

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Cognitive testing - slide deck of findings
Date: 13 April 2022 13:04:25

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Hi [REDACTED]

I have now been through your comments on the slides and actioned most of them. However, I have a query about the comments on the summary of cognitive testing findings and next steps. How are you envisaging that the cognitive testing and pilot findings will be presented? Will these be presented as part of one overall presentation or two separate ones?

The cognitive testing findings on the letters really need to be considered in the context of what we found when we tested these letters in the pilot. What we know from the pilot is that the letters successful in attracting gamblers. Non-gamblers were under-represented. The letter may play a part but the way in which we select individuals 16+ within households to take part may also contribute to non-response bias. What we want to do is look at both of those issues at the experimental stage.

In terms of presenting next steps to stakeholders, the next steps are what I described in the last slide:

Consider cognitive testing findings together with the pilot findings

Agree changes needed

Agree plan for further testing/evaluation

Do you want to include this as part of the presentation to stakeholders? I am not sure that we are at that point yet. [REDACTED] will be able to advise on when we were planning to agree next steps with you.

Happy to discuss further today [REDACTED] if a call would be helpful.

Kind regards

[REDACTED]

Thanks,

[REDACTED]

From: [REDACTED]
Sent: 08 June 2022 16:12
To: [REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>; [REDACTED]
<[\[REDACTED\]@natcen.ac.uk](mailto:[REDACTED]@natcen.ac.uk)>; [REDACTED]
[REDACTED]
Cc: [REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>
Subject: RE: Experimental statistics phase - feedback

Hi [REDACTED]

[REDACTED]. Please see attached our updated proposal for the experimental statistics phase based on our discussion a couple of weeks ago and the comments below. Unfortunately we have yet to finalise what sample size we can afford within the existing budget for the soft launch stage yet but we will be able to give you an indicator of what this will be at our meeting tomorrow. It would be great if you could review the attached proposal, especially Step 1 and Step 2, prior to our meeting tomorrow as the set up work for Step 1 will need to commence very shortly to meet the current proposed timetable.

Thanks,

[REDACTED]

From: [REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>
Sent: 24 May 2022 21:21
To: [REDACTED] <[\[REDACTED\]@natcen.ac.uk](mailto:[REDACTED]@natcen.ac.uk)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@natcen.ac.uk](mailto:[REDACTED]@natcen.ac.uk)>; [REDACTED]
[REDACTED]
Cc: [REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@gamblingcommission.gov.uk](mailto:[REDACTED]@gamblingcommission.gov.uk)>
Subject: Experimental statistics phase - feedback

Hi All

[REDACTED] and I have reviewed the experimental stage proposal and added comments, but I don't think it is quite in line with our thinking just yet as you'll see from the comments but in summary;

- We should focus the first step on reducing the non-response bias from non gamblers but be realistic about what we'll actually be able to achieve. The focus of the experiments should be on the recommendations in the pilot report e.g. household selection and the invitation letter, we don't want to undertake the incentive experiment (although not ruling it out in the future). A sample of 8,000 respondents at this stage feels too much.
- Step 2 in the proposal is really important for us in terms of being able to develop a new participation question, this builds on feedback from stakeholders too so we are keen to

get Step 1 completed ASAP so we can move to this stage.

- There is nothing included about unpicking the PG results further once we have more sample, given that the sample size in the pilot survey limited the amount of analysis that could be done. The pilot report refers to further work being done to unpick the privacy/confidentiality concerns and also possible ordering effects. There will also be the opportunity to do a lot more analysis of the PG data, by mode of completion, by demographic groups etc. We appreciate that we may need to resource this internally but it will be important going into the soft launch and the development of a dashboard so we have some early thinking of how we want to present the data.
- There is no mention of how we'll continue to develop the harms questions in the experimental stage although appreciate this may get picked up by the additional work we have commissioned but internally we will also need to show how this work will also progress through the year.
- Like the idea of soft launch which will prepare us to move to Stage 3. We need to up the number of responses proposed for the soft launch though as we don't feel 2,000 is enough.
- Overall, the sample size for the experimental year is 14,000 responses but we would like this figure to be closer to 20,000 given the additional investment we've secured for the project to boost the sample.

[REDACTED] and will be able to join the call on Thursday to discuss this so we can progress to agreeing costs, getting the contract agreed for the next 12 months and then commencing the experimental phase. I'm around tomorrow though and could jump on a call if needed?

Thanks

[REDACTED]

[REDACTED]

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[REDACTED]

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To: [REDACTED]@natcen.ac.uk>; [REDACTED]
[REDACTED]@gamblingcommission.gov.uk>
Cc: [REDACTED]@natcen.ac.uk>; [REDACTED]
[REDACTED]@gamblingcommission.gov.uk>
Subject: RE: Gambling survey: invitation and reminder letters for Step 1

Hi [REDACTED]

Yes OK we're happy with leaving it as 'games'

Thanks

[REDACTED]

From: [REDACTED]@natcen.ac.uk>
Sent: Wednesday, August 3, 2022 9:14 AM
To: [REDACTED]@gamblingcommission.gov.uk>; [REDACTED]
[REDACTED]@gamblingcommission.gov.uk>
Cc: [REDACTED]@natcen.ac.uk>; [REDACTED]
[REDACTED]@gamblingcommission.gov.uk>
Subject: RE: Gambling survey: invitation and reminder letters for Step 1

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Hi [REDACTED]

Apologies I missed that part of the change. My feeling however is that we should not add the "you play" as this may be read as the survey only being applicable to you if "you play" these games and hence exasperate the non-gamblers non-response bias. I.e. someone just reading the header may read "Help us understand the nation's feelings towards lotteries, betting and games you play" and think 'I don't play any of those' and therefore not read the rest of the letter or complete the survey.

Please could you confirm if you are happy to keep the letters as they are and, if so, sign them off for printing (we are due to send them to the printer today)?

Thanks,

[REDACTED]

Understanding the differences between prevalence survey estimates – insights from the real world

August 2022

Introduction

On 24th May 2022, The Gambling Commission published a report from NatCen¹, setting out findings from a pilot for a new gambling prevalence survey (the 'Pilot Survey') which it is envisaged will replace the gambling sections of the Combined Health Surveys from 2023 onwards. Headline findings from the Pilot Survey included a rate of annual gambling participation (63%) higher than reported by recent Health Surveys (54% in 2018; 57% in 2016) as well as much higher rates of PGSI 'at risk' and PGSI/DSM-IV 'problem' gambling.

Both the Gambling Commission and NatCen have emphasised that the Pilot Survey and the next round of data collection (scheduled for summer 2022) will be badged as "*experimental statistics*" and have cautioned against how much weight should be accorded them. Despite such statements, both NatCen (which is also responsible for analysis of the gambling sections of the Combined Health Surveys) and the Gambling Commission have used the Pilot Survey findings to cast doubt on the accuracy of the Health Surveys, which had previously been described as meeting the "*gold standard*". In attempting to explain the differences in participation rates for gambling and the prevalence of 'at risk' and 'problem' gambling, the authors of the report wrote: "*The analysis...highlights two potential causes of the differences between the prevalence estimates produced by HSE 2018 (including the trend-adjusted figures) and the pilot survey. Firstly, it appears likely that the pilot survey participants were more likely to be gamblers. This will have led to higher prevalence rates than HSE 2018 where there is no reason to expect that gamblers would have been more likely to take part. Secondly, it appears that there were differences between the two surveys in the way that survey participants completed the PGSI, with the differences greatest for women. Pilot survey participants were more likely than their HSE 2018 counterparts to have their gambling behaviour rated as low or moderate risk or problematic. It is hard to know which of the estimates are most accurate.*"

NatCen's explanation indicates a fairly even balance of probability with regard to whether the Health Survey 2018 or the Pilot Survey is likely to be more accurate. The suggestion of roughly equal likelihood of accuracy is surprising given that NatCen was effectively comparing results from an untested pilot survey with a small sample of respondents (n=1,077) with those from the latest in a series of large-sample² surveys with reasonable levels of consistency between editions. Others however, have gone further, suggesting that the Pilot Survey has revealed issues with the Health Surveys. In June 2022, the chief executive of the Gambling Commission, Andrew Rhodes told the parliamentary Select Committee for Culture Media and Sport that 'problem gambling' estimates from Health Surveys were likely to be under-estimates³ and linked this statement to the Pilot survey: "*We think there is under-reporting*⁴. *It is not necessarily that we think that the quantum is worse than it was, but the strategy*

¹ Ashford et al., 2022

² The sample size for the Health Survey 2018 was 7,126 while the Combined Health Surveys for 2015 and 2016 were based on samples of 15,563 and 14,765 respondents respectively

³ This judgement was offered without substantiation but echoes caveats provided by NatCen in previous reports on findings from the gambling sections of the Health Surveys which relate to the exclusion from surveys of various 'vulnerable groups'

⁴ We have assumed here that Mr Rhodes was referring to the prevalence rate of 'problem gambling'. It is not clear to us how to reconcile his claims of under-reporting with his subsequent comment that "it is not necessarily that we think the quantum is worse than it was" or a later claim that "the headline rates of gambling harm as measured by an official statistic have been falling".

and the work that we have done suggests that there is underreporting here. That is why we have launched the pilot and that is why we have made a financial commitment over the next multiple years in our budget to carry on that work, because we think understanding the level of harms and the wider effects is very important.”

In this report, we examine the arguments commonly made in relation to under-reporting and consider other factors that may result in over-reporting.

The consequence of NatCen’s report and the Gambling Commission’s public statements has been to cast doubt on the accuracy of findings from a decade of the Health Surveys⁵ and at the same time to encourage speculation in relation to the ‘true’ prevalence of ‘at risk’ and ‘problem’ gambling. The implications of this may extend further – suggesting perhaps that the Adult Psychiatric Morbidity Survey 2007 (which reported a similar ‘problem gambling’ prevalence rate to the British Gambling Prevalence Survey⁶ 2007) and the DCMS Taking Part Survey (which has estimated participation in specific gambling activities) were also incorrect. Meanwhile, the suggestion that the gambling sections of the Health Surveys have been inaccurate raises questions about the reliability of all findings in the NHS Health Surveys.

While the migration away from the Health Surveys to a web-based survey vehicle may be justified on the grounds of cost and practicality, we consider that greater circumspection may be warranted given a) the experimental nature of the Pilot Survey and b) a significant omission from NatCen’s reporting which we turn to now.

