

# Testing Alternative Gambling Harm Measures

**Publication date:** August 2024

**Authors:** Briony Gunstone, Sarah Prescott-Smith and Megan Coutin

Commissioned by GambleAware

**YouGov**<sup>®</sup>

## Contents

1	Introduction.....	3
1.1	Background.....	3
1.2	Method.....	7
2	The PGSI mini-screen.....	10
2.1	Introduction.....	10
2.2	Summary of key findings.....	10
2.3	Prevalence of harm.....	11
3	The Gambling Commission question development.....	16
3.1	Introduction.....	16
3.2	Summary of key findings.....	16
3.3	Prevalence of harm.....	17
4	South Oaks Gambling Screen (SOGS).....	23
4.1	Introduction.....	23
4.2	Summary of key findings.....	23
4.3	Prevalence of harm.....	24
5	20-item Gambling Harm Screen & SGHS.....	30
5.1	Introduction.....	30
5.2	Summary of key findings.....	30
5.3	Prevalence of harm.....	30
6	Victoria Gambling screen.....	36
6.1	Introduction.....	36
6.2	Summary of key findings.....	36
6.3	Prevalence of harm.....	36
7	Domain-General Gambling Harm (DGHS-7).....	42
7.1	Introduction.....	42
7.2	Summary of key findings.....	42

7.3	Prevalence of harm.....	42
8	DSM-5 .....	47
8.1	Introduction.....	47
8.2	Summary of key findings .....	47
8.3	Prevalence of harm.....	48
9	Conclusions and implications .....	52
10	Technical appendix.....	59
10.1	Additional tables .....	59
10.2	Weighting.....	60
10.3	Questionnaire .....	61

# 1 Introduction

## 1.1 Background

GambleAware, along with many other organisations working in the gambling support field, typically uses the Problem Gambling Severity Index (PGSI) as a measure of gambling harm. However, it is recognised that the tool has limitations<sup>1</sup>. For example, the items do not necessarily capture the full range of possible harms that can be experienced; all items are treated equally in the scoring which does not necessarily reflect the likely relative impact of the different items, and subjective interpretation may affect how items are answered by different individuals. Furthermore, the PGSI measures the previous 12 month period and as such does not capture long term legacy harms.

Various alternative tools for measuring gambling harm have been used in different studies/contexts and in different countries<sup>2</sup>. Hence, the purpose of this study was to test alternative tools to understand how they compare with the PGSI and how they affect the incidence of those experiencing different levels of gambling harm within the British population, compared with a PGSI-based approach. A similar study has been conducted in Australia<sup>3</sup>, however this is the first time analysis has used data from respondents in Britain to analyse various alternative tools.

It is worth considering the background and possible limitations of these scales. Indeed, older tools such as the PGSI, South Oaks Gambling Screen, Victoria Gambling Screen and the DSM-5 all rely on clinically derived notions of “problem gambler”, arguably limiting them due to the understanding of harm which underpins the scales not following modern protocols and being somewhat ambiguous<sup>4</sup>.

---

<sup>1</sup> <https://www.begambleaware.org/sites/default/files/2023-11/PGSI%20tech%20report.pdf>

<sup>2</sup> Frameworks and Measurement of GRH\_Final\_for publication.pdf (begambleaware.org)

<sup>3</sup> [https://responsiblegambling.vic.gov.au/documents/1206/RES0118\\_The\\_Gambling\\_Harms\\_Scales.pdf](https://responsiblegambling.vic.gov.au/documents/1206/RES0118_The_Gambling_Harms_Scales.pdf)

<sup>4</sup> [https://www.gambleaware.org/sites/default/files/2023-12/Frameworks%20and%20Measurement%20of%20GRH\\_Final\\_for%20publication.pdf](https://www.gambleaware.org/sites/default/files/2023-12/Frameworks%20and%20Measurement%20of%20GRH_Final_for%20publication.pdf)

By contrast, the newer tools, such as the Gambling Commission items, Gambling Harm Scales and DGHS, are based on the Langham framework which provides more precise measures of harm<sup>5</sup>. The tables below allow for more direct comparisons to be made between the scales based on the background, development, and items used.

**Table 1. Details of Instruments/Scales**

Scale	Year of development	Development paper	Number of items	Recall period	Scoring mechanism	Theoretical underpinnings
<b>PGSI</b>	1999, revised in 2003	<a href="#">The Canadian Problem Gambling Index: Final report</a>	9	Last 12 months	Problem gambler = 8+ Moderate risk = 3-7 Low risk = 1-2 Non-problem gambler = 0	Clinical
<b>PGSI mini screen</b>	2012	<a href="#">Developing a Short Form of the PGSI</a>	3	Last 12 months	Never = 0 Sometimes = 1 Most of the time = 2 Almost always = 3	Clinical
<b>The Gambling Commission</b>	Since 2020	<a href="#">Developing survey questions capturing gambling-related harms</a>	14 in harm to self scale	Last 12 months	Still in development	Langham Framework
<b>South Oaks Gambling</b>	1987	<a href="#">The South Oaks Gambling Screen (SOGS): a new</a>	16	Undefined	No problem = 0 Some problems = 1-4	Clinical

<sup>5</sup> [https://www.gambleaware.org/sites/default/files/2023-12/Frameworks%20and%20Measurement%20of%20GRH\\_Final\\_for%20publication.pdf](https://www.gambleaware.org/sites/default/files/2023-12/Frameworks%20and%20Measurement%20of%20GRH_Final_for%20publication.pdf)

		<a href="#">instrument for the identification of pathological gamblers</a>			Probable pathological gamblers = 5-20	
<b>Gambling Harm Screen</b>	Short scale: 2017  20-item scale: 2022	<a href="#">The Gambling Harms Scales: Instruments to assess impact to gamblers and affected others that are benchmarked to health utility</a>	Short scale = 10 items  Full scale = 20 items	Last 12 months	No harm = 0  Low harm = 1-2  Moderate harm = 3-5  High harm = 6-10  Additional category = 11+	Langham Framework
<b>Victoria Gambling Screen</b>	Developed from 1988, published 2001	<a href="#">The Victoria Gambling Screen</a>	15	Last 12 months	No harm = 0-8  Some harm = 9+	Clinical
<b>Domain-General Gambling Harm</b>	2023	<a href="#">Validation of the 7-Item Domain-General Gambling Harm Scale (DGHS-7)</a>	7	Last 12 months	No impact = 0  Minor impact = 1  Some impact = 2  Moderate impact = 3  Major impact = 4	Langham Framework
<b>DSM-5</b>	2013	<a href="#">DSM-5 Gambling Disorder: Prevalence and Characteristics in a Substance Use Disorder Sample</a>	9	Last 12 months	No 'persistent and recurrent' problem = 0-3  Mild = 4-5  Moderate = 6-7  Severe = 8-9	Clinical



**Table 2. Items included in each tool**

Scales/ Items	PGSI	PGSI mini screen	The Gambling Commission	South Oaks Gambling	Gambling Harm Screen (*indicates inclusion in the SGHS)	Victoria Gambling Screen	Domain-General Gambling Harm	DSM-5
Bet more than could afford/ Gambled more than intended	X	X		X		X		
Gambled larger amounts to feel excitement	X							X
Unable to stop gambling/ Carry on gambling to win back losses	X			X		X		X
Gambled when feeling low/sad						X		X
Hidden betting/gambling related items or lied about gambling			X	X		X		X
Borrowed money/ sold items/ used savings/ cut back on spending	X		X	X	X*	X	X	X
Lost time at work/school			X	X	X	X		
Other people criticise/ damaged relationships	X	X	X	X	X*	X		X
Felt guilt/regret/vulnerable	X	X	X	X	X*	X		

<b>Health related problems (physical or mental)</b>	X		X		X*		X	X
<b>Often preoccupied with gambling</b>						X		X
<b>Lost something of value</b>			X					
<b>Increased debt</b>	X				X*			
<b>Experience violence</b>			X					
<b>Committed crime/ illegal act</b>			X			X		

## 1.2 Method

To avoid asking people to complete the PGSI and various similar tools in the same survey, this study was conducted as a follow-up to the annual GambleAware Treatment and Support Survey 2023, which includes PGSI questions in the questionnaire and subsequently classifies people into PGSI scoring categories.

By recontacting respondents who had already taken the Treatment and Support survey we were able to compare their PGSI scores to the scores of another tool without the need to re-ask them the PGSI questionnaire. The recontact survey took place around 2-3 weeks after the Treatment and Support survey.

In total, 4,456 people who had gambled in the last 12 months were recontacted and took part in this study. To ensure that their responses were still relevant, we asked about their gambling habits in the past 12 months at the start of the survey, with any respondents indicating that they had not gambled in this timeframe being screened out of the study. Respondents were then randomly allocated to one of the seven tools we wished to test, which were:



1. The PGSI mini screen (n=622)
2. The Gambling Commission question development (n=605)
3. The South Oaks Gambling screen (n=644)
4. The 20-item Gambling Harm screen (n=639)
5. The Victoria Gambling screen (n=661)
6. The 7-item Domain-General Gambling Harm screen (n=635)
7. The DSM-5 Gambling Disorder screen (n=650)

Initially we considered a longer list of tools, with the tools above ultimately selected for inclusion in the study. These tools were selected due to them having readily available questions and scoring information meaning they would serve as a useful comparator to the PGSI. They were also selected on the grounds that they were generally respected tools which had been tested, often validated and used elsewhere for measuring gambling harm.

Tools which were considered but not selected included:

- The DSM-4 Gambling Disorder Criteria, due to instead choosing the more recent DSM-5 scale.
- The Canadian Problem Gambling Index, due to the PGSI being a subset of this scale.
- The Harm Questionnaire, due to information not being readily available.

The data was weighted by PGSI category, age, gender, social grade, region and ethnicity to ensure that each individual sample split matched the profile of gamblers seen in the Treatment and Support study.

More information on the questions, scoring, and weighting can be found in the Appendix.

Please also note that in tables and charts, due to rounding some figures might not add up to 100%, or the full 'net' percentage.

### *Limitations, mitigations, and implications for future research*

It is worth noting that there was a gap of 2-3 weeks between the fieldwork of Treatment and Support closing and fieldwork for this study, hence there is the possibility that some people could have changed their behaviour in the interim and would therefore be classified differently had they retaken the PGSI survey.

Since the survey used a recontact approach, it is possible that certain groups of people were more likely to take part (for example, those more interested in the topic of gambling). However, our survey invitations do not include the specific topic of the survey, to mitigate against this type of bias. Additionally, the data is weighted by PGSI category to ensure a representative spread of gamblers.

Sample sizes for each individual tool were limited due to the overall sample of gamblers from the Treatment and Support survey being divided into seven cohorts, However the samples still allow for robust analysis by key groups and demographics.

Future research could potentially examine a smaller list of tools (or just one selected tool of particular interest), with larger sample sizes utilised for each tool, and go into more detail on the tool(s).

## 2 The PGSI mini-screen

### 2.1 Introduction

The PGSI mini-screen was developed as a short form of the PGSI and includes three of the nine PGSI items:

- Have you bet more than you could really afford to lose? (*Item 1 on the full PGSI scale*)
- Have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true? (*Item 7 on the full PGSI scale*)
- Have you felt guilty about the way you gamble or what happens when you gamble? (*Item 9 on the full PGSI scale*)

Since respondents who took part in this study had already previously answered the full PGSI scale, an option would have been to calculate their PGSI mini-screen score from their existing answers. However, to avoid the other 6 items from the PGSI full screen having any impact on the 3 items used in the PGSI mini-screen, respondents were asked the 3 items of the PGSI mini-screen again in isolation. This would therefore more accurately reflect how the mini-screen would be used in place of the full PGSI scale, and provide more robust findings for comparison to the full scale.

The questions refer to gambling-related issues within the last 12 months. A score of 0 is categorised as a 'non-problem gambler', followed by 'low-risk gambler' (score 1), 'moderate-risk gambler' (score 2-3), and 'problem gambler' (score 4+). The list of PGSI mini-screen questions and response options can be found at Q5 in the appendix.

### 2.2 Summary of key findings

The mini-screen classifies fewer people who gamble as experiencing problems than the full PGSI. Half of those classified as 'low level of problems' (score 1-2) on the full PGSI are classified as experiencing no problems by the mini-screen, along with over a quarter of the 'moderate level of problems' (score 3-7) category and 11% of those experiencing 'problem gambling' (score 8+).

