household experiencing gambling harms – indicating high level of contact, and having seen a documentary about someone experiencing gambling harms – indicating a more distant level of contact). We modified language slightly to make more accessible and current, and in response to lived experience panel and expert advisors' recommendations. Specifically, we merged two items which referred to having experience of working in service provision for people with gambling harms, as stakeholders found it difficult to see the very subtle difference between them. We also modified items 3 (which refers to having seen a character experiencing gambling harms on TV or in movies) to include 'in books', and item 4 (which refers to having seen a real person experiencing gambling harms in a documentary or article) to include 'on social media'). Scoring was hierarchical, ranging from 1 (no experience of contact at all) to 11 (first-hand lived experience). In line with Holmes, participants received the score corresponding to the highest level of contact that they reported (regardless of how many other forms of contact they reported), so scores ranged from 1-11.

B.3 Data preparation

Indexes and scales relating to gambling harms, stigma and discrimination – data preparation

Derived variables were created for the indexes and scales used, as follows.

For **PGSI**, YouGov had provided a PGSI total score variable in the cleaned and weighted dataset. In addition, a categorical variable was created based on the commonly-reported four groups according to PGSI scores: PGSI 0, PGSI 1-2, PGSI 3-7, and PGSI 8+. For use in analyses drawing on the general population dataset,

[116] Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. American Journal of Public Health, 89(9), 1328–1333. https://doi.org/10.2105/AJPH.89.9.1328

[117] Hing, N., Russell, A. M. T., & Gainsbury, S. M. (2016). Unpacking the public stigma of problem gambling: The process of stigma creation and predictors of social distancing. Journal of Behavioral Addictions, 5(3), 448–456. https://doi.org/10.1556/2006.5.2016.057

[118] Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Changing Attitudes About Schizophrenia. Schizophrenia Bulletin, 25(3), 447–456. https://doi.org/10.1093/oxfordjournals.schbul.a033392

participants who had not gambled in the past 12 months were coded as 'Do not gamble' in the PGSI derived variable.

Owing to very low base sizes in some analyses two further categorical variables for PGSI were created, 'binning' some of the smaller groups together:

- Whether gambled / level of problems with gambling: Three categories - Do not gamble, PGSI 0, PGSI 1+ (used for some of the analyses based on the General Population Dataset);

- Level of problems with gambling: Two categories – PGSI 1-2, PGSI 3+ (used for some analyses based on the dataset of people who had gambled in the past year and experienced problems from gambling (PGSI score of 1+).

For **GPSS**, **GESS**, **AOESS**, **GISS (from ISMI-9)**, and **InDI-D** derived variables were created for total scores. Derived variables were also created for total scores for the two GPSS subscales: Ostracism and Contempt.

Reverse coding of items 2 and 9 was carried out on the **GISS (ISMI-9)** variables before deriving the total score variable.[119] In the case of **InDI-D** which had four response categories, responses 'Never' and 'Yes, but not in the past year' were combined to produce three final response categories: 'Never or Yes, but not in past year', 'Yes, once or twice in past year', and 'Yes, many times in past year'.[120]

For **K6**, a derived categorical variable was created with three groupings: No or low mental distress (K6: 0-4), Moderate mental distress (K6: 5-12), and Serious mental distress (K6: 13+).[121]

Sociodemographic variables – data preparation

Derived variables were created for selected sociodemographic characteristics, as shown in Appendix Table B.4.

Appendix Table B.4: Derived variables for sociodemographic characteristics

Derived variable	Original variable	Number of response categories	Response categories for the derived variable
ethnicity_2groups	ethnicity_new	2	• White ethnicity (English, Welsh, Scottish, Northern Irish, British) • Minority ethnicity (including White minority ethnicities: Irish,
religion_2groups	profile_religion	2	• No religion • Belonging to a religion
sexuality_2groups	sexuality_pdl	2	• Heterosexual Lesbian, Gay or Bisexual
marital_3groups	profile_marital	3	• Married or in a civil partnership • Single, separated, divorced or widowed

[119] Hammer, J.H. Internalized Stigma Of Mental Illness Scale-9 (ISMI-9). [Webpage]. https://drjosephhammer.com/research/internalized-stigma-of-mental-illness-scale-9-ismi-9/

[120] Scheim, A. I., & Bauer, G. R. (2019). The Intersectional Discrimination Index: Development and validation of measures of self-reported enacted and anticipated discrimination for intercategorical analysis. Social Science & Medicine, 226, 225–235. https://doi.org/10.1016/j.socscimed.2018.12.016

[121] Prochaska, J. J., Sung, H. Y., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale as a measure of moderate mental distress based on mental health treatment need and utilization. International journal of methods in psychiatric research, 21(2), 88–97. https://doi.org/10.1002/mpr.1349

			• Living with a partner (but not married or in a civil partnership), OR In a relationship but not living together
hhdsize_3	profile_household_size	3	• Living alone • Living with one other person • Living with two or more people
hhdchildren_3	profile_household_children	3	• No children • 1 child • 2 or more children
gross_hhd_3groups	profile_gross_household	3	• Under £5,000 to £34,999 • £35,000 to £69,999 • £70,000 and over

Note: Where the original variable offered options such as Prefer not to say, Not applicable, Don't know, or Other, these response categories have been retained and generally treated as missing data and excluded from the analyses.

B4. Analysis - stigma indexes and scales

Descriptive statistics and correlation analyses have been applied in providing the analyses in this report.

The first set of analyses explored the level of reported stigmatisation among the general population (those who had gambled in the past 12 months). Crosstabulations were used to assess whether there was an association between PGSI level and, in turn, gambling-related experienced stigma (GESS), gambling-related internalised stigma (GISS), and gambling-related stigma experienced by those who were affected by the gambling of others (AOESS). For the three stigma scores, the total score variable was used in order to produce a mean score as the statistic, while for PGSI, a categorical variable based on groupings by PGSI score was used.