A significant omission

Perhaps the most curious aspect of the NatCen report is not what the researchers put in - but what was left out. The Pilot Survey is largely concerned with gambling behaviours in 2021⁷. That year was, however, far from ‘normal’. Large parts of the licensed gambling industry (arcades, betting shops, bingo clubs and casinos) spent long periods in lockdown and were therefore unable to trade.

Table 1: Effect of lockdown restrictions on non-remote gambling venues in 2021			
Venues	Lockdown dates	Days closed in 2021	% of year
Licensed Betting Offices	1st January to 11th April	101	28%
Arcades, bingo clubs, casinos, pubs, racecourses	1 st January to 16 th May	136	37%

Once permitted to reopen, they and their customers continued to be bound by Covid restrictions which are likely to have deterred visitation. This fact – which has a significant bearing on the comparability of findings from the Pilot Survey with the 2018 Health Survey - appears to have eluded the researchers at NatCen and is not mentioned at all in their 50 page report. This is an surprising omission, in our view.

In the light of the well-documented impact of Covid restrictions in 2021, the Pilot Survey results warrant greater scrutiny – especially with respect to non-remote gambling participation. We therefore

⁵ The 2021 Health Survey for England contained questions on gambling but this has not yet been released

⁶ The British Gambling Prevalence Survey series was used to estimate population prevalence of gambling and ‘problem gambling’ prior to 2012.

⁷ Fieldwork took place in January and February 2022 and questions were asked in relation to gambling in the prior 12 months.

undertook analysis to compare results from prevalence surveys with extrapolations from industry data – an approach that we have discussed with the Gambling Commission during a call on 13th July 2022.

Executive summary

In this report, we consider the findings from the NatCen Pilot Survey alongside those obtained from NHS Health Surveys; we address a number of the Gambling Commission's and NatCen's assumptions about the reliability of survey responses to questions from the Problem Gambling Severity Index (the 'PGSI') and we describe the results of our attempt to cross-check self-report survey results with hard (typically audited) information on gambling participation from regulated operators. We found the following:

- Overall, we consider the Health Surveys to be more accurate than the NatCen Pilot Survey in measuring participation rates in gambling in Great Britain.
- In the absence of persuasive evidence to the contrary, we consider it likely therefore that the Health Surveys have been more accurate in measuring population prevalence of 'at risk' and 'problem' gambling.
- Health Surveys appear to have been reasonably accurate in measuring participation rates in non-remote bingo and non-remote casino.
- Health Surveys over-reported participation in betting exchanges and the football pools.
- Health Surveys may have under-reported participation in online gambling.
- When compared with other official statistics (the British Gambling Prevalence Survey series, the Adult Psychiatric Morbidity Survey 2007 and the DCMS Taking Part Survey series), the Health Survey series appears to have good internal validity.
- The NatCen Pilot Survey substantially over-reported participation in non-remote bingo, non-remote casino, betting exchanges and the football pools (and we believe it likely that it will have done the same where other non-remote gambling activities are concerned).
- The NatCen Pilot Survey may also have over-estimated participation in online gambling – but not to the same extent as for the other activities assessed.
- Claims that the Health Surveys have under-reported 'at risk' and 'problem' gambling prevalence appear to lack substance.
- While there are factors that may lead to under-reporting, there are also factors that may lead to over-reporting. Both sets of factors need to be considered.
- In any case, the original validation of the PGSI would have involved many if not all of the biases that might lead to under or over-reporting. In other words, such biases are 'baked in' to the validation of the PGSI.
- We have provided a rough attempt to assess the reliability of self-report surveys on gambling behaviours using hard, audited, 'real world' data. While our analysis involves a number of limitations, we consider that the approach we have taken has significant promise. We propose a more rigorous study, using larger datasets and experiments to test the validity of assumptions.

Our analysis may be replicated with relative simplicity by the Gambling Commission in order to check our findings⁸.

⁸ Indeed, the Commission has access to far more comprehensive and detailed data than we were able to obtain.

Key differences between the Health Surveys and the Gambling Commission pilot survey

The Gambling Commission acknowledges that the Pilot Survey is different from the 'gold standard' Health Survey in a number of important ways and that results obtained from them should not be considered comparable. We itemise the key differences here.

Sample size: The sample size for the Pilot Survey was just 1,078 respondents. This is substantially below the 7,126 obtained for the Health Survey for England 2018 and the 15,563 and 14,765 in the Combined Health Surveys for 2015 and 2016 (respectively).

Response rate: Just 21% of those approached to complete the Pilot Survey did so compared with 54% for the Health Survey for England 2018. This raises the risk of selection bias in the Pilot Survey and diminishes confidence that respondents were representative of the overall population.

Survey method: The Gambling Commission has stated that face-to-face household interviewing is likely to be more accurate than online surveys, which tend to over-recruit more digitally engaged citizens⁹. This means that they are more likely to be online gamblers (compared with the general population) and to have higher levels of engagement with gambling.

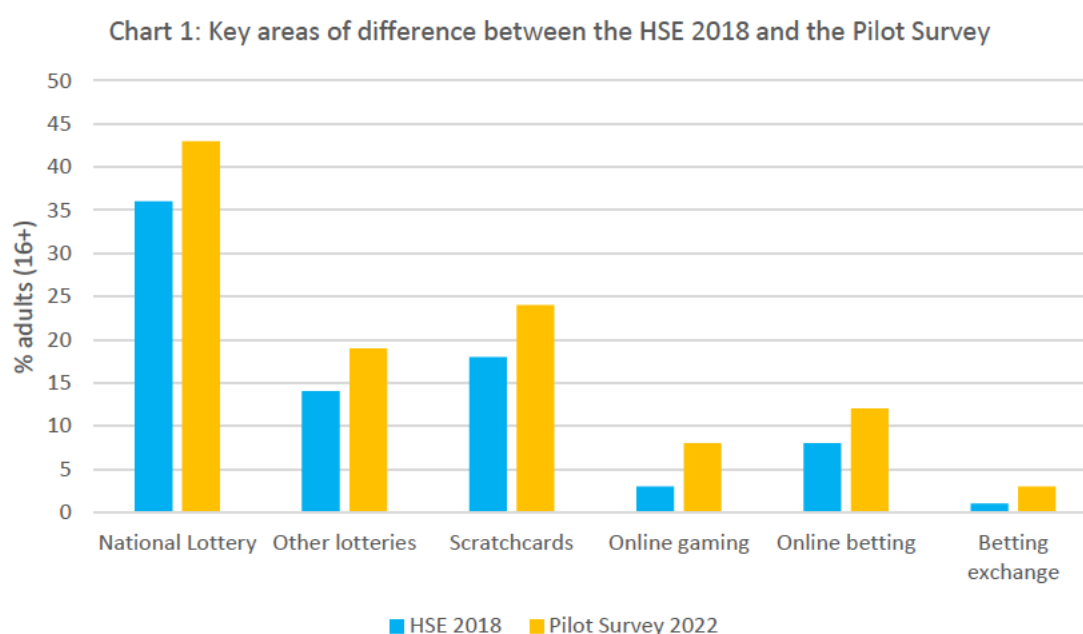
Framing effects: The pilot survey was explicitly described as a gambling survey; whereas the Health Survey is described in terms of general health and well-being. As the Commission has stated, this framing effect may result in over-recruitment of gamblers, highly engaged gamblers and 'problem gamblers' as a 'gambling survey' is likely to be more salient to these groups than a general health and well-being survey.

⁹ The Pilot Survey included a pen-and-paper response option as well as an online option. Results obtained from those completing the survey using the former option were much closer to those obtained in the past from Health Surveys.

Section 1: The Survey findings - gambling participation

NatCen's Pilot Survey reports that 63% of British adults (16 years and over) took part in at least one gambling activity in 2021¹⁰. This is 17% higher than the 54% reported in the Health Survey for England 2018 and the 57% reported in the Combined Health Surveys 2016. It is also much higher than the 43% reported by the Gambling Commission's Quarterly Telephone Survey for 2021, although this collects data for past four-week rather than past-year participation.

Looking at gambling participation by activity, the key areas of difference are shown in Chart 1.



NatCen suggests two possible reasons for the variation in results between the two surveys:

1. That the Pilot Survey over-recruited gambling consumers;
2. That the Health Survey under-recruited gambling consumers.

1.1 – The effect of lockdown

The report observes that, aside from the five activities highlighted in Chart 1, *“Prevalence rates for other forms of gambling were not statistically significantly different between the two surveys”*. Rather surprisingly, it fails to mention that in 2021, many gambling activities were severely curtailed as a result of the Government's lockdown policies:

- Licensed betting offices were closed between 1st January and 11th April 2022 (101 days or 28% of the year).
- Arcades, bingo clubs, casinos and pubs were closed between 1st January and 16th May (136 days or 37% of the year).
- Even after these dates, visitation to land-based gambling premises was affected by wider social distancing policies that inhibited use of public transport and use of the venues themselves; along with wider concerns about socialisation among some population groups.

¹⁰ Fieldwork was carried out between 5th January and 21st February 2022. The survey asks respondents about their gambling activity over the course of the prior 12 months. To this end, the survey effectively seeks to understand gambling behaviours between January 2021 and mid-February 2022.

- It seems plausible that in-venue sale of lottery products may also have been impacted by lockdown policies and while sales of main draw products might have been expected to move online, this would not have been possible for scratchcards.

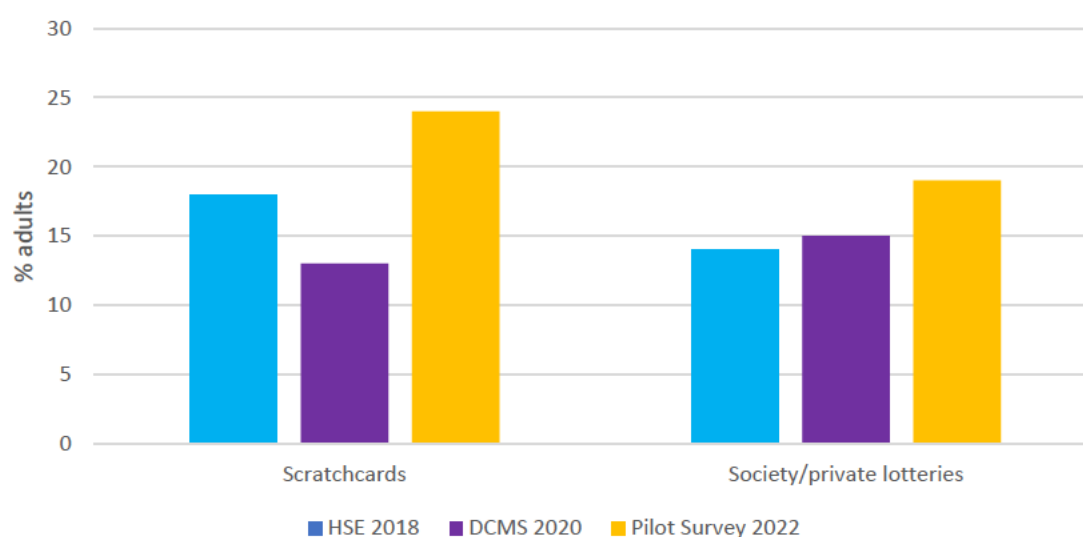
The effect of lockdown policies that prevented consumers from being able to gamble in most land-based premises for such a large part of the year has a distortive effect on comparisons between the Pilot Survey and the Health Surveys – but this is not mentioned at all in the NatCen report.