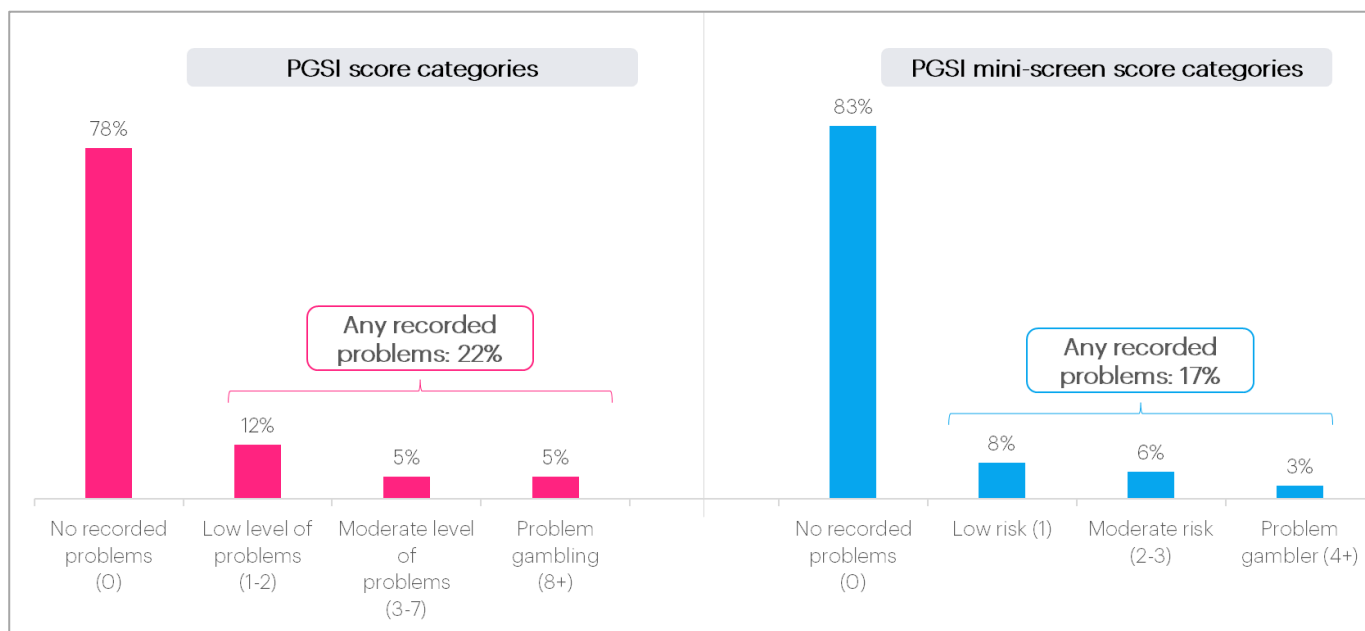
The results suggest that if the mini-screen were to be used in place of the full PGSI, a substantial amount of people who are recorded as experiencing problems by the full PGSI would be ‘missed’ by the mini-screen (i.e. classified as not experiencing problems). This pool of ‘missed’ people would be slightly skewed towards men, older age groups, and white adults.

## 2.3 Prevalence of harm

### *Overall prevalence of harm*

The PGSI mini-screen was less likely to identify respondents as experiencing problems than the full PGSI, with 17% classified as experiencing any problems (a score of 1 or higher), compared with 22% recorded on the full PGSI. This is perhaps unsurprising given that the mini-screen contains common items with the full PGSI but fewer of them.

**Figure 1: Comparison of full PGSI and PGSI mini-screen score categories**



Base: all who have gambled in the last 12 months (n=622)

Analysis of responses to the mini-screen among those in each full PGSI category shows that the majority (62%) of those classified as experiencing any problems on the full PGSI (a score of 1+) were also classified in an equivalent way (a score of 1+) when answering the mini-screen. However, a sizable minority (38%) of this group did not record any problems via the mini-screen.

Among the individual full PGSI categories, 11% of those experiencing ‘problem gambling’ (a score of 8+) were classified as experiencing no problems (a score of 0) by the mini-screen. This was also true for 28% of those in the ‘moderate level of problems’ PGSI category (score 3-7), and half (53%) of those in the ‘low level of problems’ (1-2) category. Only just under half (48%) of those with a full PGSI score of 8+ were placed in the top mini-screen category (a score of 4+). Those experiencing a moderate level of problems according to the full PGSI (score 3-7) were most likely to be placed in the ‘low levels of problems’ (score 1) category on the mini-screen (35%), with 26% falling into the ‘moderate level of problems (score 2-3) category.

For those who did not record any problems, the fit between the tools was close: 95% of those with a score of 0 on the full PGSI also recorded a score of 0 on the mini-screen.

**Table 3: PGSI mini-screen harm category by PGSI category**

		PGSI category				
		Score 0 (n=364)	Score 1-2 (n=115)	Score 3-7 (n=59)	Score 8+ (n=59)	All 1+ (n=233)
PGSI mini screen category	No recorded problems (0)	95%	53%	28%	11%	38%
	Low level of problems (1)	3%	31%	35%	7%	27%
	Moderate level of problems (2-3)	1%	14%	26%	35%	21%
	Problem gambling (4+)	0%	2%	11%	48%	14%
	All 1+	5%	47%	72%	89%	62%

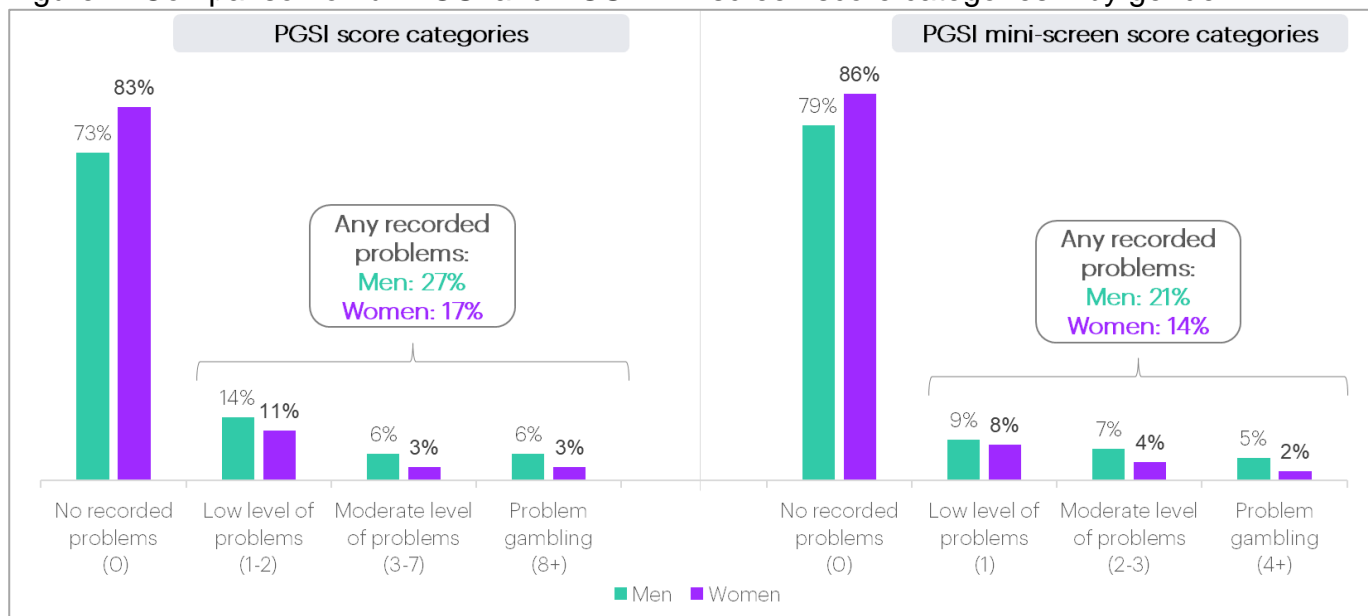
The results suggest that if the mini-screen were to be used in place of the full PGSI, 38% of people who are recorded as experiencing problems (1+) and 11% of people recorded as experiencing problem gambling (8+) on the full PGSI would be ‘missed’ by the mini-screen (i.e. classified as not experiencing problems). Conversely, 5% of those classified as experiencing no problems on the full PGSI would be classified as experiencing some level of problems by the mini-screen.

Overall, 12% are given a different classification by the mini-screen than they were by the full PGSI, with the majority of this group being those recorded as experiencing problems (1+) on the full PGSI but not by the mini-screen.

## *Prevalence of harm among demographic groups*

Analysis by gender shows that both men and women are less likely to be classified as experiencing problems by the mini-screen than by the full PGSI. For men, over a quarter (27%) are classified in this way by the full PGSI, which falls to a fifth (21%) when answering the mini-screen. For women, the equivalent decrease is from 17% on the full PGSI to 14% on the mini-screen. Proportionally, the decrease for men is slightly larger than it is for women. This suggests that the overall pool of people who would be ‘missed’ by the mini-screen, if it were to be used in place of the full PGSI, would be slightly skewed towards men.

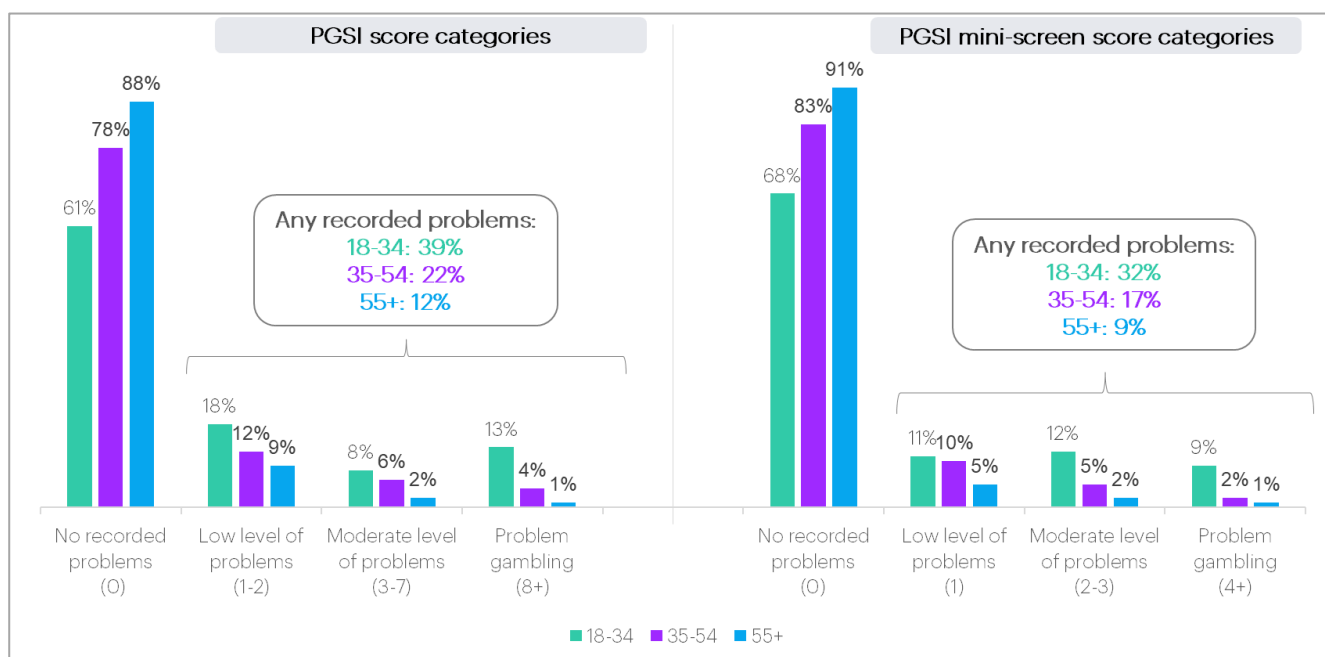
Figure 2: Comparison of full PGSI and PGSI mini-screen score categories – by gender



Base: men (n=348), women (n=274)

This pattern, whereby the mini-screen identifies fewer people as experiencing problems than the full PGSI, can also be seen across all age groups. For those aged 18-34, the proportion recorded as experiencing any problems falls from 39% on the PGSI to 32% on the mini-screen, while for age 35-54 the equivalent decrease is from 22% to 17%, and for age 55+ it is 12% to 9%. Proportionally, the decrease is largest for the 55+ age group.

Figure 3: Comparison of full PGSI and PGSI mini-screen score categories – by age

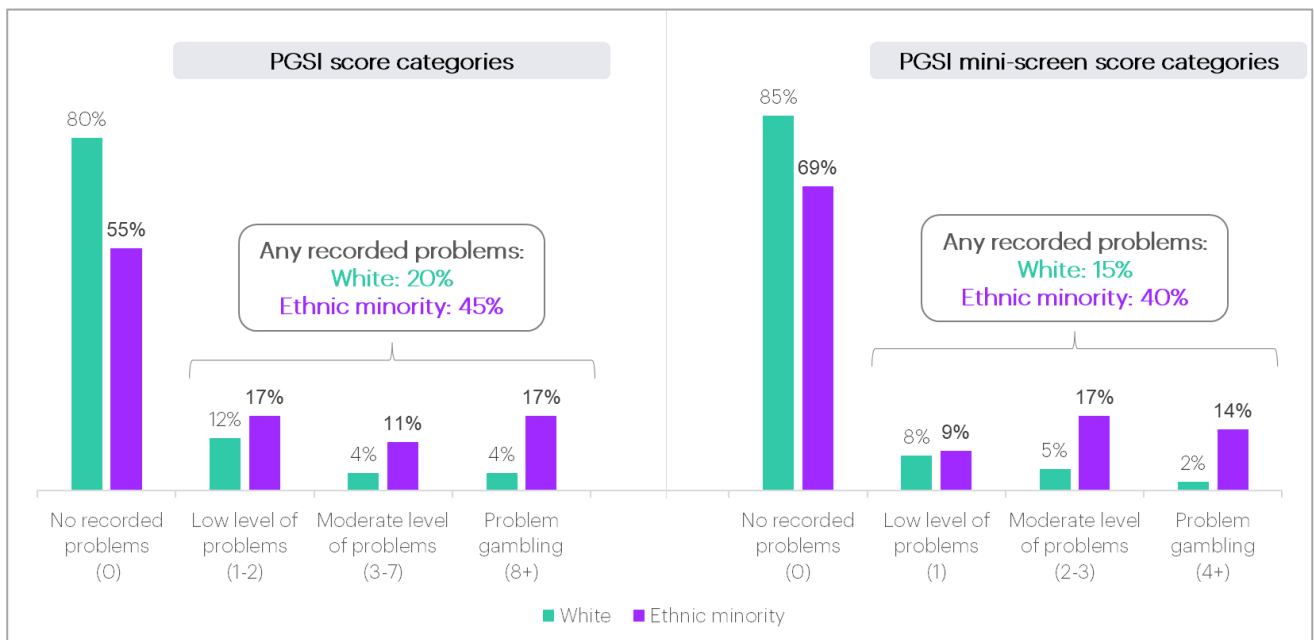


Base: 18-34 (n=163), 35-54 (n=226), 55+ (n=233)

Considering differences by ethnicity, the mini-screen shows a similar general pattern to the full PGSI, with those from ethnic minority backgrounds being much more likely than white respondents to be classified as experiencing any problems (a score of 1+). However, for ethnic minority adults, the difference between the full PGSI and the mini-screen is smaller: 45% of this group are classified as experiencing problems by the full PGSI, and 40% by the mini-screen (a relative decrease of 11% between the two measures). For white adults, the equivalent relative decrease is around 25% (from 20% on the full PGSI to 15% in the mini-screen). This suggests that, if the mini-screen were to be used in place of the full PGSI, a larger proportion of white adults who gamble would be 'missed' by the tool, whereas for ethnic minority adults the impact would be smaller.