A further crosstabulation was conducted using the main general population dataset to assess the level of perceived gambling-related stigma (GPSS) among all participants (including those who had not gambled in the past 12 months and those who had). GPSS mean score calculated from the GPSS total score variable was crosstabulated by PGSI score category.

To examine whether there was a relationship between the various stigma scales among people who experience problems from gambling, we used the PGSI 1+ dataset to conduct a series of partial correlations. The analyses examined the relationship between GESS and GISS, GESS and GPSS, and GISS and GPSS, in each case controlling for the influence of PGSI on both of the stigma scales being analysed. For the partial correlations, the total score variables was used for the three stigma scales and also for PGSI. The values of the Pearson's correlation coefficient can range from 0 in the absence of any correlation to 1 in the case of a perfect correlation. The strength of the relationship is considered to be strong if values are within the range +/- .7 to .9, moderate if values are within the range +/- .4 to .6, and weak if values are in the range +/- .1 to .3. The correlation can be positive or negative, for example if higher experienced stigma is correlated with higher internalised stigma, this would be a positive correlation.

For the remainder of the analyses performed on the stigma scales, nested crosstabulations were used to examine the mean GESS score by PGSI category and a series of sociodemographic variables, use of treatment and support services, types of gambling activity, and health, wellbeing and health behaviours.

Significance testing

Significance testing was carried out on the results of the analyses of stigma (as measured by the indexes and scales) in this report. The term 'significant' refers to statistical significance at the 95% level and is not intended to imply substantive importance.

The significance tests were carried out to test the relationship between variables in a cross tabulation, usually an outcome variable such as gambling-related experienced stigma mean score (nested within PGSI categories), cross-tabulated with an explanatory variable such as age (in categories), ethnicity (in categories), or used treatment and support services (in categories). The tests were conducted for the main effects only (using a Wald test),[122] while controlling for differences in severity of gambling. For example, the test might examine whether

[122] The Wald test is a statistical test used to calculate the significance of parameters in a statistical model. The Wald test was used in analysis of the data in this report to establish whether the association among particular variables is statistically significant. For example, the test might help to establish whether there is a statistically significant relationship between experienced stigma (GESS) mean score and ethnicity (after controlling for PGSI) and between experienced stigma and PGSI (after controlling for ethnicity). The test calculates the statistical significance of parameters in a logistic regression model of stigma mean score in order to establish whether ethnicity and PGSI are

there is a statistically significant relationship between mean GESS score and age overall (after controlling for PGSI). It would not test for relationships between specific mean GESS scores and age.

It is worth noting that the test does not establish whether there is a statistically significant difference between any particular pair of subgroups (e.g., the highest and lowest subgroups). Rather, it seeks to establish whether the variation in the outcome between groups that is observed could have happened by chance or whether it is likely to reflect some 'real' differences in the population.

In addition to testing for the main effects, significance tests for interaction effects were also carried out. Interaction effect refers to a situation where the relationship between an outcome variable and an explanatory variable varies depending on a second explanatory variable. For example, a test was carried out to see whether the variations in PGSI categories by mean GESS score followed the same pattern in different age groups.

Significance testing was also carried out on the partial correlations, at the 95% level.

Mean scores for scales such as the Gambling Experienced Stigma Scale (GESS) are reported. These are estimates of the average mean score that would occur in the population being studied. The sample is weighted to be representative of the general population (main dataset), or the population of people who experience problems from gambling (PGSI 1+ dataset). Standard errors indicate how much higher or lower the true mean (average) in the population being studied might be compared with the estimate provided from this sample.

B5. Vignette analysis

A series of 2-way ANOVAs were conducted to test for main effects of gender and other vignette characteristics on the aforementioned variables associated with stigma; i.e. desire for social distance (the key proxy measure of stigma used in relation to the vignettes), and beliefs about origin, recoverability, harmfulness, disruptiveness and noticeability. Due to violation of parametric assumptions for some variables, data were analysed using robust two-way independent factorial ANOVAs based on a 20% trimmed mean, using the WRS2 package in R. Where main effects were significant, post-hoc multiple comparisons to identify which vignette conditions differed from one another were conducted using the Games-Howell test in SPSS – this t-test does not rely on equal variances and sample sizes, as it uses ranked variables. It is based on Welch's degrees of freedom and controls for type I error for the entire comparison and is considered particularly appropriate where 6 or more conditions are compared with >50 cases per group (Lee & Lee 2018)[123] – i.e. the conditions present in this analysis.

In order to explore how multiple factors combined to influence desire for social distance, a multiple linear regression with 'desire for social distance' as the criterion variable and stigma-related constructs (beliefs about origin, recoverability, disruptiveness, harmfulness and noticeability) was also conducted, with appropriate assumption checks.

Crosstabulations were used to explore differences in the proportion of participants endorsing particular beliefs/attitudes, based on various factors (e.g. to compare proportion of people with and without lived

significantly associated with mean GESS score. Testing was at the 95% level and differences described in the report as significant, were statistically significant at least at the 95% level ($p < .05$).

[123] Lee, S., & Lee, D. K. (2018). What is the proper way to apply the multiple comparison test? Korean Journal of Anesthesiology, 71(5), 353–360. https://doi.org/10.4097/kja.d.18.00242

experience of gambling harms who would be willing to engage with someone experiencing gambling harms), with significance tests (e.g. Chi-square/Fisher's Exact test) where relevant.


LIVERPOOL
JOHN MOORES
UNIVERSITY


National Centre
for Social Research


UNIVERSITY OF
WOLVERHAMPTON