By way of illustration, the Pilot Survey indicates that 3.5 million individual adults bet on horseraces at licensed betting offices and at racecourses in 2021. It was impossible however, to bet off-course before 12th April and on-course before 17th May. This prevented non-remote betting on the most popular horserace betting event of the year, the Grand National (which attracts large numbers of one-time race bettors) - as well as the Cheltenham Festival. This fact should, in our view, have prompted enquiry when considering the results of the Pilot Survey – but it is not mentioned by NatCen.

1.2 - Internal consistency of Health Survey findings

Results from Health Surveys have been relatively consistent with results from other official surveys (which NatCen omits to mention) – including the DCMS Taking Part Survey and the NHS Adult Psychiatric Morbidity Survey. Participation rates for society lotteries and scratchcards are relatively similar between the Health Surveys and the Taking Part Survey (see chart 2). The Taking Part Survey does not disclose discrete participation rates for National Lottery draw products, although we note that participation in the main Lotto draw was 31% - which seems reasonably consistent with the Health Survey estimate that 36% of adults (16+) spent money on National Lottery draws in 2018¹¹.

Chart 2: Comparison of participation rates between three surveys



¹¹ The Taking Part Survey also estimates that 17% of adults participated in sports betting in 2019; but there is no obvious comparator in either the Health Survey or pilot survey which disclose sports betting by five separate categories (online betting; non-remote horserace betting; non-remote dog-race betting; non-remote sports betting; and betting exchange).

Section 2: The survey findings - ‘at risk’ and ‘problem’ gambling

Results from seven sets of major household prevalence surveys conducted in Great Britain between 1999 and 2018 have indicated relatively low population prevalence of ‘problem gambling’ (PGSI/DSM-IV) and ‘at risk gambling’ (PGSI). The Pilot Survey however reports far higher prevalence, as shown in Table 1.

Table 1: Comparison of ‘at risk’ and ‘problem’ gambler population estimates			
	Health Survey 2018	Pilot Survey 2022	% difference
DSM-IV			
‘problem gambler’	0.5%	1.2%	+140%
PGSI			
‘problem gambler’	0.4%	1.3%	+247%
‘moderate risk’	0.8%	2.3%	+188%
‘low risk’	2.7%	7.8%	+189%

NatCen considers three main explanations for the difference in results:

1. The Pilot Survey over-recruited gambling consumers¹²;
2. The Health Survey under-recruited gambling consumers;
3. That the in-person nature of Health Survey interviews meant that respondents were less likely to be candid in responding to DSM-IV and PGSI questions compared with online respondents in the Pilot Survey.

The reasons why the Pilot Survey may be suspected of over-reporting gambling participation (and more engaged gambling participation) have been addressed in Section 1. In this section we address the claims that Health Surveys under-recruit gambling consumers and that respondents are less likely to respond to screening questions accurately and honestly.

2.1 – Have Health Surveys systemically under-reported ‘at risk’ and ‘problem’ gambling?

The NatCen report does not provide reasons why the Health Survey may be considered inaccurate¹³. We note however that NatCen has in the past provided three main caveats when considering the reliability of Health Survey estimates of ‘problem gambling’ in Great Britain¹⁴:

- i. That people living at institutional addresses, *“such as prisons, military bases, care homes or student halls of residence, and the homeless were outside the scope of the surveys”* and that *“there is evidence to suggest that some of these sub-groups are more likely to be problem gamblers”*.
- ii. *“Some people may give ‘socially desirable’ (and potentially dishonest) answers to a questionnaire and may underestimate the extent of their gambling behaviour.”*
- iii. *“There is an argument that very frequent gamblers are less likely to be at home and available for interview than other sub-groups and are therefore less likely to be included in the study.”*

We consider each of these hypotheses in turn.

¹² The effects described in section 1 may also plausibly be considered to result in over-recruitment of more engaged gamblers who have a greater probability of being classified as ‘problem’ or ‘at risk’

¹³ We note that it has become increasingly common in journal papers and policy discourse to state - without substantiation - that Health Surveys under-estimate ‘problem gambling’ prevalence rates.

¹⁴ Conolly et al., 2018, p.7

2.1.1 Exclusion of those living at institutional addresses.

NatCen's observation that "*some of*" the sub-groups living at institutional addresses "*are more likely to be problem gamblers*" appears well-founded – but the critical word is "*some*". Servicemen and servicewomen living on military bases for example may be considered a higher risk group – but they constitute a relatively small percentage of the population (and so are unlikely by themselves to skew results materially). In total, the British Armed Forces comprise around 150,000 personnel¹⁵ (excluding reservists), but many of these will be stationed outside Great Britain and many others will not live on military bases.

People in the criminal justice system may also be considered a higher risk sub-group – but the total prison population sits at around 80,000 people so exclusion of this group is also unlikely to skew reporting significantly¹⁶.

Of the groups described, only one - those living in halls of residence - is sizeable¹⁷. It is far from clear however that exclusion of students in institutional accommodation depresses reporting of 'problem gambling'. Health Surveys indicate that adults in full-time education are less likely than the general population to gamble and less likely to be classified as 'problem gamblers' (0.0% 'problem gambling' in 2016 and 2018 Health Surveys). Educational attainment of degree level or higher is also negatively correlated with 'problem gambling'. Analysis of data from Health Surveys indicates that while a relatively large proportion (7.6%) of 18 and 19-year-olds (the age group most likely to be living in halls of residence) are estimated to be PGSI 'low risk' gamblers, the prevalence of PGSI 'problem gambling' in this age group is low (0.15%).

There are also approximately 420,000 people living in care homes in Britain – and it seems likely that these people are less likely to gamble and to be 'problem gamblers' than the general population. People aged 65 years and over are less likely to gamble than any other age group and less likely to be classified as 'problem gamblers'¹⁸. While some people living in care homes may be more vulnerable to disordered gambling (e.g. those taking medication where disinhibition is a potential side-effect) we observe that they are far less likely to access bingo clubs, casinos, betting shops, arcades, racecourses than the population at large and are also less likely to own smartphones or to gamble online¹⁹.

While Health Surveys will omit certain population sub-groups - and some of these may be at elevated risk of 'problem gambling' – it seems plausible that the net effect of this it to exclude those adults *less* likely to be 'problem gamblers'.

2.1.2 - some people may provide socially desirable responses

It is valid to observe that some survey respondents may provide socially desirable responses to questions about both gambling behaviour and potentially problematic gambling behaviour; and that responses may be more candid when provided via online questionnaire compared with the self-

¹⁵ Less than 0.3% of the adult population of Great Britain

¹⁶ To the extent that it is relevant to policy, people in the criminal justice system are unlikely to be active participants in the licensed gambling market

¹⁷ Based on results from the National Student Accommodation Survey 2022, this population is likely to number between c450,000 and 1.1 million.

¹⁸ Our estimate, based on the Health Survey for England 2018 is that that prevalence of PGSI 'problem gambling' for those aged 65 and over was <0.1%

¹⁹ According to the Health Survey 2018, the annual online gambling participation rate for those aged 65 and over was 1.9% - significantly lower than the 9.4% reported for the adult population as a whole

completion paper survey used by the Health Survey²⁰. We note however, the findings of Sturgis & Kuha (2021) who reviewed differences in ‘problem gambling’ prevalence reporting between the Health Surveys and six online surveys conducted between 2019 and 2021. They concluded that, “socially desirable responding in the health surveys is unlikely to be a significant contributory factor to the lower estimates of gambling harm [reported in Health Surveys]”²¹.

2.1.3 – Bias can cause over-reporting too

In Gambling Commission and NatCen characterisations of the effect of bias on prevalence survey estimates, factors that may result in over-reporting are rarely (if ever) cited. However, as Samuelsson et al.’s follow-up study of participants in Sweden’s longitudinal gambling study (Swelogs) revealed, PGSI item interpretation may result in cases of mistaken endorsement – and thereby over-reporting. They wrote that:

*“Several answers to the PGSI items contained ambiguities and misinterpretations, making it difficult to assess to what extent their answers actually indicated any problematic gambling over time. The item about feelings of guilt generated accounts rather reflecting self-recrimination over wasting money or regretting gambling as a meaningless or immoral activity. The item concerning critique involved mild interpretations such as being ridiculed for buying lottery tickets or getting comments for being boring. Similar accounts were given by the participants irrespective of initial endorsement of the items. Other possible reasons for misclassifications were related to recall bias, language difficulties, selective memory, and a tendency to answer one part of the question without taking the whole question into account.”*²²

Excerpts from the follow-up interviews illustrate some of the reasons given for PGSI item endorsements that do not appear to be indicative of either harmful gambling or excessive risk:

PGSI item 4: “How often have you borrowed money or sold anything to get money to gamble?”

Interviewer: Thinking about the last eight year, have you borrowed money or sold anything to get money to gamble?

*Quynh [respondent]: Yes. It has happened that I’ve borrowed EUR 10 maybe to go to the gambling table or if one of my friends has chips I get one or two, and instead I buy the next round of beer. It has happened /... / if I don’t have the money in my pocket.*²³

PGSI item 6: “How often have people criticised your betting, or told you that you have a gambling problem, whether or not you thought it is true?”