Figure 4: Comparison of full PGSI and PGSI mini-screen score categories – by ethnicity



Base: white (n=560), ethnic minority (n=62)

## 3 The Gambling Commission question development

### 3.1 Introduction

Since 2020 the Gambling Commission has been conducting work to develop and test a new series of survey questions aimed at measuring the experience of gambling harms<sup>6</sup>, including both harms to oneself and harms caused by the gambling of others.

These questions are now included in the Gambling Commission annual survey, although they are not yet treated as a specific 'measurement instrument'. They refer to gambling-related activities within the last 12 months and include three items taken from the PGSI. Full questions can be found at GC\_1 onwards in the appendix.

Those classified as experiencing some level of harm are then divided into two groups: severe harm and other negative consequences. Information on how this is defined can be located in the questionnaire in the appendix.

### 3.2 Summary of key findings

Overall, the Gambling Commission questions classify more people who gamble as experiencing some level of harm (severe or other negative consequences) than the PGSI (27% vs. 22%). There is considerable divergence in both directions between the two tools.

Close to half of those classified as experiencing any problems on the PGSI (a score of 1+) were classified as not experiencing any problems (a score of 0) by the Gambling Commission questions. This includes a sizable minority of those in the 'moderate level of problems' (score 3-7) category, and the majority of those classified as 'low level of problems' (score 1-2). Conversely, a fifth of those classified as not experiencing any problems (a score of 0) on the PGSI were classified as experiencing some level of problems by the Gambling Commission tool.

---

<sup>6</sup> <https://www.gamblingcommission.gov.uk/statistics-and-research/publication/gambling-participation-and-the-prevalence-of-problem-gambling-survey-final>

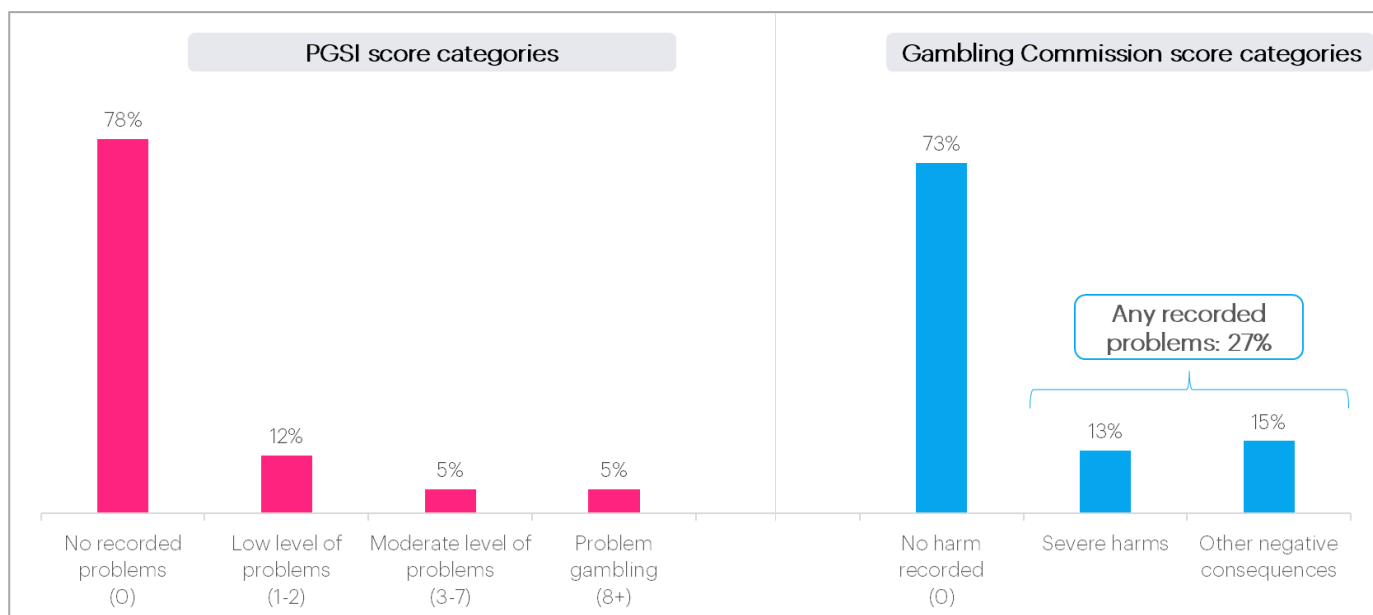
There is much weaker variation by gender for the Gambling Commission tool than for the PGSI, with men and women similarly likely to be classified as experiencing any problems. If the Gambling Commission tool were to be used in place of the PGSI, a substantial amount of women would be recorded as experiencing problems who are currently not classified in this way where the PGSI is used. Additionally, using this tool would pick up more respondents in older age groups and white ethnic groups when compared to the PGSI.

### 3.3 Prevalence of harm

#### *Overall prevalence of harm*

Using the Gambling Commission’s set of questions, 27% of those gambling in the last 12 months were classified as experiencing some level of harm (a score of 1 or higher): a significantly higher proportion than the PGSI scale which classifies 22% as experiencing any problems from gambling.

**Figure 5: Comparison of PGSI and Gambling Commission score categories**



Base: all who have gambled in the last 12 months (n=597)

Analysis of the Gambling Commission harm scoring within PGSI category shows considerable movement between categories at individual respondent level. Notably, only just over half (54%) of those classified as experiencing any problems on the PGSI scale (a score of 1+) are also classified in an equivalent way (a score of 1+) using the Gambling Commission tool, showing that there is considerable divergence between the two tools.

Almost all those with a score of 8+ on the PGSI (97%) also recorded some level of harm via the Gambling Commission tool (i.e. a score of 1+), with 72% being classified as experiencing ‘severe harm’. For those experiencing a moderate level of problems on the PGSI (score 3-7), the majority (69%) recorded some level of harm via the Gambling Commission tool, but a sizable minority (31%) were classified as not experiencing any harm (a score of 0). Those experiencing a moderate level of problems on the PGSI (score 3-7) were most likely to have experienced ‘other negative consequences’ only (58%) via the Gambling Commission tool, with 11% experiencing ‘severe’ harms.

The majority (68%) of respondents experiencing a low level of problems via the PGSI (score 1-2) were scored 0 using the Gambling Commission tool, with only a third (32%) classified as experiencing any harm via this tool. Furthermore, the proportion of the PGSI 1-2 category classified as experiencing ‘severe’ harms via the Gambling Commission tool is equal to that seen among the PGSI 3-7 category (11% in both cases).

At the bottom of the scale, 80% of those with a score of 0 on the PGSI were also given a score of 0 by the Gambling Commission tool. However, this leaves a fifth of those with a score of 0 on the PGSI who were classified as experiencing some level of harm by the Gambling Commission tool, which is driving the higher overall proportion recorded as experiencing any harm by this tool.

**Table 4: Gambling Commission harm category by PGSI category**

		PGSI category				
		Score 0 (n=364)	Score 1-2 (n=115)	Score 3-7 (n=59)	Score 8+ (n=59)	All 1+ (n=233)
Gambling Commission category	Score 0	80%	68%	31%	3%	46%
	Severe harms	9%	11%	11%	72%	24%
	Other negative consequences	10%	21%	58%	25%	30%
	All 1+	20%	32%	69%	97%	54%

If the Gambling Commission tool were to be used in place of the PGSI, 46% of people who are recorded as experiencing problems (1+) on the PGSI would be 'missed' by the Gambling Commission tool (i.e. classified as not experiencing problems). However, as discussed above, a sizeable proportion (20%) of those classified as experiencing no problems on the PGSI would be classified as experiencing some level of problems by the Gambling Commission tool. Overall, 25% are given a different classification by the Gambling Commission tool than they were by the PGSI, with the majority of this group being those recorded as experiencing problems by the Gambling Commission tool but not on the PGSI.

### *Prevalence of harm among demographic groups*

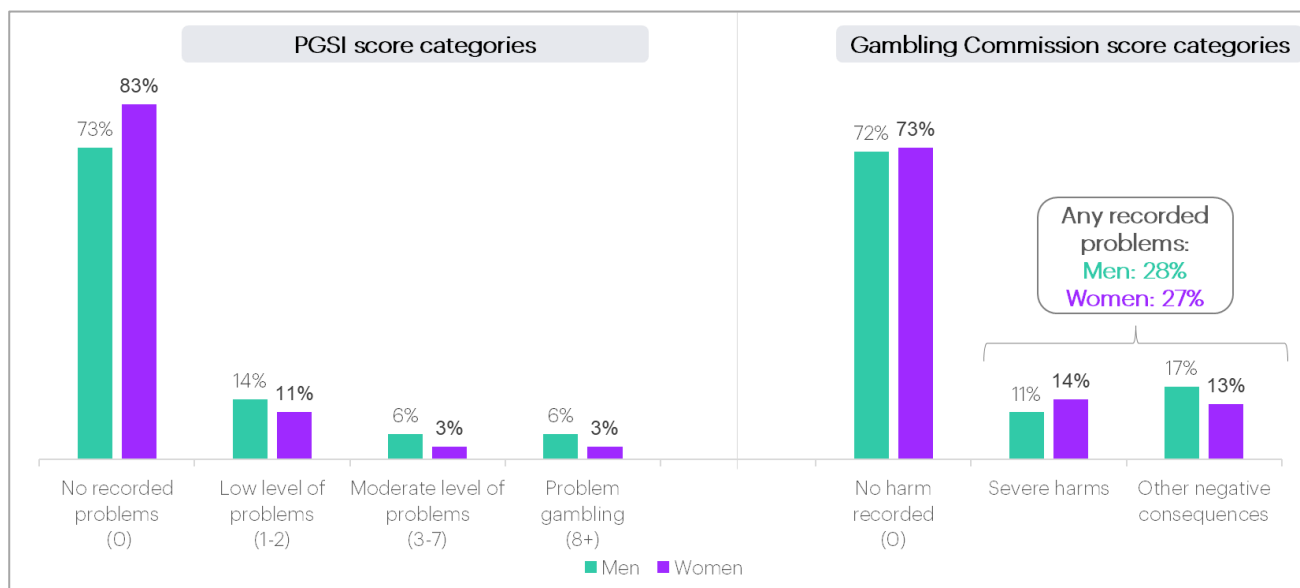
Analysis by gender shows a somewhat different pattern for the Gambling Commission tool compared with the PGSI scale. While the PGSI shows a strong pattern by gender, with men who gamble around 50% more likely to be placed in the 1+ category than women, there is much weaker variation by gender for the Gambling Commission tool. Indeed, at an overall level, men and women who gamble are similarly likely to be classified as experiencing any harm via the Gambling Commission tool (28% of men, 27% of women).

For men, there is little difference between the two tools in terms of the proportion classified as experiencing any harm, with 27% classified this way by the PGSI and 28% by the Gambling Commission tool. However for women, there is a fairly dramatic uplift when using the Gambling Commission tool: 27% are classified as experiencing any harm, compared with only 17% when using the PGSI, an increase of over 50%.

Additionally, women were more likely to have experienced harms classified as 'severe' on the Gambling Commission tool; 14% of women had experienced one or more of these harms, compared with 11% of men. This difference is largely driven by the category 'experienced violence or abuse because of your own gambling', which applied to 7% of women and 5% of men.

The findings suggest that, if the Gambling Commission tool were to be used in place of the PGSI, a substantial amount of women would be recorded as experiencing harm who are currently not identified in this way where the PGSI is used. For men, there would be little difference in the amount recorded as experiencing any problems or harm.

**Figure 6: Comparison of PGSI and Gambling Commission score categories – by gender**



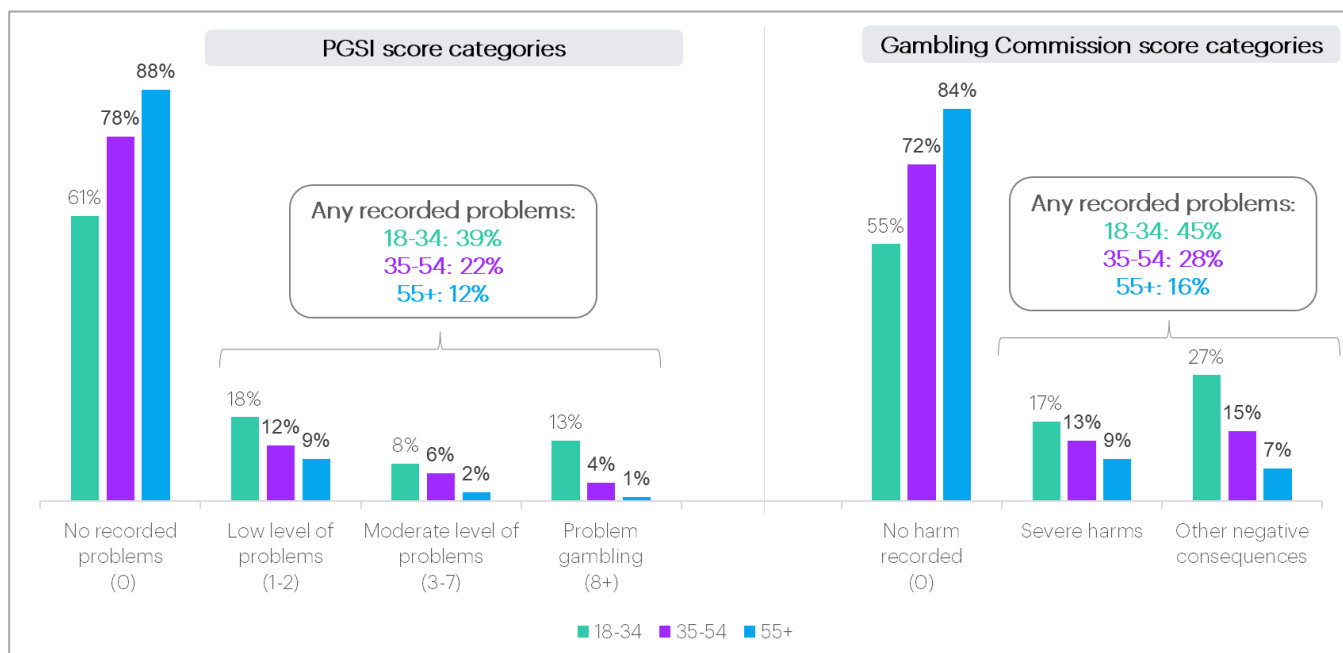
Base: men (n=321), women (n=276)

Analysis by age reveals a similar pattern for the Gambling Commission tool when compared with the PGSI scale, with younger individuals more likely than their older counterparts to be placed in the 1+ category.