Interviewer: Thinking about the last eight years, has anyone criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

*Olivia: Yes. Definitely! Not out of concern but more laughing about it, that I’ve bought a lottery ticket ... / ... / Not being criticised more than that, my friends think that I’m comical.*²⁴

²⁰ While the Health Survey is in the main conducted by face-to-face interviews, gambling questions are answered in private by self-complete form

²¹ Sturgis & Kuha, 2021, p.66

²² Samuelsson et al. (2019), pp.141-142

²³ Ibid., p.151

²⁴ Ibid., p.145

In the same way that socially desirable reporting may result in false negative responses, it seems plausible that subjective interpretation of screening questions (as described by Samuelsson et al.) may result in false positive responses. It is unclear what the overall effect of confounding biases may be.

2.1.3 - Frequent gamblers are less likely to be at home

NatCen also observes that frequent gamblers may be less likely than others to participate in prevalence surveys. It may, however be significant that this observation is qualified by the words *“there is an argument that...”*. In other words, it is an unproven hypothesis (as indeed are all the caveats described here). It may be the case that individuals who frequently attend licensed betting offices, arcades, pubs, bingo clubs, racecourses and casinos²⁵ during hours when household surveys are conducted may be under-represented in surveys. It is unclear however whether this is likely to be the case where online gambling is concerned. The Gambling Commission reports that 95% of online gamblers report gambling at home; whereas out-of-home online gambling appears to be a relatively rare activity (15% report gambling online at work; 12% while commuting; 7% in a pub or club; and 4% at a sports venue²⁶). It seems plausible therefore that highly engaged online gamblers may be more likely to be at home than non-gamblers with similar demographic profiles²⁷. We observe too that unemployed people (who may in fact be more likely to be at home during daytime hours) have a much higher rate of PGSI problem gambling (1.9%²⁸) compared with the general population (0.4%²⁹).

2.1.4 – PGSI validation incorporated biases

In any case, there is a more fundamental problem in assuming that the results of PGSI screening are automatically affected by socially desirable responses or other biases. This is because the PGSI was itself validated³⁰ using a population survey which would also have involved these biases. ***In other words, assumptions of bias were made as part of the validation of the instrument.*** To suggest that Health Surveys underestimate population prevalence of ‘problem gambling’ is to assume that the original validation of the PGSI was based on a perfectly representative survey in which all respondents interpreted the questions consistently and provided answers free from bias. The use of the PGSI in surveys can only ever provide a rough guide to the likelihood that respondents experience adverse consequences from gambling – and is likely to be affected by a number of confounding biases.

2.2 - Problem gambling, gambling engagement and the effect of lockdown

In order to understand the variations in reported rates of PGSI ‘at risk’ and ‘problem’ gamblers, NatCen conducted a test to compare PGSI scores between Health Survey and Pilot Survey respondents with *“similar gambling profiles”*. Similarity in this sense was defined in terms of breadth of participation (i.e. the number of different activities participated in during the year) and frequency of participation (once/twice a year; every 2 to 3 months; monthly; more than monthly/less than weekly; weekly; twice or more a week).

NatCen found that Pilot Survey respondents completing the online survey were significantly more likely to have a PGSI score of one or more (i.e. ‘at risk’ or ‘problem’ gambler) than Health Survey respondents with similar frequency and breadth of participation. The report states that, *“the*

²⁵ Given typical hours of visitation, we might conclude that this was most likely to affect frequent customers at bingo clubs and LBOs.

²⁶ Gambling Commission (2020), p.17

²⁷ Whether they answer the door is another matter.

²⁸ NHS Digital, 2019

²⁹ Ibid.

³⁰ For ‘problem gambling’ at least

estimated odds of having a PGSI score of 1+ was found to be 2.9 times higher for the pilot survey than for HSE 2018. That is, pilot survey participants with the same demographic and gambling profile as their HSE 2018 counterparts were more likely to score as being involved in low or moderate risk or problem gambling.”

Once again however, NatCen failed to consider the effect of lockdown on this comparison. The year 2021 was far from ‘normal’ in that traditional, non-remote gambling businesses were forced to remain closed as a result of lockdown policies for between 28% and 37% of the trading year – and were hindered by social distancing restrictions even after lockdown was lifted³¹.

It ought to be obvious that comparison of gambling behaviour between 2018 and lockdown impacted 2021 is not like-for-like. Given the more limited opportunities to gamble in 2021, there would appear to be strong qualitative differences between ‘similar’ behaviour observed in the Health Survey and the Pilot Survey. By way of illustration, it is questionable how ‘similar’ are the behaviours of those who gambled on four discrete activities in 2017/18 (a period in which all sectors of the regulated market were trading) and those who did the same in 2021 (when most non-remote gambling operators were closed for lengthy periods).

In the same way, a person who gambled once a month in 2017/18 may not necessarily be considered to be ‘similar’ to someone who did the same in 2021; given that in the latter case the opportunities to gamble on a monthly basis would have been far more limited. In other words, where both breadth and frequency of gambling participation is concerned, allegedly ‘similar’ respondents in the Pilot Survey were likely to be more engaged gamblers than those in the Health Survey.

This seems to be a fairly significant omission in the NatCen analysis. It is unclear therefore what conclusions may be drawn from this particular test. In the next section we look at an arguably more meaningful test of comparability between the Health Surveys and the NatCen Pilot Survey.

³¹ In addition, a number of venues – it is at present unclear how many – simply never reopened following lockdown.

Section 3: Self-report vs hard data - an opportunity to test prevalence survey results

In order to illuminate the subject of survey reliability, we identified an opportunity to compare self-report estimates of gambling participation from surveys with hard (typically audited) data provided by licensed operators³².

By using a combination of publicly available data and data provided to us by licensees, we have been able to test the accuracy of participation rates for specific activities reported in the Health Surveys for 2012, 2015, 2016 and 2018; and the Gambling Commission/NatCenPilot Survey for 2021³³. We analysed participation in the following:

- Playing games of bingo in a licensed bingo club
- Playing table games in non-remote casinos
- Betting via betting exchanges
- Online gambling (excluding betting exchanges)

For each of these activities, we produced participation estimates for as many of the survey years as we were able to. The analysis was necessarily rough - the operator data did not align perfectly between licensees or with the Gambling Commission Industry Statistics or the survey fieldwork dates. With sufficient resource, it ought to be possible to improve the analysis in this area – but we consider it unlikely that this is likely to change our conclusions³⁴.

We also investigated the reliability of survey data on participation in the Football Pools – but note that here the industry data we obtained was less useful for comparisons with surveys .

Headline findings

Our analysis shows the following with respect to the specific activities analysed:

- The 2012, 2015, 2016 and 2018 Health Surveys were reasonably accurate in estimating population participation rates for playing bingo, casino games and using betting exchanges.
- The 2018 Health Survey was reasonably accurate for estimating population participation in online gambling.
- The 2021 Pilot Survey substantially over-estimated population participation rates for playing bingo, casino games and using betting exchanges.
- All surveys appeared to overestimate population participation in the Football Pools – possibly due to the community nature of the activity³⁵ - but this is particularly pronounced where the Pilot Survey is concerned.

The Gambling Commission ought to be able to replicate our analysis for the purposes of verification.

³² While some of the information was provided confidentially, it is already accessible by the Gambling Commission through regulatory returns

³³ The NatCen Pilot Survey provided participation rates to the nearest whole number. For the purposes of analysis, we have assumed that – by way of example, a 3% participation rate denotes 3.0%. Where it in facts denotes a higher or lower rate (2.5% to 3.4%) this will affect comparisons.

³⁴ This is because gambling participation patterns tend to be relatively stable except where major external events (e.g. lockdown, smoking bans) affect them.

³⁵ In other words, while one family member may actually buy the pools coupon, other family members may consider themselves to be players.

3.1 - Summary

Table 2 compares estimates of gambling participation based on industry data with self-report results from the Health Surveys (2012, 2015, 2016 & 2018) and (highlighted in yellow) the NatCen Pilot Survey (2021).

Table 2: Summary of findings in a comparison of self-report and data-based estimates of gambling participation				
Survey year	Participation estimate (% of 16+population)		Survey difference to industry data	
	Industry data	Survey estimate	% pts	%
Bingo (Source: audited data - The Rank Group plc)				
2012	4.85%	5.36%	+0.51% pts	+10.5%
2015	5.08%	6.00%	+0.92% pts	+18.1%
2016	5.33%	5.09%	-0.24% pts	-4.5%
2018		4.48%		
2021		5.00%		
Casino (Source: audited data - The Rank Group plc)				
2012	3.91%	3.25%	-0.66% pts	-16.9%
2015	4.01%	3.71%	-0.30% pts	-7.5%
2016	3.68%	3.22%	-0.46% pts	-12.5%
2018		2.64%		
2021		3.00%		
Betting exchange (Source: audited data- Flutter Entertainment)				
2016		1.19%		
2018		1.11%		
2021		3.00%		
Online gambling (Source: Forrest & McHale, 2022)				
2018 estimate A	11.87%	9.43%	2.44% pts	-20.5%
2018 estimate B	10.14%	9.43%	0.71% pts	-7.0%

The estimates for participation in non-remote bingo and non-remote casino games appear remarkably similar between the Health Surveys and our data-based estimates. For non-remote casino, estimates were less than ■■■ apart compared with each of the four Health Survey years. For betting exchange too, there is a reasonable level of proximity between estimates based on industry data and those based on self-report, considering the niche nature of the activity. On balance, our analysis indicates that Health Surveys have been reasonably accurate in estimating participation in these three activities – and if anything, may have provided a slight over-estimate.

For online gambling, the source of the industry data is Forrest & McHale's 2022 study, 'Patterns of Play' which analysed gambling transactions and behaviours across 140,000 online betting and gaming accounts between July 2018 and June 2019 (the data was provided by seven major licensees). We derived two participation estimates with the differences contingent on assumptions about customer cross-over between operators. Both estimates indicate that – for 2017/2018 alone – the Health Survey for England may have underestimated participation. We made a more speculative estimate for online gambling participation in 2021, using a technique from the NatCen report. This indicated that the NatCen Pilot Survey may have over-estimated participation in that year.

Overall, our analysis indicates that Health Surveys have been reasonably accurate in estimating rates of gambling participation when compared against hard (in most cases, audited) data from licensed operators.

A rather different picture emerges when we compare participation estimates from industry data with those from the NatCen Pilot Survey. It should be remembered that the NatCen Pilot Survey was principally concerned with gambling behaviours in 2021³⁶ – a year in which non-remote gambling operators were unable to trade for long periods as a result of Covid restrictions.

In its report commentary, NatCen notes that participation rates for non-remote gambling were relatively similar between their Pilot Survey and the Health Survey for England 2018. It fails, however, to mention that such stability would be truly remarkable given the well documented impact of lockdown restrictions in 2021 on hospitality and leisure venues, including bingo clubs, racecourses and casinos .

Comparisons of NatCen’s participation estimates with extrapolations from industry data indicate that – at least where non-remote bingo, non-remote casino and betting exchanges are concerned – the Pilot Survey substantially overstated participation.

³⁶ The fieldwork took place in January and early February 2022 so technically was concerned with gambling between January 2021 and February 2022.

3.2 - Games of bingo played in licensed bingo clubs

3.2.1 - Source of data:

Table 3: Sources of data for non-remote bingo analysis	
Survey year	Source
2012	Rank Group plc (Mecca Bingo) published accounts; Gambling Commission Industry Statistics
2015	Rank Group plc (Mecca Bingo) published accounts; Gambling Commission Industry Statistics
2016	Rank Group plc (Mecca Bingo) published accounts; Buzz Bingo disclosure; Gambling Commission Industry Statistics
2018	Rank Group plc (Mecca Bingo) disclosure; Buzz Bingo disclosure; Gambling Commission Industry Statistics
2021	Rank Group plc (Mecca Bingo) disclosure; Buzz Bingo disclosure

3.2.2 - Key assumptions

In deriving our participation estimates we made the following assumptions:

- Share of GGY from games of bingo is a suitable proxy for share of customers;
- All bingo customers play games of bingo;
- 10% of customers play with at least one other operator.

We note that some survey respondents may report playing non-remote bingo in reference to locations other than licensed bingo clubs (principally holiday parks). At the same time, our assumption that all customers of Mecca Bingo and Buzz Bingo play games of bingo is likely to be overly generous³⁷. We consider, however, that neither of these factors (which are off-setting) is likely to have a significant effect on population participation rates.

3.2.3 - Calculation

In the first instance, we decided to use Rank Group data alone for the calculation as the Buzz Bingo (formerly Gala Bingo) data was not available for all survey years. We grossed up the number of unique Mecca Bingo customers reported by The Rank Group in each year, based on Mecca's share of bingo games expenditure (GGY)³⁸. We then made a 10% adjustment to reflect levels of customer cross-over between operators. This is a rule of thumb estimate provided by operators and we consider that it is likely to be conservative. In 2016, Ipsos MORI found that 35% of monthly bingo players used more than one club³⁹ (although it did not disclose how many different operators they played with).

Having performed the calculation based upon data from Mecca Bingo, we then repeated it, adding in data from Buzz Bingo for the years 2016, 2018 and 2021.

³⁷ In 2016, Ipsos MORI reported that 71% of customers at licensed bingo clubs played paper tickets, 61% played interval games and 17% played electronic gaming machines. It did not disclose however what proportion played no games of bingo at all and it seems likely that a small proportion of customers (e.g. some machines players) did not play any games of bingo.

³⁸ This has been fairly consistently around one-third of total expenditure on non-remote games of bingo.

³⁹ Ipsos MORI, 2016, p.20

For 2021, no Gambling Commission statistics on total bingo expenditure are currently available. We have therefore assumed that Mecca Bingo and Buzz Bingo's 2021 share of GGY was similar to 2018⁴⁰.

3.2.4 - Results

The results of our analysis are shown in table 4 below.

Table 4: Non-remote bingo participation estimates			
Survey year	Regulus estimate A (Mecca Bingo)	Regulus estimate B (Mecca Bingo + Buzz Bingo)	Health Survey/ NatCen Pilot Survey
2012	4.85%	n/a	5.36%
2015	5.08%	n/a	6.00%
2016	5.33%		5.09%
2018			4.48%
2021			5.00%

Our estimates based on actual, audited customer numbers are reasonably similar to those reported in the Health Surveys for 2012, 2015, 2016 and 2018. There is however, a substantial difference between our industry data estimates for 2021 and the NatCen Pilot Survey. Given the size of the delta and the fact that Mecca and Buzz Bingo clubs generated between [REDACTED] of bingo games revenue in the 2012-2018 period, it is difficult to see how the NatCen estimate for 2021 could be accurate.

⁴⁰ The Gambling Commission has released no industry statistics for land-based gambling prior to March 2020.

3.3 - Casino games played in licensed casinos

3.3.1 - Source of data:

Table 5: Sources of data for non-remote casino analysis	
Survey year	Source
2012	Rank Group plc (Grosvenor Casinos) published accounts; Genting UK disclosure; Gambling Commission Industry Statistics
2015	Rank Group plc (Grosvenor Casinos) published accounts; Genting UK disclosure; Gambling Commission Industry Statistics
2016	Rank Group plc (Grosvenor Casinos) published accounts; Genting UK disclosure; Gambling Commission Industry Statistics
2018	Rank Group plc (Grosvenor Casinos) disclosure; Genting UK disclosure; Gambling Commission Industry Statistics
2021	Rank Group plc (Grosvenor Casinos) disclosure; Genting UK disclosure

3.3.2 - Key assumptions

In deriving our participation estimates we made the following assumptions:

- Share of GGY from games of casinos⁴¹ is a suitable proxy for share of customers (excluding high-end);
- 55% of casino customers play casino table games;⁴²
- 15% of customers play with more than one operator.

The assumption that 50% of customers play casino table games is based on the higher of two estimates provided to us by the Rank Group and Genting UK.

3.3.3 - Calculation

We grossed up the number of unique Grosvenor Casino and Genting Casino customers using their share of casino games expenditure (GGY)⁴³, excluding revenue from high-end casinos⁴⁴. We made an adjustment to reflect the assumption that 45% of casino customers do not play casino games (but instead visit casinos to play gaming machines or for non-gaming activities such as eating and drinking, watching shows etc). This was the lower of the two operator estimates provided to us by Grosvenor and Genting. We then made a 15% adjustment to reflect levels of customer cross-over between operators. This is a higher estimate than for bingo clubs, reflecting the fact that casinos tend to be grouped together within certain towns (a result of 'permitted areas' legislation) and so are often very close to one another⁴⁵.

For 2021, no Gambling Commission statistics on total casino games expenditure is currently available. We have therefore assumed that the market shares for Grosvenor and Genting were similar to 2018.

⁴¹ Excluding London's six 'high-end' casinos

⁴² Including electronic versions

⁴³ This has been fairly consistently around one-third of total expenditure on non-remote games of bingo

⁴⁴ Although London's high-end casinos generate a significant amount of GGY, they have relatively few customers. A majority of their revenue is derived from overseas customers who would not be included in British prevalence surveys.

⁴⁵ There are around 20 licensed casinos in the single London borough of Westminster; while Birmingham, Glasgow, Leeds, Liverpool and Manchester all have four or more casinos.

3.3.4 - Results

The results of our analysis are shown in table 6 below.

Table 6: Non-remote casino participation estimates		
Survey year	Regulus estimate	Health Survey/ NatCen Pilot Survey
2012		3.25%
2015		3.71%
2016		3.22%
2018		2.64%
2021		3.00%

Our estimates based on actual, audited customer numbers appear remarkably similar to those reported in the Health Surveys for 2012, 2015, 2016 and 2018. There is however, a substantial difference between our industry data estimates for 2021 and the NatCen Pilot Survey. Given that Grosvenor and Genting typically generate more than [REDACTED] of casino games revenue⁴⁶, the NatCen Pilot Survey estimate for 2021 appears questionable.

⁴⁶ Excluding high-end casinos

3.4 Betting exchange

3.4.1 - Sources of data

Table 7: Sources of data for betting exchange analysis	
Survey year	Source
2016	Flutter Entertainment plc (betfair) disclosure; Gambling Commission Industry Statistics
2018	Flutter Entertainment plc (betfair) disclosure; Gambling Commission Industry Statistics
2021	Flutter Entertainment plc (betfair) disclosure; Gambling Commission Industry Statistics

3.4.2 - Key assumption

In deriving our participation estimates we made the following assumption:

- Share of GGY from betting exchanges is a suitable proxy for share of customers.

3.4.3 - Calculation

We grossed up the number of unique betfair customers based on the brand's share of betting exchange GGY [REDACTED]

3.4.4 - Results

The results of our analysis are shown in table 8 below.

Table 8: Betting exchange participation estimates		
Survey year	Regulus estimate	Health Survey/ NatCen Pilot Survey
2016	[REDACTED]	1.19%
2018		1.11%
2021		3.00%

Our estimates based on actual, audited customer numbers are markedly lower ([REDACTED]) than those reported in the Health Surveys for 2016 and 2018. In other words, Health Surveys appear to have slightly over-estimated participation rates for betting exchange. The NatCen Pilot Survey estimate however, is substantially higher than our data-based estimates. Taken at face value, the NatCen Pilot Survey implies that fewer than [REDACTED] past-year exchange bettors used betfair in 2021. Given betfair's share of the exchange market, this is implausible in our view.

3.5 - Online gambling

3.5.1 Sources of data:

Table 9: Sources of data for online gambling participation estimates	
Survey year	Source
2018	Forrest & McHale (2022); Gambling Commission (2020); Gambling Commission (2022)

3.5.2 - Key assumptions

In deriving our participation estimates we made the following assumption:

- That share of GGY from online gambling is a suitable proxy for share of customers;
- That the 140,000 customer records provided to Forrest & McHale were representative of the online gambling population in 2018/19;
- 25% of accounts were dual use (betting and gaming);
- Estimate A - that the mean number of online accounts per customer was 2.7 (Gambling Commission survey estimate for 2018 and 2019);
- Estimate B – that the mean number of online accounts per customer was 3.16 (five-year average of Gambling Commission survey estimates between 2015 and 2019).

3.5.3 - Calculation

We grossed up the number of online gambling accounts reported in Forrest & McHale by share of GGY (86% for betting; 37.5% for gaming). We adjusted these figures on the basis that 25.1% of accounts in the study were classified as ‘dual use’. We made a further set of adjustments to reflect customer cross-over between operators, using Gambling Commission survey findings on the mean number of online accounts for past-year online gamblers⁴⁷. Estimate A was calculated using the 2019 figure (2.7 accounts per customer); estimate B was calculated using the average of the five years between 2015 and 2019 (3.16 accounts per customer)⁴⁸.

3.5.4 - Results

The results of our analysis are shown in table 10 below.