As discussed earlier in this chapter, the Gambling Commission tool identified a higher proportion of those who gamble overall as experiencing some level of harm than the PGSI scale (27% compared with 22%). This uplift is evident to some degree across ages, with each age group showing a higher proportion classified as experiencing harm on the Gambling Commission tool than on the PGSI scale.

However, the gap between the two tools appears to be more pronounced for middle and older age groups than for younger people. Among those aged 55+, 12% were classified with a score of 1+ by the PGSI scale which rises to 16% when using the Gambling Commission tool: a relative increase of around 33%. For the 35-54 age group, the proportion recorded this way is 22% on the PGSI scale and 28% on the Gambling Commission tool (representing around a 27% relative increase). The equivalent increase for 18-34s is only around 15% (from 39% on the PGSI scale to 45% on the Gambling Commission tool).

Figure 7: Comparison of PGSI and Gambling Commission score categories – by age



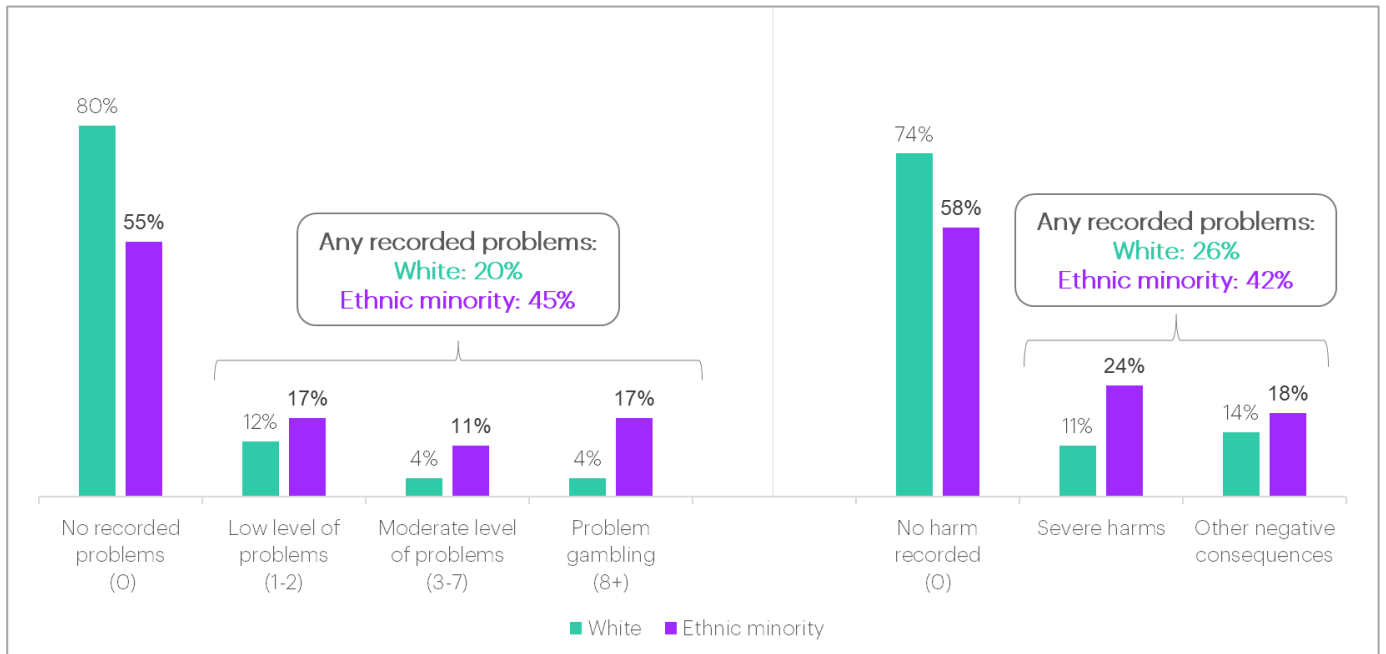
Base: 18-34 (n=167), 35-54 (n=235), 55+ (n=195)

Turning to look at differences by ethnicity, the Gambling Commission tool shows a similar general pattern to the PGSI scale, with those who gamble from ethnic minority backgrounds being more likely than their white counterparts to be classified in the 1+ category. Using the Gambling Commission tool, 42% of those who gamble from ethnic minority backgrounds were classified as experiencing any harm, compared with 26% of white people who gamble. The equivalent comparison from the PGSI scale is 45% vs. 20%.

However, the 26% of white respondents who are classified by the Gambling Commission as experiencing some level of harm is significantly higher than the 20% of this group who are classified by the PGSI scale as experiencing any problems. By contrast, those from ethnic minority backgrounds are similarly likely to be classified as experiencing harm by both tools (45% by the PGSI, 42% by the Gambling Commission tool – a non-significant difference).



Figure 8: Comparison of PGSI and Gambling Commission score categories – by ethnicity



Base: white (n=518), ethnic minority (n=79)

## 4 South Oaks Gambling Screen (SOGS)

### 4.1 Introduction

The South Oaks Gambling Screen (SOGS) consists of 16 items, of which four are excluded from the final score. The maximum score is 20, with respondents grouped into three categories: those who experience no problem with gambling (score of 0), those who experience some problems with gambling (1 to 4), and those who may be classified as 'probable pathological gamblers' (5 to 20).

With an undefined timeframe, these scores are reflective of lifetime gambling-related behaviour and problems, rather than within a specific time period. The full list of questions can be found from SOGS\_4 onwards in the appendix.

### 4.2 Summary of key findings

Analysis shows that those gambling in the last 12 months are much more likely to be classified as having experienced some level of harm (a score of 1+) when using the SOGS tool compared with the PGSI scale. This is perhaps unsurprising given the 'lifetime' timescale used for the SOGS scale, rather than a focus on the last 12 months for the PGSI.

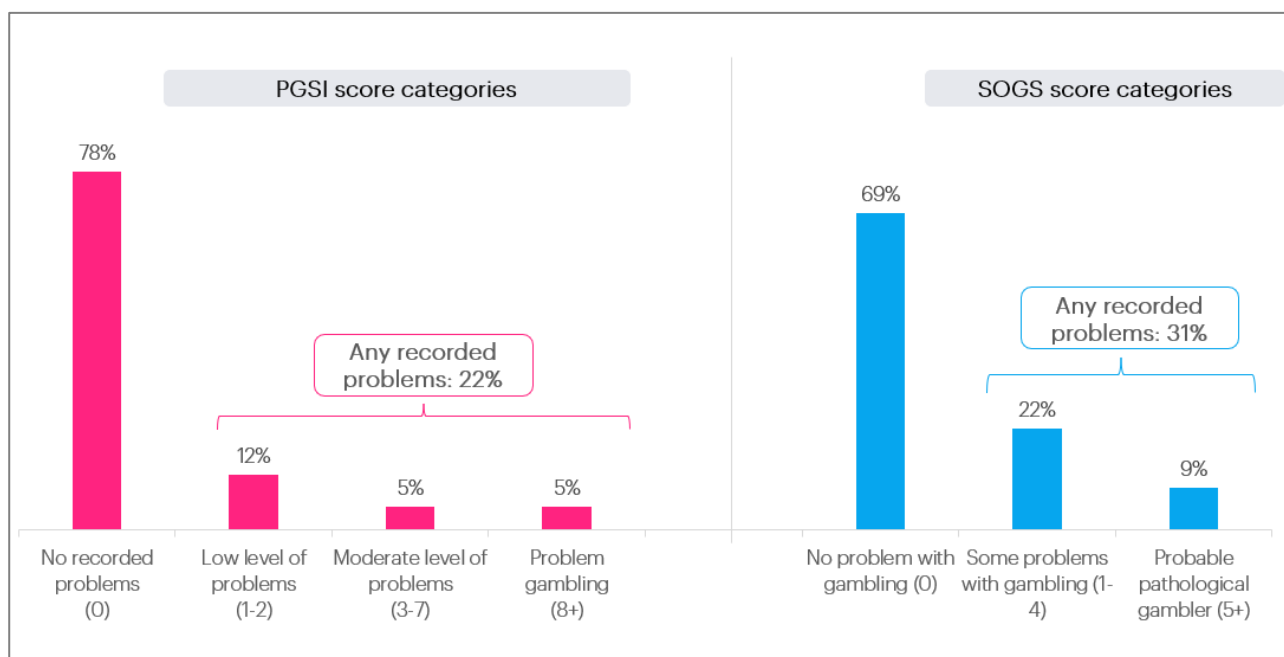
If the SOGS tool were to be used in place of the PGSI, this change would particularly result in the identification of more older adults as experiencing harm – more so than younger age groups. It would also mean that significantly more white respondents were recorded as experiencing harm, while there would be little difference for ethnic minority respondents. The balance of gender would remain similar, with a substantial amount of both men and women recorded as experiencing harm who are currently not identified in this way where the PGSI is used.

## 4.3 Prevalence of harm

### Overall prevalence of harm

Using the SOGS tool, 31% of those gambling in the last 12 months were classified as experiencing some level of harm (a score of 1+): a significantly higher proportion than the PGSI scale, which classifies 22% as experiencing any problems from gambling. This is likely to relate to the timescale used, with items phrased as ‘ever’ whereas the PGSI refers to the last 12 months.

**Figure 9: Comparison of PGSI and SOGS score categories**



Base: all who have gambled in the last 12 months (n=644)

Analysis of the SOGS scoring within PGSI category shows some movement between categories at individual respondent level. Eight in ten (82%) of those classified as experiencing any problems on the PGSI scale (a score of 1+) are also classified in an equivalent way (a score of 1+) using the SOGS tool, indicating a reasonably good fit between the tools.

Almost all those with a score of 8+ on the PGSI (99%) also recorded some level of harm via the SOGS tool (a score of 1+). Similarly, for those experiencing a moderate level of problems on the PGSI (score 3-7), nine in ten (89%) recorded some level of harm via the SOGS tool (a score of 1+), with 40% of them being classified as having some problems with gambling (score of 1-4), and 49% as being ‘probable pathological gamblers’ (score 5+). Fewer of those experiencing a low levels of problems on the PGSI (score 1-2) recorded some level of harm via the SOGS tool (73%), but divergence between the tools remains small.

At the bottom of the scale, 84% of those with a score of 0 on the PGSI were also given a score of 0 by the SOGS tool. However, this leaves one in six (16%) of those with a score of 0 on the PGSI who were classified as experiencing some level of harm by the SOGS tool, which is largely driving the higher overall proportion recorded as experiencing any harm by this tool.

**Table 5: SOGS score category by PGSI category**

		PGSI category				
		Score 0 (n=395)	Score 1-2 (n=127)	Score 3-7 (n=57)	Score 8+ (n=65)	All 1+ (n=249)
SOGS score category	No problem with gambling (0)	84%	27%	11%	1%	18%
	Some problems with gambling (1-4)	16%	61%	40%	6%	45%
	Probable pathological gambler (5+)	1%	12%	49%	93%	38%
	All 1+	16%	73%	89%	99%	82%

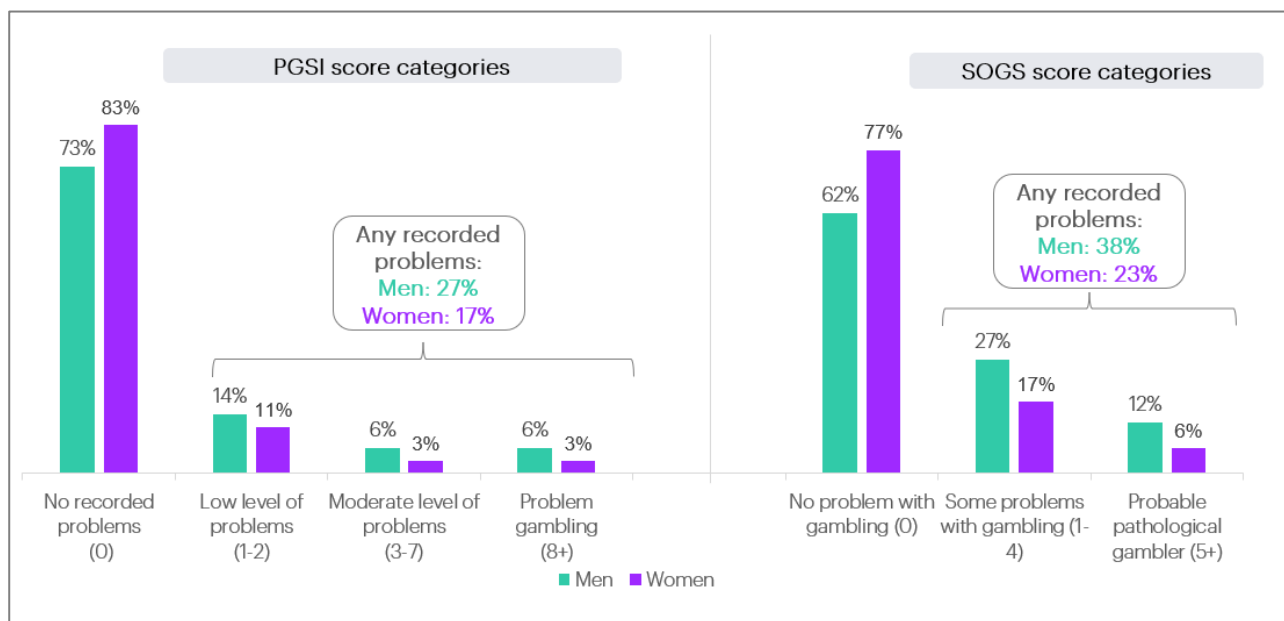
If the SOGS tool were to be used in place of the PGSI, 18% of people who are recorded as experiencing problems (1+) on the PGSI would be 'missed' by the SOGS tool (i.e. classified as not experiencing problems). Conversely, 16% of those classified as experiencing no problems on the PGSI would be classified as experiencing some level of problems by the SOGS tool. Overall, 17% are given a different classification by the SOGS tool than they were by the PGSI, with the majority of this group being those recorded as experiencing problems by the SOGS tool but not by the PGSI.