Table 10: Estimates of participation in online gambling			
Survey year	Regulus estimate A	Regulus estimate B	Health Survey/ NatCen Pilot Survey
2018	11.87%	10.14%	9.43%
2021 (adjusted odds)	14.30%	12.22%	17.0% ⁴⁹

Our analysis indicates that the Health Survey for England 2018 may have under-estimated somewhat online gambling participation for 2018. Given that the Patterns of Play data was only available to us for 2018⁵⁰, we used the same odds adjustment process described in the NatCen report (using changes

⁴⁷ Gambling Commission, 2020, p.18

⁴⁸ We note here that the Gambling Commission estimate of numbers of online gambling accounts used annually includes lotteries. This may have a bearing on our estimates but the magnitude is unclear.

⁴⁹ The NatCen report reports gambling participation rates to the nearest whole number. It is possible therefore that the online gambling participation rate was as low as 16.5% (rounded to 17%); or it may have been as high as 17.4%.

⁵⁰ Although the Patterns of Play project could feasibly be used to produce an estimate for 2021.

in past-four-week participation reported in the Gambling Commission’s quarterly telephone survey between 2018 and 2021) to estimate participation in 2021⁵¹. Taken together, these analyses suggest that the Health Survey may have under-estimated online gambling participation while the NatCen Pilot Survey is likely to have over-estimated participation by a similar or greater margin.

We highlight that the studies used in our analysis cover gambling behaviours over different periods and this may have some bearing on comparability. For example, gambling participation rates reported in the Health Survey conceivably cover a period from 2017 to early 2019; whereas participation rates from Patterns of Play are confined to a tightly bound 12 month period from 1st July 2018 to 30th June 2019.

Table 11: Periods of online gambling observed		
Study	Fieldwork	Period of observation (actual/ implied)
Health Survey for England 2018	2018/19 ⁵²	2017/2019
Telephone Survey	Q2, Q3 & Q4 2018; Q1 2019	Q2 2017 to Q1 2019
Patterns of Play	n/a	July 2018 to June 2019
NatCen Pilot	January-February 2022	January 2021 to February 2022

There are two important limitations with this section of our analysis:

- The Patterns of Play data was only available to us for comparison with the 2018 Health Survey for England and was based upon a sample of 140,000 customer accounts;
- Using changes in estimates of past-four-week gambling (from the quarterly telephone survey) to estimate changes in past-year gambling (based on the 2018 Health Survey) is somewhat speculative; and is sensitive to assumptions made about when the fieldwork was conducted.

A more robust comparison could be attempted using the Patterns of Play research project or separate analysis of regulatory returns.

⁵¹ We used an adjusted odds of 1.20 based on an increase in past four-week online gambling participation from 15.5% in 2018/19 to 18.1% in 2021/22.

⁵² The NHS reports that fieldwork was undertaken in 2018 and completed in March 2019

3.6 - Football pools

We had hoped to be able to provide a cross-check analysis on prevalence survey estimates of participation in the football pools, given a) the consolidation of the market in a single operator; and b) the ability to capture unique customer data (via agent collections and online participation). Frustratingly, however, we were only able to find data on the number of customers per week, which we show in table 12.

We made contact with the management of the Football Pools Company to enquire whether it was possible to obtain the number of unique annual customers of the football pools; or at least a rule of thumb for translating weekly customers to annual customers. We were advised that management assumed a ratio for weekly to annual customers of [REDACTED]. While we imagine that this ratio may have changed as participation in the football pools has declined, it suggests that Health Surveys have over-estimated rates of participation and that the NatCen Pilot Survey did so substantially.

Table 12: Estimates of participation in the football pools				
Survey year	Weekly customers (reported)	Weekly: annual ratio	Implied annual participation	Health Survey/ NatCen Pilot Survey
2012	397,000	[REDACTED]	[REDACTED]	2.78%
2015	300,000			2.94%
2016	215,000			2.84%
2018	n/a			2.91%
2021	130,000			3.00%

We observe that – in order for the industry data estimates to attain consistency with the prevalence survey estimates, the weekly to annual customers ratio would need to be 3.5 in 2012, 5.0 in 2015, 6.8 in 2016 and 12.1 in 2021 (NatCen Pilot Survey).

By way of speculation, it seems plausible to us that the football pools may be a form of gambling in which participation is not confined to the individual buying the coupon. In other words, an entire household may consider that they play the pools even if only one member actually pays money to participate⁵³.

We asked the senior management of the Football Pools Company whether they considered it plausible that they had more than 1.5 million unique customers in 2021 (as indicated by the NatCen Pilot Survey). They suggested that this was entirely implausible.

⁵³ A similar effect may be expected for syndicate play of the National Lottery.

Conclusion

Our attempt to cross-check prevalence survey estimates with estimates based on hard, audited industry data is necessarily rough. We had access to only limited data and were forced to make a number of 'rule of thumb' assumptions. The approach we have taken seems a sensible way to address issues of reliability where prevalence surveys are concerned and to further the Gambling Commission's ambition of establishing 'one version of the truth'.

In spite of the limitations of our rough study, we are confident that the Health Surveys have estimated participation rates with a reasonable degree of accuracy for non-remote bingo and non-remote casino games. We have a very high degree of confidence that Health Surveys have slightly over-reported participation in betting exchanges.

We believe that Health Surveys may have under-reported rates of participation in online gambling but that the NatCen Pilot Survey may have over-estimated participation. While we were not able to obtain annual unique customer numbers in relation to the football pools, we think it likely that Health Surveys over-estimated participation and that the NatCen Pilot Survey did so to a significant degree.

Some sectors of the gambling market do not lend themselves to analysis of this type because operators do not routinely capture customer identities – for example in arcades, pubs and clubs (fruit machines), racecourses and dog tracks. Nevertheless, we consider the participation rates reported for these activities in the NatCen Pilot Survey to be questionable given the effect of lockdown policies on the ability of operators to trade and consumers to bet.

In short, our analysis – which the Commission ought to be able to replicate using larger datasets and more closely aligned time-frames – suggests that the Health Surveys did in fact deserve their 'gold standard' descriptor. It also indicates that the NatCen Pilot Survey may have systematically over-estimated participation rates. Care should therefore be taken with the Commission's plans to migrate away from one tried and tested approach to a clearly more experimental – and less reliable - one.

We were unable to take the same cross-check approach to other findings from the prevalence surveys – and in particular estimates of the number of 'at risk' and 'problem' gamblers in the population. Nevertheless, our finding that participation rates were over-reported in the Pilot Survey leads us to believe that the same may well be true for 'problem gambling' rates (on the basis that the survey appears to have over-sampled more engaged gamblers). We are unconvinced by NatCen's attempt to assess 'comparable' rates of 'problem gambling' by considering customers with similar frequency and breadth of engagement. It seems to us obvious that a person who gambled monthly and on six different activities in 2021 (when large parts of the industry were prevented from operating for significant periods) is engaging in qualitatively distinct behaviour compared with a person doing the same in 2018.

Finally, we consider it simplistic to assume that Health Surveys systematically under-report rates of 'at risk' and 'problem' gambling. There are factors that may lead to under-reporting but there are also factors that may lead to over-reporting. Perhaps most significantly, the PGSI was validated by use of a survey. This means that whatever biases may affect who responds and how, these were likely to have been present during the validation exercise and are therefore integral to its reliability. To suggest that survey responses to the PGSI are under-reported as a result of socially desirable reporting bias in itself undermines the validity of the tool.

Those wishing to make claims about the accuracy or otherwise of prevalence surveys should take care to substantiate those claims with clear analysis. It is unhelpful for any stakeholders to call into question official statistics on the grounds of convenience.

Areas for further analysis

1. It would be advantageous to compare estimates of participation drawn from the Health Surveys, the Pilot Survey and hard industry data (in sectors where concentration of supply and capture of data permits).

Recommendation: We suggest that a more rigorous cross-check exercise be undertaken with larger datasets (with greater temporal alignment) and more rigorous testing of the ‘rule of thumb’ assumptions used in our analysis.

2. One useful test of comparability between surveys would be to analyse differences between mental health and well-being scores (using the Warwick Edinburgh Mental Wellbeing Screen) to identify how similar the Pilot Survey was in terms of general mental health to the most recent Health Surveys.

Recommendation: We recommend that the Gambling Commission make this data available for analysis⁵⁴.

⁵⁴ It is unclear whether release of this data will support the accuracy of the Health Survey over the Pilot Survey – but in any case it would provide a helpful test.

Appendix

The question of how many people in Britain experience disordered or ‘problem’ gambling is likely to remain confused for some time to come. This is due to a profusion of conflicting surveys as shown in Table 13.

Table 13: A profusion of gambling prevalence surveys			
Survey	Most recent year	Problem gambling rate	Next publication
Health Survey for England	2018	PGSI: 0.4% DSM-IV: 0.5%	HSE 2021 (published 2023?)
Adult Psychiatric Morbidity Survey	2007	DSM-IV: 0.7%	APMS 2022 (published 2023?)
Gambling Commission Quarterly Telephone Survey	2021/22	Short-form PGSI: 0.2%	12M to September 2022 (published 25 th October)
Gambling Commission Pilot Survey	2021	PGSI: 1.3% DSM-IV: 1.2%	Pilot Survey 2 (published 2023?)
		Harms survey	2021 (published June/July 2022)
Gambling Commission Prevalence Survey	n/a	Not yet published	Gambling Prevalence Survey 2023 (published 2023?)
Young People and Gambling Survey	2020	DSM-IV-MR-J: 1.9% (11-16-year-olds)	2022 (published 10 th November 2022)
DCMS Taking Part Survey	2019/20	n/a	Gambling section discontinued
GambleAware Treatment & Support Survey	2021	PGSI: 2.7%	Treatment & Support Survey 2022 (published March 2023?)

The Gambling Commission’s search for “one version of the truth” is likely to be frustrated for some time to come.

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Andrew Rhodes
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12th September 2023

Dear Andrew,

Re: Gambling Prevalence Survey for Great Britain

I am writing to you to express the concern of the BGC and its members in relation to the planned publication of a new Gambling Survey for Great Britain next year and particularly your plan to replace the 'Gold Standard' NHS Health Surveys with an experimental new Gambling Survey for Great Britain.

We want to be clear that we share your interest in the collection of robust data in order to inform policy, as well as your concerns about the misrepresentation of statistics and your desire for a greater degree of care in this area. However, we are concerned that the approach is potentially inconsistent with the Code of Practice for Statistics¹, and therefore subject to a potential compliance review by the Office for Statistics Regulation (OSR) by virtue of the Statistics and Registration Service Act 2007.

There is a clear risk that the change in survey methodology will have a serious impact on the Government's Gambling Act Review given the implications for Financial Risk Assessment thresholds; and the establishment, and rate, of a statutory levy to fund gambling harm prevention (as well as the forthcoming introduction of quotas for remote customer interactions).

At the outset of the Gambling Survey for Great Britain project, the Gambling Commission admitted that the switch from face-to-face interviewing to an online survey was likely to result in over-reporting of gambling participation and the population prevalence of 'problem gambling'; and acknowledged that the framing effects of a gambling survey (as distinct from a health survey) also raised the risk of sample bias. Both of these concerns – which we share – are underpinned by an extensive research literature².

The results released to date (the Pilot Survey and the Experimental Stage results) vindicate these concerns, with strong evidence of selection bias in both survey samples. We have seen no evidence that the project team has been successful in eliminating skew and we have been told that the 'problem gambling' rate in the final survey *will* be higher than in the NHS Health Surveys because of changes to survey methodology. This suggests a degree of pre-determination which is both unscientific and potentially inconsistent with aspects of The Code of Practice for Statistics.

¹ <https://code.statisticsauthority.gov.uk/the-code/>

² See for example, Sturgis & Kuha (2022), p.63: *"Our findings show that surveys conducted online produce substantially higher estimates of problem gambling compared with in-person interview surveys. This is because online surveys, whether using probability or non-probability sampling, overrepresent people who are more likely to gamble online and to gamble frequently, relative to the proportions of these groups in the general population."*

We have set out our concerns in greater detail in the attachment to this letter. We acknowledge that there may be benefits from creating a new prevalence survey (including timeliness and coverage) but do not consider that any of these should be traded off against survey reliability. In order to build confidence in the statistics, we would appreciate answers to the following questions:

1. Will the survey, methodology, and results be submitted for review to the Office for Statistics Regulation to ensure that the process of replacing the 'Gold Standard' NHS Health Survey with an experimental online survey is consistent with OSR guidelines and consistent with the Commission's stated ambition to "*build confidence in the statistics through transparency and access to data for all*"?
2. Will you grant reasonable requests for additional data accessibility, so that we and others can assess the context for the results published to date and their likely reliability?
3. Will you consider wider evidence with regard to survey reliability – including comparisons with independently audited and assessed industry data?
4. Will you commit to a genuinely independent assessment of survey reliability, such as that carried out by Professors Patrick Sturgis and Jouni Kuha in their 2022 research paper on comparisons between online and face-to-face surveys?³
5. Will the NHS Health Surveys remain the source of Official Statistics on gambling participation and the prevalence of 'problem gambling' until far more robust and transparent checks have been completed on the reliability of the new Gambling Prevalence Survey for Great Britain?⁴

We hope that you agree that these questions are reasonable and that such steps are worth taking in order to ensure that Official Statistics remain trusted and reliable. We look forward to hearing from you in regard to this matter.

Yours sincerely



³ Sturgis, P. & Kuha, J. (2022) How survey mode affects estimates of the prevalence of gambling harm: a multisurvey study. *Public Health*

⁴ It is our understanding that the NHS Health Survey for England will contain questions on gambling in both its 2023 and 2025 editions

The Gambling Prevalence Survey for Great Britain

Our concerns relate to the reliability of the survey results and the extent to which the project may be inconsistent with the Code of Practice for Statistics; and the implications for effective market regulation arising from the use of unreliable statistics. The Gambling Commission has acknowledged from the outset that the use of an online survey and framing effects arising from the designation of a gambling survey (as distinct from a health survey) creates risk of over-reporting both gambling participation and the prevalence of problem gambling. We agree and – based on the results published to date by the Commission – have little confidence that these sources of bias have been mitigated.

The Code of Practice for Statistics

In its December 2020 consultation on gambling participation and problem gambling prevalence research, the Gambling Commission stated:

As part of our duty under the [Gambling Act 2005](#) to advise the government on gambling in Great Britain and provide an effective regulatory function, we collect gambling participation and problem gambling prevalence data via surveys of adults in Great Britain. The data are published as official statistics – meaning they are produced in accordance with the standards set out by the Government Statistical Service in the Code of Practice for Statistics.

The statistics published by the Gambling Commission have the status of 'official statistics', and the Gambling Commission is required to comply with the Code of Practice for Statistics (the "**Code**") published by the UK Statistics Authority ("**UKSA**").

The UKSA is required to promote and safeguard: (a) the quality of official statistics (including their impartiality, accuracy and relevance, and their coherence with other official statistics); (b) good practice in relation to official statistics; and (c) the comprehensiveness of official statistics.

The Code is intended to ensure that official statistics are trustworthy, good quality and are valuable. The key principles underpinning the Code include that:

- those producing statistics must demonstrate their integrity and professionalism. Their behaviours and actions should reflect the public interest as shown in their public commitments, attitudes and processes;
- statistics have to be based on the right data sources, with transparent judgements about definitions and methods, and judgements about the strengths and limitations of the statistics. Producers should demonstrate how they assure themselves that their statistics are robust and reliable; and
- statistics must be equally available to all, and not be released partially or to selected audiences.

Amongst other things, the Code specifically states that:

- The collection, access, use and sharing of statistics and data should be ethical and for the public good. Those producing and releasing statistics should be free from conflicts of interest, including political and commercial pressures, that may influence the production, release and sharing of the statistics and data. [Para. T1.2 of the Code]
- Statistics, data and explanatory material should be presented impartially and objectively. Independent measures, such as internal and external audit, peer review and National Statistics Quality Reviews, should be used to evaluate the effectiveness of statistical processes. Statistics producers should be open about identified areas for improvement. [T4.6]

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- The nature of data sources, and how and why they were selected, should be explained. Potential bias, uncertainty and possible distortive effects in the source data should be identified and the extent of any impact on the statistics should be clearly reported. [Q1.5]
- The causes of limitations in data sources should be identified and addressed where possible. Statistics producers should be open about the extent to which limitations can be overcome and the impact on the statistics. [Q1.6]
- The quality of the statistics and data, including their accuracy and reliability, coherence and comparability, and timeliness and punctuality, should be monitored and reported regularly. Statistics should be validated through comparison with other relevant statistics and data sources. The extent and nature of any uncertainty in the estimates should be clearly explained. [Q3.3]

Inconsistency between the Health Surveys for England and the Pilot Study

While the statistics published by the Gambling Commission are required to carry the designation of 'official statistics', the statistics within the Health Survey for England carry the higher designation of 'National Statistics', on the basis that these statistics have been assessed as meeting the highest standards of Code compliance, including the value they add to public decisions and debate.

It is therefore concerning that the Pilot Survey (and, by inference from Gambling Commission statements, the experimental stage) reported a markedly higher overall level of gambling participation in the population than HSE in 2018 and HSE 2021. Based on our own analysis, we do not consider these results to be plausible. If the Commission's new survey is skewed towards people with higher than average engagement in gambling, it seems obvious that it will also over-report rates of 'problem gambling' in the population⁵. The NatCen/University of Glasgow report on the Pilot Survey attempted to adjust comparisons between the Pilot Survey and the HSE 2018 by comparing 'problem gambling' rates among people with similar breadth and frequency of participation in gambling – but failed to recognise the distortive effects that lockdown measures will have had on both metrics. Taken together with the Commission's insistence (unsupported by evidence) that Health Surveys have under-reported the population prevalence of 'problem gambling' we are concerned that this project may not have been approached with sufficient rigour.

It is also concerning when Commission officials have made statements at odds with the spirit of the Code, such as:⁶

The pilot of course presented figures regarding levels of gambling related harms different to our current methodology. Whilst our current figures show the overall problem gambling rate is statistically stable at 0.2%, the pilot data suggested that rate for participants was 1.3%. The figures are different. We make no apology for that.

Following its last compliance check, the Office for Statistics Regulation ("OSR") wrote to the Gambling Commission on 21 June 2019.⁷ The OSR stated:

we encourage you to engage more widely. Being able to incorporate the views of a wide range of bodies, including interested lobby and industry groups and academics, could help you to make further improvements that would deliver more insight from these important data sources.

⁵ Findings from the experimental stage that the sample over-reported rates of suicide attempt also indicate sample skew.

⁶ <https://www.gamblingcommission.gov.uk/news/article/westminster-media-forum-ian-angus-keynote>

⁷ <https://osr.statisticsauthority.gov.uk/correspondence/compliance-check-of-gambling-commission-industry-statistics/>

You may be able to reinforce the quality and trustworthiness of the statistics by including more detailed documentation of your arrangements for assuring the quality of data. When users can read clearly about how the data are quality assured, they are able to better interpret the strengths and limitations of the statistics.

We have made several requests for data that would help to test the reliability of the Pilot Survey (as well as the 'experimental stage' results); but these have been rejected. It should be expected that outside parties will wish to critique the findings and data. This is part of a dynamic and open process to assure data quality and analysis.

Pursuant to para. Q3.3 of the Code, we would expect the Pilot Study to be validated against the HSE surveys⁸, particularly as these carry the higher designation of 'National Statistics'. We believe that further work should be done to assess the reliability of the Pilot Study and the experimental stage results; and that the Gambling Commission should engage with stakeholders in a far more transparent and open way in order to achieve this.

Practical consequences

The Commission's plan to report a higher rate of population prevalence of 'problem gambling' threatens to have a distortive effect on market regulation:

Post-hoc impact on LCCP changes. By changing the reported rate of 'problem gambling' by use of methodological revision, the Gambling Commission threatens to subvert three consultations on market regulation by introducing (potentially unreliable) post-hoc revisions to key evidence.

- **Interaction Quotas** – in January 2023, the Commission closed a consultation on remote customer interactions. This included the introduction of quotas for interaction, based on the reported 'problem gambling' prevalence rate among participants in each type of activity. These quotas have been proposed using 'problem gambling' rates from the HSE 2018. Should these rates subsequently increase (as appears to be the Commission's intention) we should therefore expect the quotas to rise. The Commission has therefore proposed a formula to calculate interaction quotas in the full knowledge that a key variable will be subject to arbitrary increase in the near future; and that the quotas may be expected therefore to rise shortly after their introduction.
- **Financial Risk Assessments** – in July 2023, the Gambling Commission opened a consultation on the introduction of standardised thresholds for financial risk assessments for consumers gambling online. The consultation document states that "problem gambling rates and other information about harms" was one of "three key information points" used to establish the thresholds. It seems likely therefore that the planned increase in the reported rate of 'problem gambling' will lead to a future downwards recalibration of these thresholds.
- **Statutory Levy** – although the DCMS has yet to open its consultation on the establishment of a statutory levy to fund gambling harm prevention, it is likely that its assessment of required resources will be influenced by the official reported rate of 'problem gambling' in Great Britain (for example by considering cost per 'problem gambler'). The planned introduction of a higher reported rate of problem gambling prevalence clearly has the potential to influence the outcome of this consultation – or future consultations to recalibrate funding levels.