### *Prevalence of harm among demographic groups*

Analysis by gender shows a similar pattern for the SOGS tool compared with the PGSI scale, with both showing a strong and similar pattern by gender. Using SOGS, men are more likely to be placed in the 1+ category than women (38% men, 23% women), as is the case when using PGSI (28% men, 17% women).

Notably, both men and women are more likely to be classified as experiencing any harm using the SOGS tool than with PGSI. Using the SOGS tool, men are around 40% more likely to be classified as experiencing any harm than when using PGSI (an increase from 27% on the PGSI to 38% on SOGS), while women are around 35% more likely to be classified in this way (an increase from 7% on the PGSI to 23% on SOGS). This suggests that, if the SOGS tool were to be used in place of the PGSI, a substantial amount of both men and women would be recorded as experiencing harm who are currently not identified in this way where the PGSI is used, and the impact would be similar for both men and women.

**Figure 10: Comparison of PGSI and SOGS score categories – by gender**



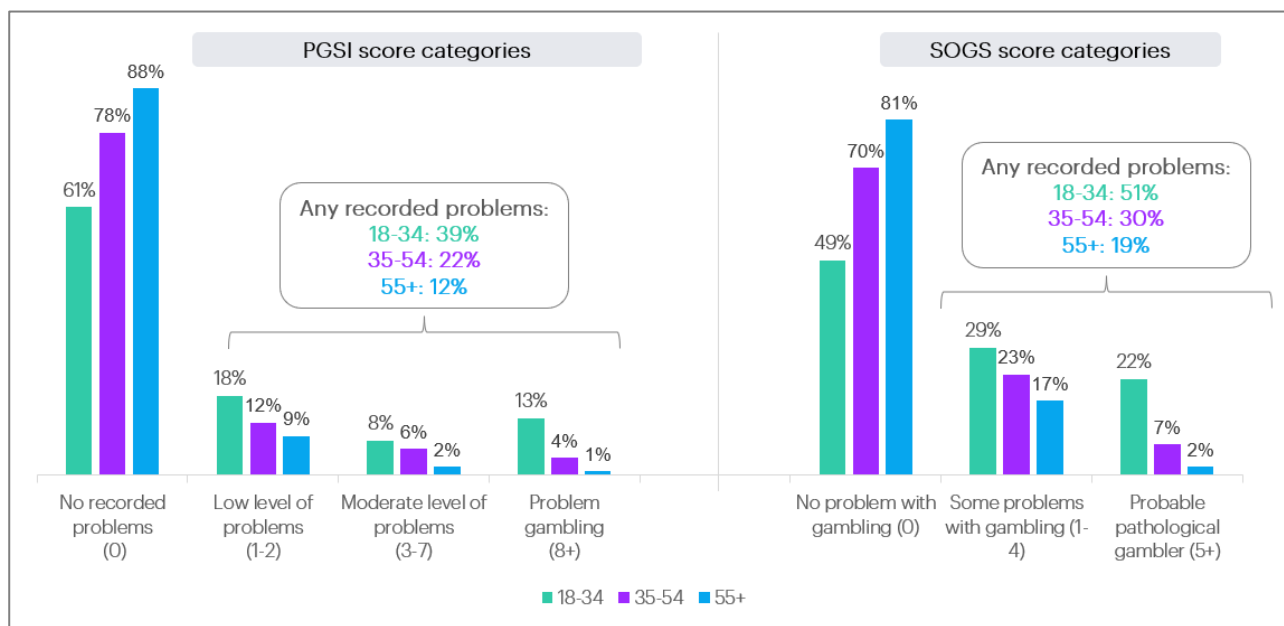
Base: men (n=337), women (n=307)

Analysis by age reveals a similar pattern for the SOGS tool when compared with the PGSI scale, with younger individuals more likely than their older counterparts to be placed in the 1+ category.

As discussed earlier in this chapter, the SOGS tool identified a higher proportion of those who gamble overall as experiencing some level of harm than the PGSI scale (31% compared with 22%). This uplift is evident to some degree across ages, with each age group showing a higher proportion classified as experiencing harm on the SOGS tool than on the PGSI scale.

However, the gap between the two tools appears to be more pronounced for older age groups than for younger or middle-aged people. Among those aged 55+, 12% were classified with a score of 1+ by the PGSI scale, rising to 19% when using the SOGS tool (a relative increase of 58%). For the 35-54 age group, the proportion recorded this way is 22% on the PGSI scale and 30% on the Gambling Commission tool, representing a relative increase of around 36%. The equivalent increase for 18-34s is around 31% (from 39% on the PGSI scale to 51% on the SOGS tool). While there is a substantial difference between the tools for all age groups, the findings suggest that using SOGS in place of PGSI would particularly result in the identification of more older adults as experiencing harm.

**Figure 11: Comparison of PGSI and SOGS score categories – by age**



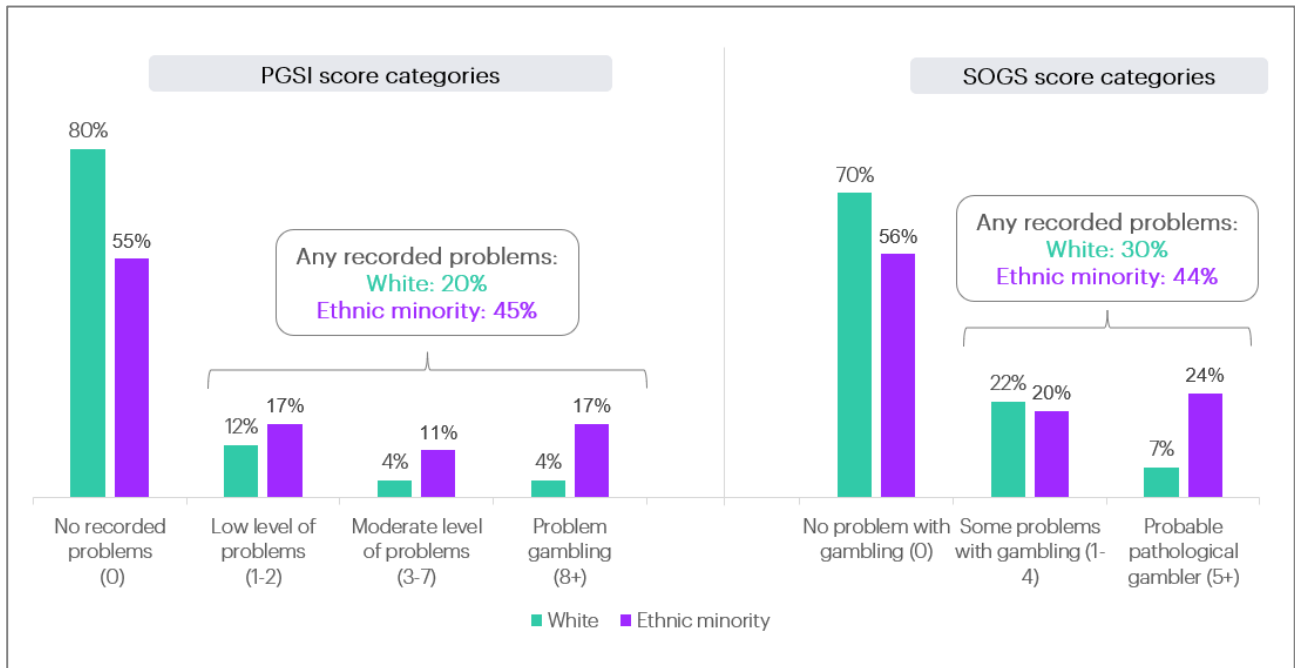
Base: 18-34 (n=179), 35-54 (n=245), 55+ (n=220)

Looking at differences by ethnicity, the SOGS tool shows a similar general pattern to the PGSI scale in that those who gamble from ethnic minority backgrounds are more likely than their white counterparts to be classified in the 1+ category. Using the SOGS tool, 44% of those who gamble from ethnic minority backgrounds were classified as experiencing any harm, compared with 30% of white people who gamble. The equivalent comparison from the PGSI scale is 45% vs. 20%.

However, although the proportion of those from ethnic minority backgrounds remains fairly consistent between tools (44% SOGS, 45% PGSI), those from white backgrounds are significantly more likely to be classified as experiencing any harm using the SOGS tool (30%) than PGSI (20%). This suggests that, if SOGS were to be used in place of PGSI, significantly more white respondents would be recorded as experiencing harm, while for ethnic minority respondents there would be little difference between the two measures.



Figure 12: Comparison of PGSI and SOGS score categories – by ethnicity



Base: white (n=561), ethnic minority (n=83)

## 5 20-item Gambling Harm Screen & SGHS

### 5.1 Introduction

The 20-item Gambling Harm Screen is taken from a wider 72-item harms checklist and developed from the 10-item Gambling Harm screen (SGHS), identified by Browne & Rockloff, and Browne & Volberg, et al. In this research, respondents were shown the full 20-item Gambling Harm Screen, and from this analysis has been conducted of the SGHS.

The scoring criteria splits those who gambled in the last 12 months into those experiencing no harm (0), low harm (1-2), moderate harm (3-5), high harm (6-10), with an additional category for scores 11-20 for the 20-item screen. The full list of items is outlined from GHS\_2 onwards in the appendix.

### 5.2 Summary of key findings

Analysis shows that a similar proportion of those gambling in the last 12 months are classified as experiencing some level of harm (a score of 1 or higher) on both the 20-item Gambling Harm Screen and SGHS as with the PGSI scale, however there is some considerable divergence when looking at different categories of harm within the PGSI scale.

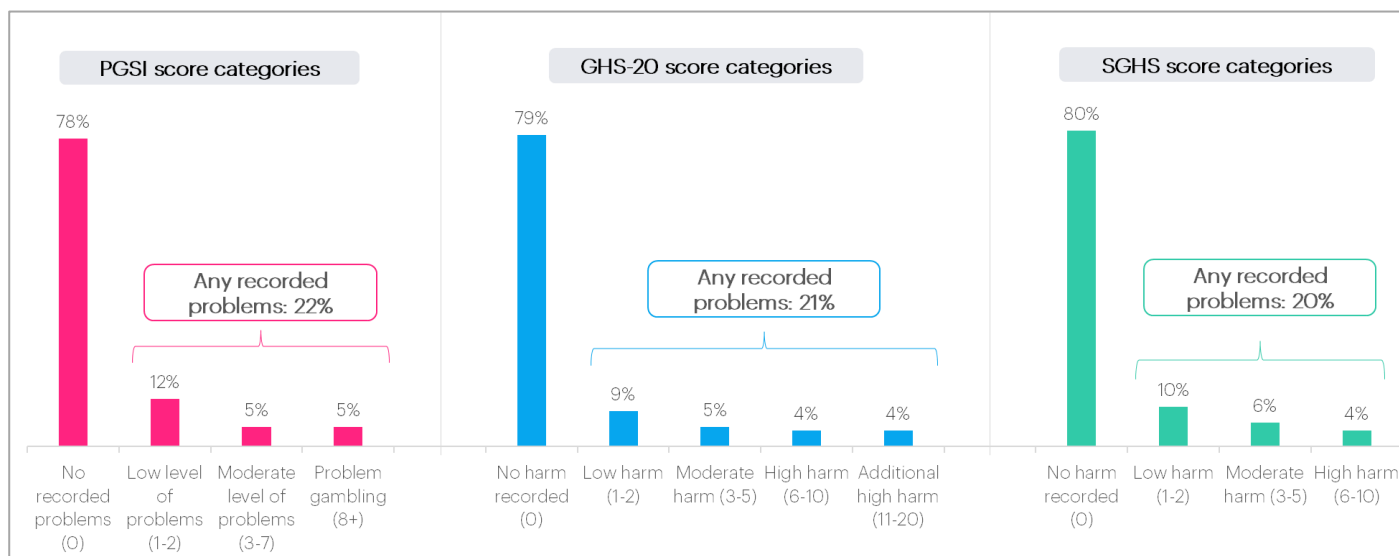
Additionally, whilst the GHS-20 and SGHS tools show similar general patterns to the PGSI when looking at age and ethnicity, they classify somewhat fewer young people (18-34) and people from ethnic minority backgrounds as experiencing some level of harm (a score of 1+). Furthermore, the SGHS tool classifies fewer men than the PGSI tool.