⁸ This should include the HSE 2021, but it is our understanding that the project team has made no attempt to do so and has not even requested the full gambling dataset from the NHS.

The impact that the change in the reported rate of problem gambling will have has not been mentioned in either of the consultation documents published to date; and this raises an issue of transparency. It also means that any impact assessment conducted by the Commission in relation to the planned changes to the LCCP will prove to be wrong; and it threatens to undermine the policy intent of the Government's Gambling Act Review.

Beyond these near-term practical consequences, we also note that the official statistic on the population prevalence of 'problem gambling' is a key variable in a wide range of other studies and – as the Commission has itself acknowledged – it is commonly used for political purposes. We highlight the following examples:

- It directly affects the Office for Health Improvement and Disparities ('OHID') estimate of *'deaths by suicide associated with problem gambling'*. The Commission's planned increase may result in the OHID's estimate of such deaths rising from 496 to 2,000 (or one-third of all such deaths in England). The Gambling Commission is well aware of the problems with the OHID estimates, describing them last year in an internal report released under the Freedom of Information Act as being *'not based on reliable data'* – but has refused to disclose this opinion publicly. The Commission is also well aware of the effect that its new prevalence survey will have on such estimates, having speculated (immediately prior to the publication of last year's Pilot Survey) that, *"if investigated in future, the multiplier may be lower but the PG rate may be higher than 0.4% to produce a broadly similar number"*. It is difficult to see how the Commission can claim to be acting in good faith if: i) it continues to suppress its view that the OHID estimates are *'unreliable'*; and ii) it contributes to a substantially increased, arbitrary and – to use the Commission's own words – *'unreliable'* estimate.
- It will directly affect wider claims (also unreliable) about economic costs associated with gambling. These include the OHID report but also the recent report from the National Institute of Economic and Social Research ('NIESR'). This report is highly speculative (for example, 60% of its cost estimate is based on the spurious contention that winning £500 over a two-year period and being economically inactive due to ill health is a suitable proxy for DSM-IV 'at risk gambling') and contains numerous mathematical and factual errors. The Gambling Commission approved funding for this report and – according to NIESR – fed back on its production; but has indicated that it has no interest in whether or not it is likely to be accurate. We note too that a key adviser to the Gambling Prevalence Survey for Great Britain project served on NIESR's expert advisory board for the project.
- It will distort attempts to evaluate the effect of recent and planned changes to market regulation by altering official statistics (and may indeed be used to show that reforms are associated with increases in the rate of 'problem gambling'; or that 'problem gambling' has increased in spite of reforms).

Having repeatedly advised licensees in recent years that the population prevalence of 'problem gambling' was *'too high'*, we are concerned that the Commission now appears intent on inflating the rate by moving away from a highly reputable ('gold standard') survey to a highly experimental one. The justifications provided for this by the Commission are weak – our analysis attached to this letter suggests that the targeted benefits may be rather marginal and that they represent a poor trade-off compared with survey reliability. We understand that the Department for Health and Social Care has committed to fund gambling questions within the Health Survey for England 2023, 2025 and (possibly) 2027. It is unclear why the Commission did not itself disclose this. The new survey may therefore increase costs and diminish clarity.

We support the Commission in collecting high quality data which may be used to inform regulatory policy and which can help operators to enhance their own insights and improve their own procedures. The work published by the Commission to date however, gives us little confidence that the new survey will be as reliable as the NHS Health Surveys.

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Analysis of Gambling Commission's rationale for replacing the NHS Health Surveys	
Rationale	Analysis
1. <i>Lack of control over our access to Health Surveys limits our ability to report representative data for the whole of Great Britain</i>	<ul style="list-style-type: none"> - Gambling questions were included in the Health Survey for England in 2012, 2015, 2016, 2018 and 2021 – and would have been included in the 2020 survey had it gone ahead. - Questions have also been included in the Scottish Health Survey in 2012, 2015 and 2016. - England represents around 86% of the population of Great Britain. Differences in reporting in Scotland and Wales are unlikely to affect overall results for Great Britain in any meaningful way. - Results from the Scottish Health Survey and the Wales Omnibus have failed to indicate any material differences in gambling behaviours or harms. - The Quarterly Telephone Survey provides a mechanism for testing whether important differences exist between England, Scotland and Wales.
2. <i>Different participation and prevalence questions on different surveys generate multiple figures</i>	<ul style="list-style-type: none"> - This is correct – but a new prevalence survey will not help this; in fact it will make matters worse. - FOIA disclosures reveal that the DHSC has paid for the inclusion of gambling questions in the Health Survey for England 2023, 2025 and (probably 2027). - In addition, rates of gambling participation and 'problem gambling' will also be reported in the Adult Psychiatric Morbidity Survey 2022 and the GambleAware Annual Treatment Survey. - It may also be the case that the Commission continues with its Quarterly Telephone Survey.
3. <i>Data from the different surveys is not directly comparable due to different methodologies being used</i>	<ul style="list-style-type: none"> - This is correct – but the new prevalence survey will exacerbate this (as described above).
4. <i>The infrequency and long turnaround time of the Health Surveys from inception to reporting</i>	<ul style="list-style-type: none"> - Health Surveys took place in five years out of ten between 2018 and 2021. This would have been six years out of ten had the 2020 survey not been cancelled. - There is no suggestion that different actions might have been taken had the surveys been carried out more frequently. - It took nine months between the end of fieldwork for the 2018 Health Survey for England and publication; it took 11 months for the 2021 survey. These do not appear to be very long turn-around times. While expediting results is possible (e.g. results for alcohol consumption were released four months after fieldwork ended), speed is not worth the sacrifice of quality. - The Quarterly Telephone Survey has provided the ability to test for changes between household prevalence surveys.
5. <i>Traditional research methods (on which we rely) are in decline and under greater threat due to Covid-19 impacts</i>	<ul style="list-style-type: none"> - This may or may not be true. It is too soon to say whether Covid has permanently affected data collection. In the meantime, we observe that the (Covid-affected) Health Survey for England 2021 had a response rate c50% higher than the Pilot Prevalence Survey.

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Extract from Email Attachment titled Prevalence Surveys – GC Consultation – December 2021 FINAL

Subject: NatCen survey on gambling prevalence

06 December 2021

How important do you think it is for the survey to include questions on harms related to someone else's gambling (i.e. affected others)?

*We note for example the oft-cited 2017 study by Goodwin et al. in Australia that found that six other people were negatively affected for every PGSI 'problem gambler'. This finding was based upon the use of the question: "Have you had a close relationship with a person whose gambling has caused problems in your life, **no matter how minor?**". It then asked those classified as 'affected others' to estimate how many other people might have been similarly affected by the same 'problem gambler'. It ought to be clear that the first of these two questions uses a very low threshold to identify harm ("caused problems...no matter how minor"); while the second is highly subjective, potentially vulnerable to response bias and not at all insightful in respect of what type and severity of harms might have occurred.*

Extract from Email Attachment titled PP pilot phase update May 2022 V1

04 April 2022

Recommendations from Pilot Survey

- *It is clear that there was non-response bias towards non-gamblers but the extent of this cannot be fully understood from the pilot data alone. We recommend that a part of the further work undertaken during the experimental statistics phase is to further understand this bias and make changes to reduce it. Two areas that should be considered for further work are:*
 - *Conducting split-sample experiments*
 - *Changing the invite and reminder letters*

Next Steps

- *Increase understanding of non-response bias towards non-gamblers and make changes to reduce it*

Extract from Email Attachment titled Response to Comments on CI Findings Presentation

20 April 2022

32. Any suggestions on refinements to the letters?

I think this needs to be looked at in the round with the pilot data, and our plans for experimentation to try to reduce the response bias observed in the pilot. It is unlikely that using e.g. reminder 1 as the first letter will make any significant difference to the response bias. Rather I think we need to consider a range of changes to the letters that encourage participation of non-gamblers as well as the approach for selecting respondents within households e.g. do we invite

everyone 18+ to take part in an attempt to reduce the selection effect resulting from leaving it to households to decide who takes part?

Extract from Email Attachment titled Questionnaire Development next steps – REDACTED notes 22/4/22

22 April 2022

However, there is some further work to do before running the spilt ballot experiment.

- The timing of this experiment e.g. before, after or alongside the response bias experiment(s). My suggestion would be to run after the response bias experiment(s), when we have a clearer sense of whether we will stick with 2 adults per household or all asks all adults in the household to take part. Preparation work for the question wording experiment should take place whilst the response bias experiment(s) are taking place.*

Extract from Email Attachment Developing a new gambling survey for Great Britain – conference workshop

03 March 2023

FAQs

1. Why are you moving to this new methodology?

a. We want to a GB wide survey with all fieldwork collected at the same time and reported in a timely manner. Last time we have GB wide results from the Health Survey is 2016. Telephone survey aimed to fill the gap between Health Surveys, but telephone methodology has limitations re: dwindling response rates, limited on length of questionnaire and potential social desirability bias from being interviewer led.

Extract from Email Attachment titled Gambling Commission Spring Conference Debrief – The Gambling Survey for Great Britain

Subject: Debrief: Spring Conference 2024: The Gambling Survey for Great Britain

21 March 2024

REDACTED provided detail on the extensive development work that has taken place – 3 stages

- Took learnings from Steps 1 and 2 – routing of some questions changed from Step 2; there was also a non-response biased identified so that was removed.*

Question: Given the public discourse around gambling and gambling harms - how do we control for desirability bias. Will that get exacerbated over time? Any data collected face to face?

Response: We are not collecting survey responses face to face. We are using a push to web methodology to ensure privacy for respondents with the option to complete via a postal survey for those participants who are unable to go online or choose not to go online can still take part.

- *40% completing paper questions which is consistent with pilot and experimental phase - important part of methodology to be able to offer that*