### 5.3 Prevalence of harm

#### *Overall prevalence of harm*

Using the Gambling Harm Screen's 20-item questions (GHS-20), 21% of those gambling in the last 12 months were classified as experiencing some level of harm (a score of 1 or higher) and a similar proportion (20%) were classified as experiencing some harm by the SGHS tool. Both are roughly in line with the PGSI scale which classifies 22% as experiencing any problems from gambling.

**Figure 13: Comparison of PGSI, GHS-20 and SGHS score categories**



Base: all who have gambled in the last 12 months (n=639)

However, analysis of the GHS-20 scoring within PGSI category shows notable movement between categories when looking at individual respondent level. Indeed, only half (50%) of those classified as experiencing any problems on the PGSI scale (a score of 1+) are also classified in the equivalent way (a score of 1+) using the GHS-20.

Approximately nine in ten of those with a score of 8+ on the PGSI (92%) recorded some level of harm (a score of 1+), and half (50%) are recorded as experiencing additional high harm (11-20) via the GHS-20 tool. The majority (60%) of those experiencing a moderate level of problems on the PGSI (score 3-7) recorded some level of harm via the GHS-20 tool (a score of 1+), most commonly low harms (1-2) (27%), leaving a notable minority (40%) being classified as experiencing no harm (a score of 0). Furthermore, a majority (70%) of respondents experiencing a low level of problems via the PGSI (score 1-2) were scored as experiencing no harm (score of 0) when using the GHS-20 tool.

Looking to the other end of the scale, 87% of those with a score of 0 on the PGSI were also given a score of 0 by the GHS-20 tool, leaving 13% of those classified as experiencing no harm on the PGSI as experiencing some level of harm on the GHS-20 (a score of 1+).

Similarly, analysis of the SGSH scoring within PGSI category also shows considerable movement between categories. Just under half (48%) of those classified as experiencing some harm on the PGSI scale (a score of 1+) are classified in the same way by the SGHS.

In line with the GSH-20 tool, 92% of those with a score of 8+ on the PGSI scale are recorded as experiencing some level of harm (a score of 1+) by the SGHS tool, with 53% of those classified as experiencing high harm (6-10).

At the other end of the scale, 88% of those with a score of 0 on the PGSI scale are also classified as experiencing no harm (a score of 0) on the SGHS scale (also consistent with the GHS-20 tool). Of the 12% classified as experiencing some harm by SGHS, 7% are classified as experiencing low harm (score 1-2).

**Table 6. GHS-20 and SGHS harm category by PGSI category**

		PGSI category				
		Score 0 (n=391)	Score 1-2 (n=132)	Score 3-7 (n=63)	Score 8+ (n=53)	All 1+ (n=248)
GHS-20 category	Score 0	87%	70%	40%	8%	50%
	Low harm (1-2)	7%	14%	27%	5%	15%
	Moderate harm (3-5)	3%	8%	14%	11%	10%
	High harm (6-10)	2%	6%	10%	26%	11%
	Additional high harm (11-20)	1%	3%	9%	50%	14%
	All 1+	13%	30%	60%	92%	50%
SGHS category	Score 0	88%	73%	44%	8%	52%
	Low harm (1-2)	7%	17%	26%	12%	18%
	Moderate harm (3-5)	4%	7%	17%	27%	13%
	High harm (6-10)	1%	4%	13%	53%	16%
	All 1+	12%	27%	56%	92%	48%

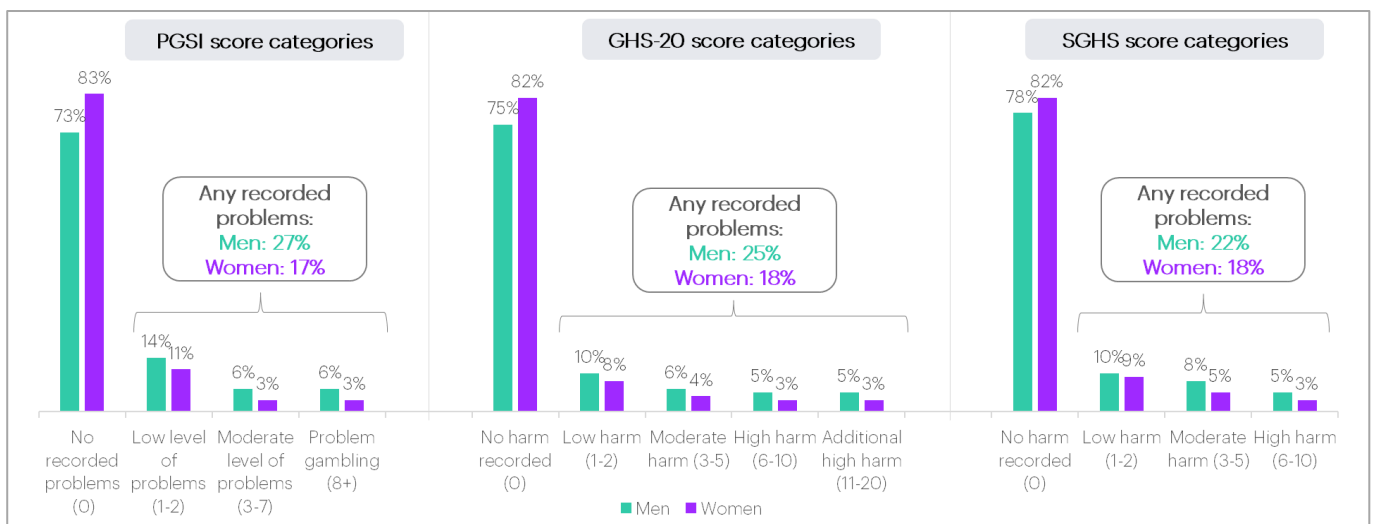
If the GHS-20 tool were to be used in place of the PGSI, half of people who are recorded as experiencing problems (1+) on the PGSI would be ‘missed’ by the GHS-20 (i.e. classified as not experiencing problems). Conversely, 13% of those classified as experiencing no problems on the PGSI would be classified as experiencing some level of problems by the GHS-20. Overall, 21% are given a different classification by the GHS-20 tool than they were by the PGSI, with roughly equal amounts moving in both directions.

### Prevalence of harm among demographic groups

Analysis by gender shows a similar pattern for the GHS-20 tool compared with the PGSI scale. The PGSI scale classifies 27% of men who gamble as experiencing some harm (a score of 1+), compared with the GHS-20 tool classifying 25% of men who gamble as experiencing some harm (a score of 1+). Both scales also show a similar classification of women who gamble (17% on the PGSI scale versus 18% on the GHS-20 tool). The results suggest that, if the GHS-20 tool were to be used in place of the PGSI, this would have little impact on the gender profile of those identified as experiencing problems.

Turning to analyse the SGHS tool by gender, the SGHS identifies fewer men than both the PGSI and GHS-20 scales (22% vs. 27% and 25%). Meanwhile, the proportion of women the tool picks up as experiencing some harm (score of 1+) is comparable to both the PGSI and GHS-20.

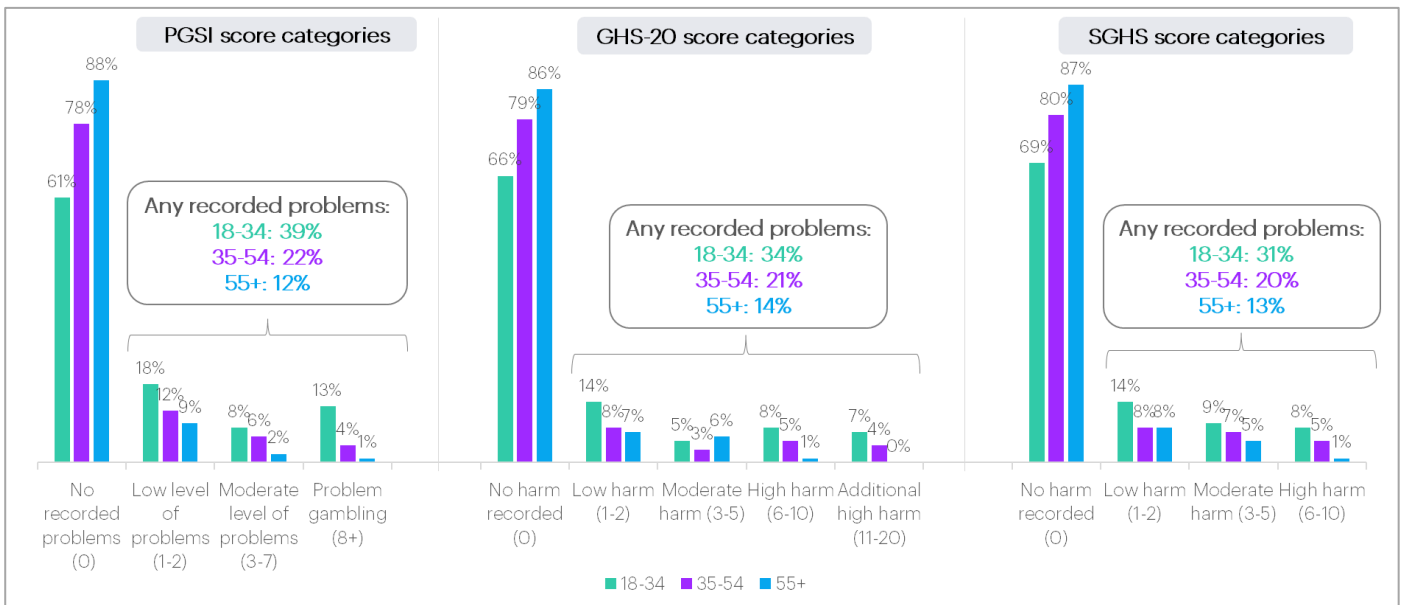
**Figure 14: Comparison of PGSI, GHS-20 and SGHS score categories – by gender**



Base: men (n=372), women (n=267)

Analysis by age reveals a similar pattern for the GHS-20 tool and SGHS tool as the PGSI scale, with younger individuals being more likely than older adults to be classified as experiencing some level of harm (a score of 1+). However, the GHS-20 and SGHS tools classified fewer young people as experiencing some harm than the PGSI scale did. Among those aged 18-34, 34% were classified with a score of 1+ by the GHS-20 tool, and even fewer were classified by the SGHS tool (31%), compared with 39% by the PGSI scale. For the middle and older age groups, the three tools classified relatively similar proportions of people who gamble as experiencing some harm (a score of 1+). Thus, if the GHS-20 or SGHS tools were to be used in place of the PGSI, fewer young adults would be identified as experiencing problems, while the amount of middle aged and older adults would remain similar.

**Figure 15: Comparison of PGSI and GHS-20 score categories – by age**

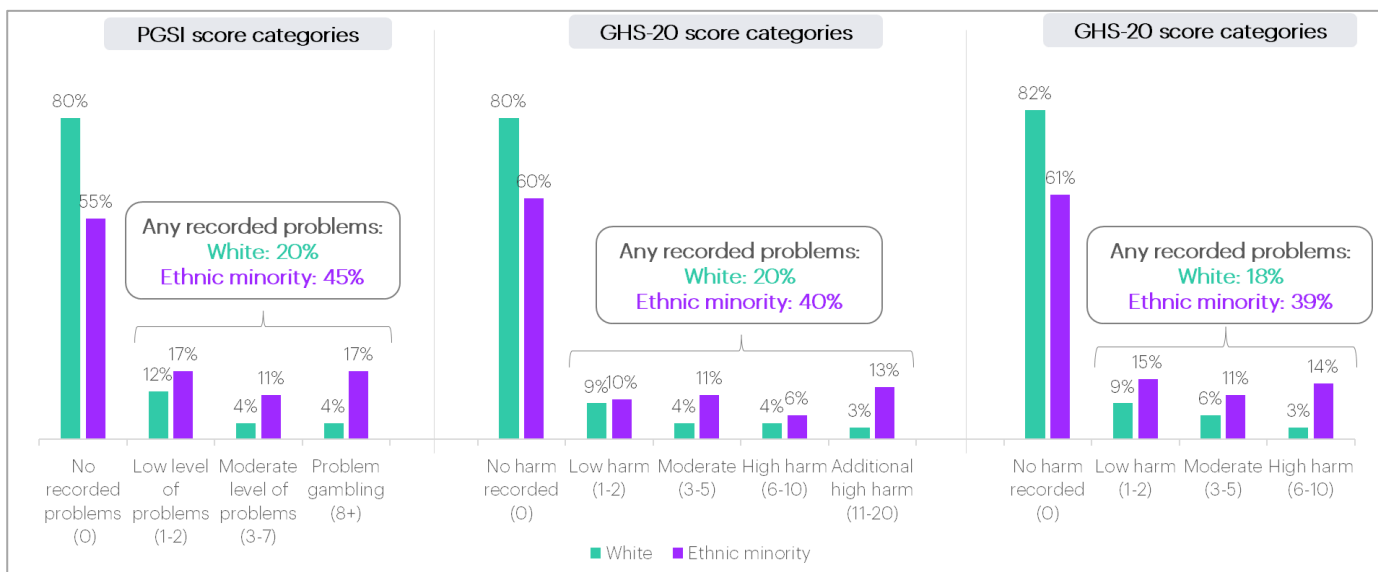


Base: 18-34 (n=152), 35-54 (n=256), 55+ (n=231)

Turning to look at differences by ethnicity, the GHS-20 tool shows a similar general pattern to the PGSI scale, with those who gamble from ethnic minority backgrounds being more likely than those who are white to be classified as experiencing some level of harm (a score of 1+). Using the GHS-20 tool, 40% of ethnic minorities were classified as experiencing any harm, compared with 20% of white people. Similarly, the SGHS tool classified 39% of ethnic minorities as experiencing harm, compared with 18% of white people.

Notably, the equivalent comparison from the PGSI scale is 45% of those who gamble from ethnic minority backgrounds compared with 20% of white people who gamble. Hence, the GHS-20 and SGHS both classify fewer people who gamble from ethnic minority backgrounds as experiencing some level of harm, and so if they were to be used in place of the PGSI, fewer people from ethnic minority backgrounds would be identified in this way, while the amount of white adults identified would remain similar.

**Figure 16: Comparison of PGSI and GHS-20 score categories – by ethnicity**



Base: white (n=570), ethnic minority (n=69)

## 6 Victoria Gambling screen

### 6.1 Introduction

The Victoria Gambling Screen was originally designed as an in-person/telephone interview which was adapted to be suitable for online surveying for the purpose of this study. It is comprised of various scales including the enjoyment of gambling, harm to self, and harm to partner. This study focused on comparing the harm to self scale with the PGSI.

It is important to note that the Victoria Gambling Screen classifies anyone with a score of 9 or more as experiencing any harm in the last 12 months, in contrast to the PGSI and most other tools which classify a score of 1+ as experiencing any problems. With a maximum score of 60, it is calculated from a response scale of Never (0 points) to Always (4 points) for each of the 15 questions. The full questions and answer options within this tool can be found from VG\_4 onwards in the appendix.

### 6.2 Summary of key findings

Only around half as many people are classified as experiencing any problems (a score of 9+) on the Victoria Gambling screen than the equivalent on the PGSI (a score of 1+). A majority of those who were classified as experiencing some level of harm by the PGSI scale were categorised by the Victoria Gambling tool as not experiencing any problems (a score of 0-8)

If the Victoria Gambling tool were to be used in place of the PGSI, the reduction in people identified as experiencing harm would disproportionately relate to women and older adults, while the balance of ethnic groups would remain similar.

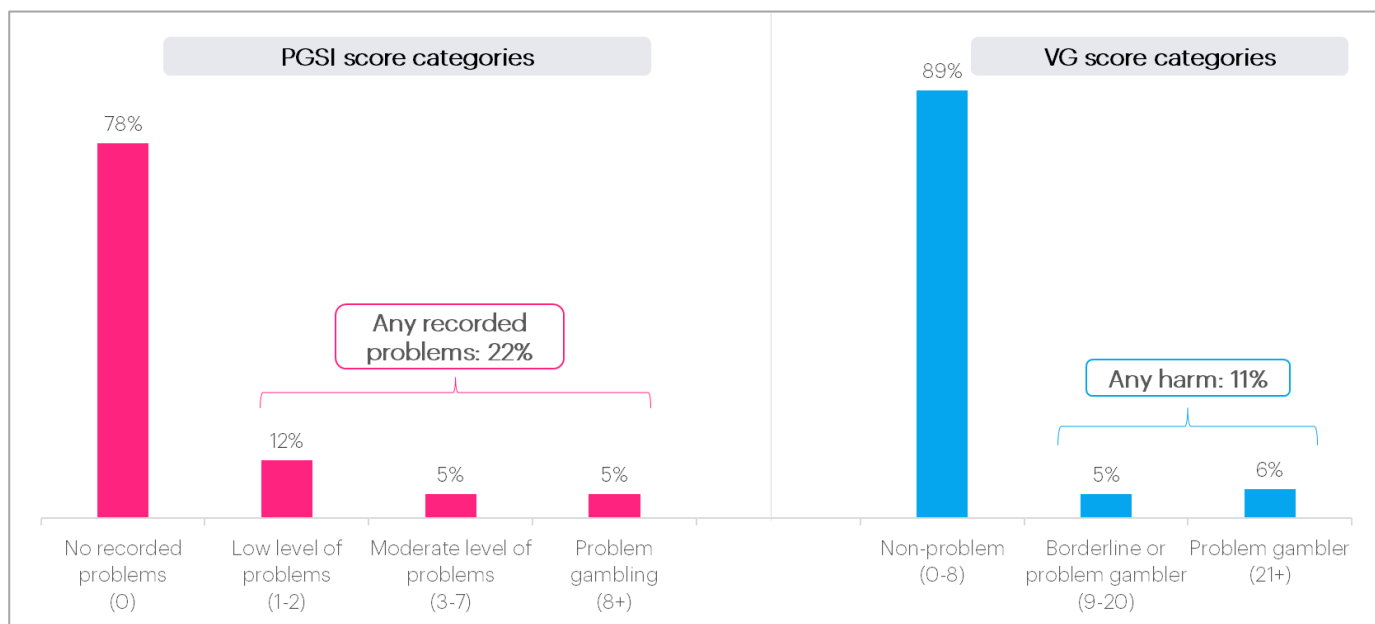
### 6.3 Prevalence of harm

#### *Overall prevalence of harm*

Using the Victoria Gambling screen questions, 11% of those who had gambled in the last 12 months were classified as experiencing any problems (a score of 9+). This is notably half the proportion who were classified as experiencing any problems (22%) on the PGSI scale (a score of 1+).



Figure 17: Comparison of PGSI and VG score categories



Base: all who have gambled in the last 12 months (n=661)

There is also considerable divergence when comparing the two tools at individual respondent level. Indeed, a majority (58%) of those who were classified as experiencing some level of harm by the PGSI scale were categorised by the Victoria Gambling tool as non-problem (a score of 0-8). This leaves just 42% of those classified as experiencing some harm (a score of 1+) on the PGSI scale who were also classified as experiencing any problems (a score of 9+) via the Victoria Gambling tool.

At the top end of the PGSI scale, 92% of those in the problem gambling (a score of 8+) group were classified as experiencing any problems (a score of 9+) on the Victoria Gambling scale. Eighty-four percent of this group were classified in the top-end of the Victoria Gambling tool (score of 21+).

For those experiencing a moderate level of problems on the PGSI (a score 3-7), 58% recorded experiencing any problems via the Victoria Gambling tool (a score of 9+). Finally, just 17% of those experiencing a low level of problems (score 1-2) on the PGSI were classified as experiencing any problems (score 9+) via the Victoria Gambling tool.

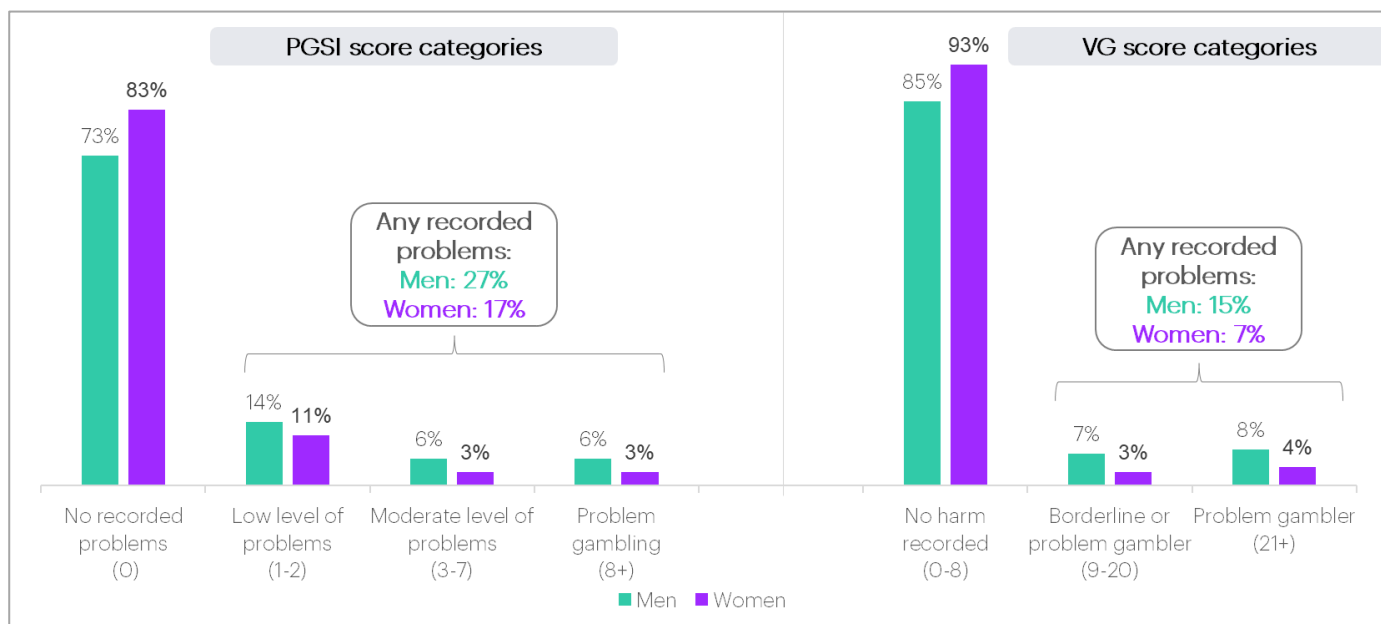
**Table 7. VG harm category by PGSI category**

		PGSI category				
		Score 0 (n=413)	Score 1-2 (n=122)	Score 3-7 (n=67)	Score 8+ (n=59)	All 1+ (n=248)
Victoria Gambling Screen category	Non-problem (0-8)	98%	83%	42%	8%	58%
	Borderline or problem gambler (9-20)	2%	14%	38%	8%	18%
	Problem gambler (21+)	1%	4%	20%	84%	24%
	NET: Any problems (9+)	2%	17%	58%	92%	42%

*Prevalence of harm among demographic groups*

Analysis by gender shows that men are twice as likely as women to be classified as experiencing any problems (score 9+) on the Victoria Gambling tool (15% vs. 7%). This is similar to the PGSI, where men are more likely to experience any harm (score 1+) than women (27% vs. 17%), but the gap between men and women is greater on the Victoria Gambling tool. This suggests that, if the Victoria Gambling tool were to be used in place of the PGSI, the overall reduction in people identified as experiencing harm would be skewed towards women.

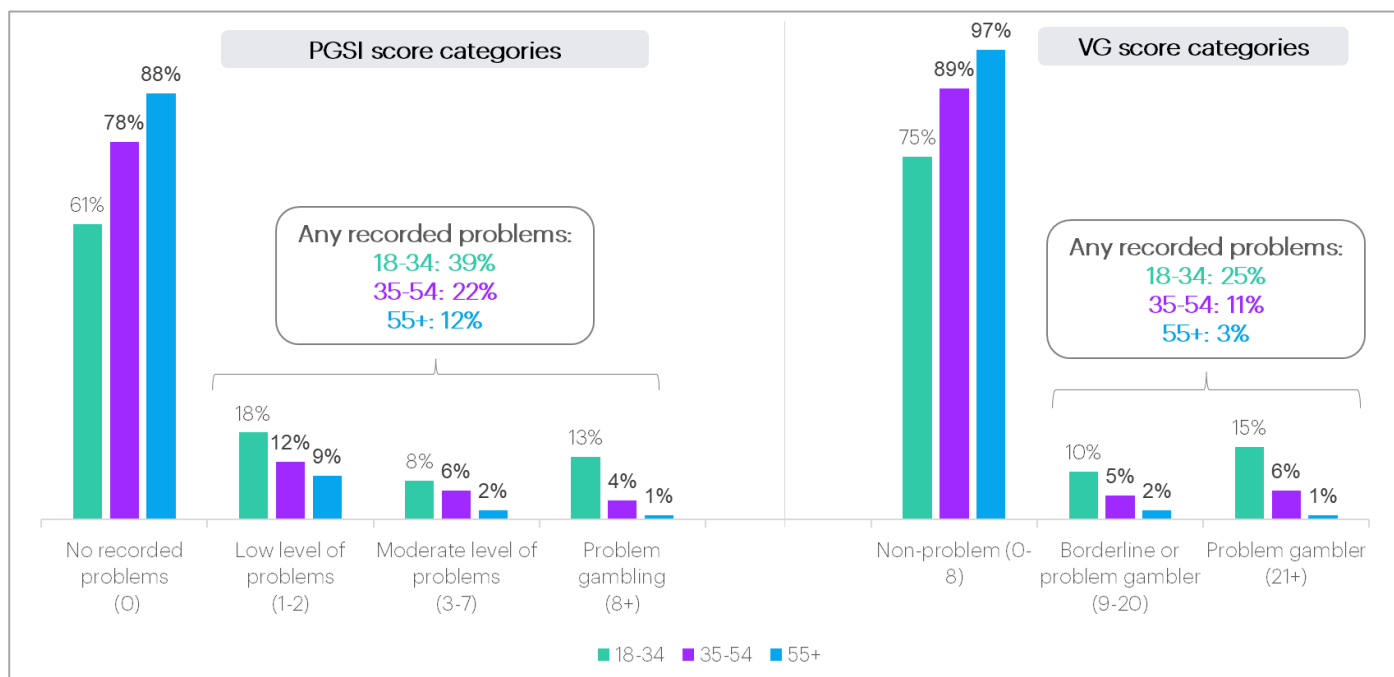
Figure 18: Comparison of PGSI and VG score categories – by gender



Base: men (n=366), women (n=295)

Turning to look at analysis by age, the Victoria Gambling tool displays a similar general pattern to the PGSI, with younger people being more likely to be classified as experiencing any problems (a score of 9+) than their older counterparts. A quarter (25%) of 18-34 year olds experienced any problems compared with 11% of 35-54's and just 3% of 55+. The differences between age groups when comparing against the PGSI is most prominent for those aged 55+: this age group is four times as likely to be classified as experiencing any harm (score 1+) on the PGSI scale than via the Victoria Gambling tool. The results suggest that, if the Victoria Gambling tool were to be used in place of the PGSI, very few older adults would be identified as experiencing harm by the tool, while the impact would be less dramatic for younger age groups.

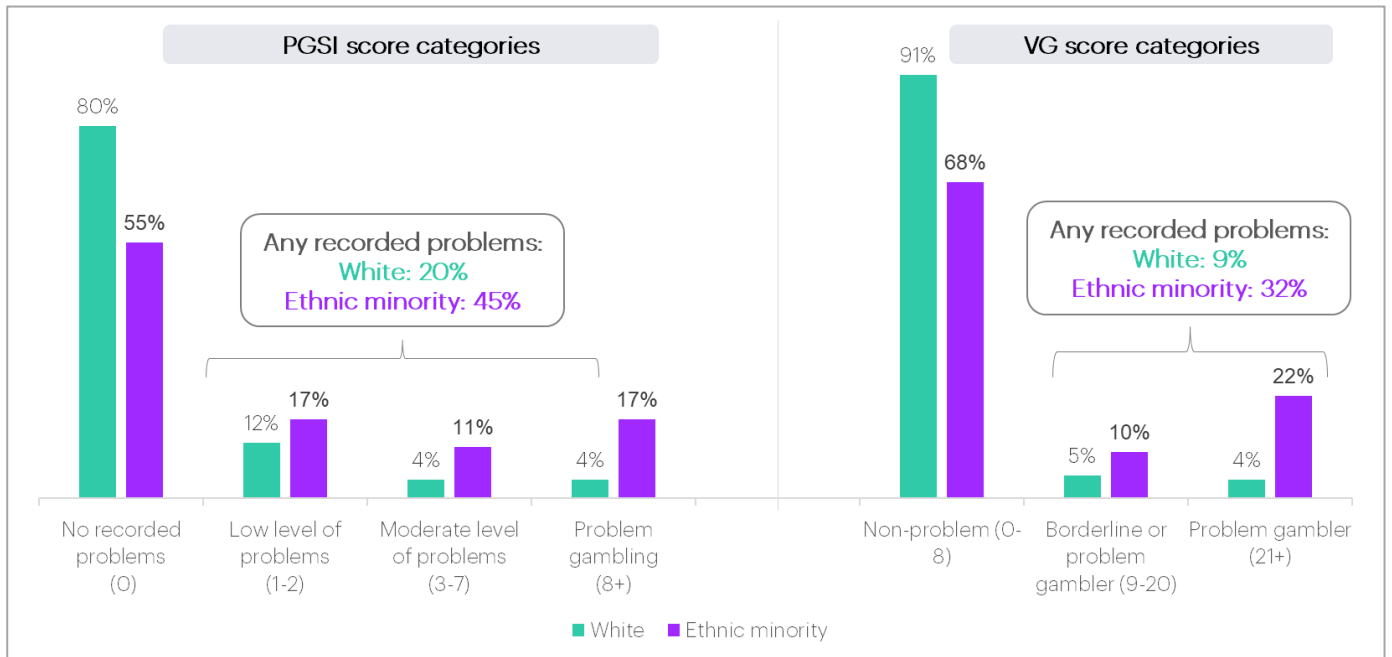
Figure 19: Comparison of PGSI and VG score categories – by age



Base: 18-34 (n=179), 35-54 (n=257), 55+ (n=225)

Analysis by ethnicity shows that the Victoria Gambling tool is more likely to classify people from ethnic minority backgrounds who gamble as experiencing any problems (a score of 9+) than white people (32% vs. 9%), a pattern consistent with the PGSI. The reduction in the proportions classified this way from the PGSI to the Victoria Gambling tool is fairly similar for white and ethnicity minority groups: both are around half as likely to be classified as experiencing problems by the latter tool.

Figure 20: Comparison of PGSI and VG score categories – by ethnicity



Base: white (n=587), ethnic minority (n=74)

## 7 Domain-General Gambling Harm (DGHS-7)

### 7.1 Introduction

The Domain-General Gambling Harm (DGHS-7) is a recently developed tool that uses seven questions to cover a variety of potential gambling related harms during the last 12 months. The questions reflect an overall category of harm, as opposed to specific descriptions of the types of harm people who gamble may experience.

Responses are indicated on a 5-point scale, ranging from No Impact (0) to Major Impact (4), with a maximum score of 28. Level of harm is based on the total score, with anyone scoring a value of one or more being classed as experiencing 'some harm'. The full set of questions can be found at DGHS\_1 in the appendix.

### 7.2 Summary of key findings

Overall, the DGHS-7 classified slightly fewer people who gamble (19%) as experiencing some level of harm than the PGSI (22%).

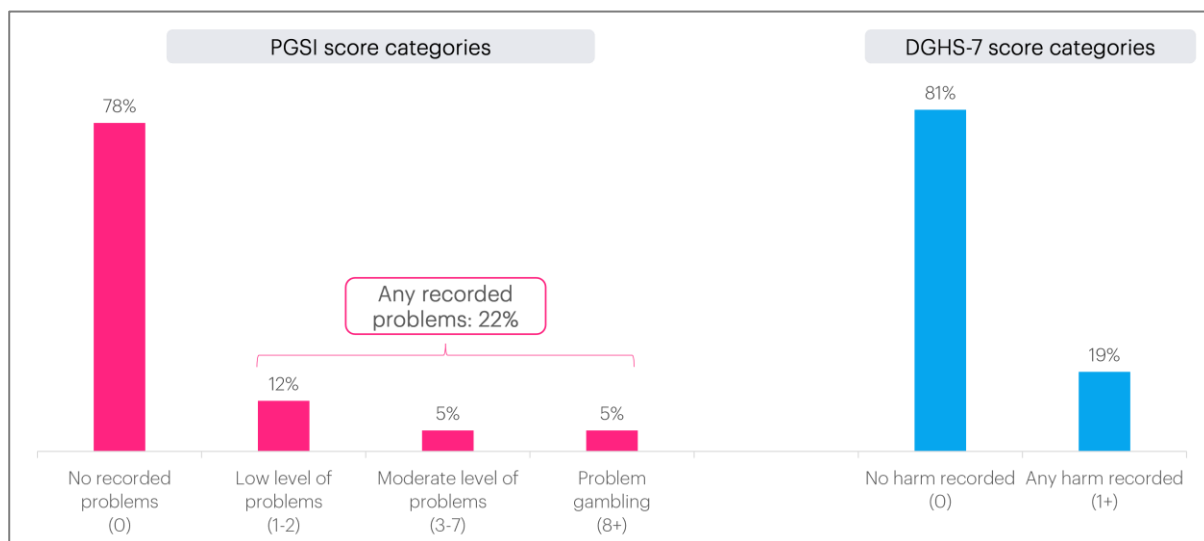
The biggest demographic trend was seen in relation to age: the overall reduction in people identified as experiencing harm is predominantly driven by those aged 18-34. This age group were around 20% less likely to be classified as experiencing harm by the DGHS-7 scale compared to the PGSI (31% and 39% respectively), while for other age groups the difference was less pronounced.

### 7.3 Prevalence of harm

#### *Overall prevalence of harm*

Using the DGHS-7 screening tool, 19% of those who gambled in the last 12 months were classified as experiencing some level of harm (scoring 1 or higher). This is slightly lower than the PGSI scale, which classified 22% as experiencing any problems from gambling.

Figure 21: Comparison of PGSI and DGHS-7 score categories



Base: all who have gambled in the last 12 months (n=629)

Analysis of the DGHS-7 harm scoring across PGSI categories shows considerable differences at the individual respondent level. In particular, only half (51%) of those classified as experiencing any problems on the PGSI scale (a score of 1+) are also classified in an equivalent way (a score of 1+) using the DGHS-7 tool, showing that there is considerable divergence between the two screening tools.

Nine in ten (90%) of those with a score of 8+ on the PGSI scale were classified as experiencing some level of harm when assessed using the DGHS-7 scale; thus, 10% of that cohort were classified as experiencing no harm with the DGHS-7. The majority (62%) of those experiencing moderate levels of gambling problems on the PGSI scale (score of 3-7) and a third (33%) of those experiencing a low level of problems (PGSI score of 1-2) recorded some level of harm when assessed through the DGHS-7 (score of 1+).

Conversely, 90% of those classified as experiencing no harm on the PGSI scale (a score of 0) were also identified as such on the DGHS-7 scale. That leaves one in ten (10%) of those classified as experiencing no harm on the PGSI scale classified as experiencing some level of harm on the DGHS-7 scale (a score of 1+).

**Table 8. DGHS-7 harm category by PGSI category**

		PGSI category				
		Score 0 (n=402)	Score 1-2 (n=122)	Score 3-7 (n=55)	Score 8+ (n=50)	All 1+ (n=227)
DGHS-7 category	Score 0	90%	67%	38%	10%	49%
	All 1+	10%	33%	62%	90%	51%

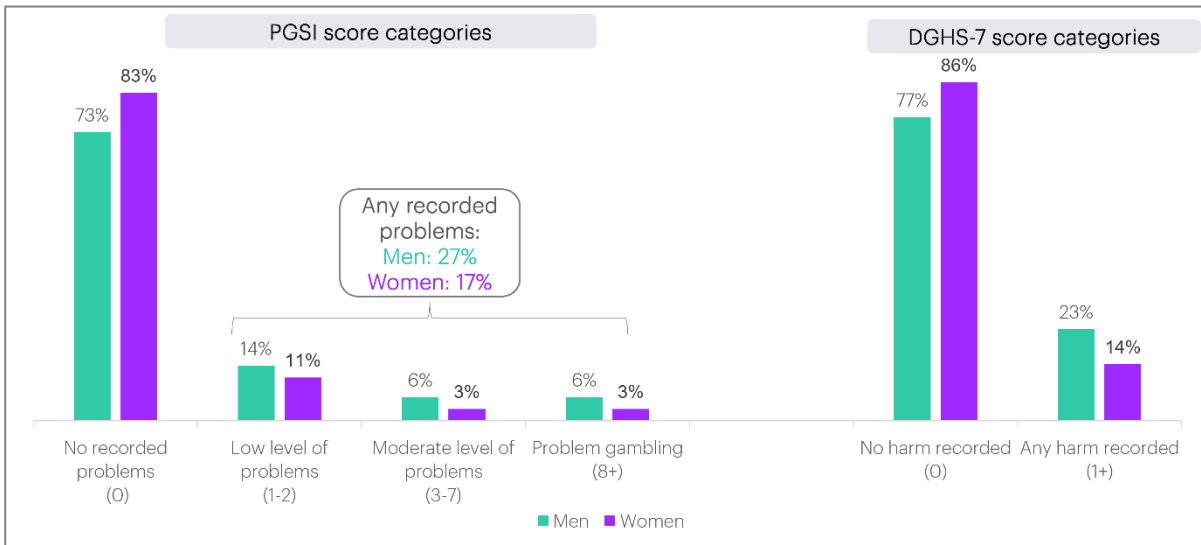
If the DGHS-7 were to be used in place of the PGSI, half of people who are recorded as experiencing problems (1+) on the PGSI would be ‘missed’ by the DGHS-7 (i.e. classified as not experiencing problems, while 8% of those classified as experiencing no problems on the PGSI would be classified as experiencing some level of problems by the DGHS-7. Overall, 18% are given a different classification by the DGHS-7 than they were by the PGSI, with the majority of this group being those recorded as experiencing problems by the PGSI but not by the DGHS-7.

*Prevalence of harm among demographic groups*

Analysis by gender, while broadly comparable between PGSI and DGHS-7, shows some slight differences in harm classification. Both tools show men as more likely to be placed in the 1+ category than women. The DGHS-7 scale classifies 23% of men as experiencing some level of harm (a score of 1+), whereas the PGSI scale classifies 27% of men as experiencing some level of harm (a score of 1+). With women who gamble, the PGSI classifies 17% in this category, versus a slightly lower 14% when assessed with the DGHS-7 scale. This suggests that, if the DGHS-7 were used in place of the PGSI, the balance of gender would remain similar, with the overall reduction in the proportion identified as experiencing harm applying similarly to both men and women.



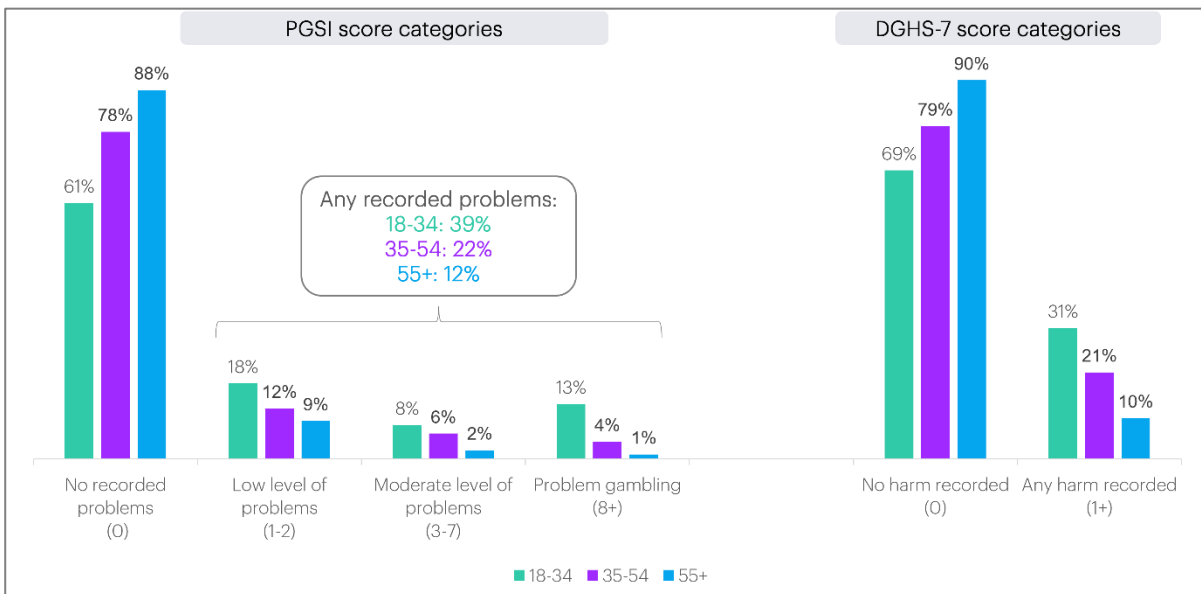
Figure 22: Comparison of PGSI and DGHS-7 score categories – by gender



Base: men (n=327), women (n=302)

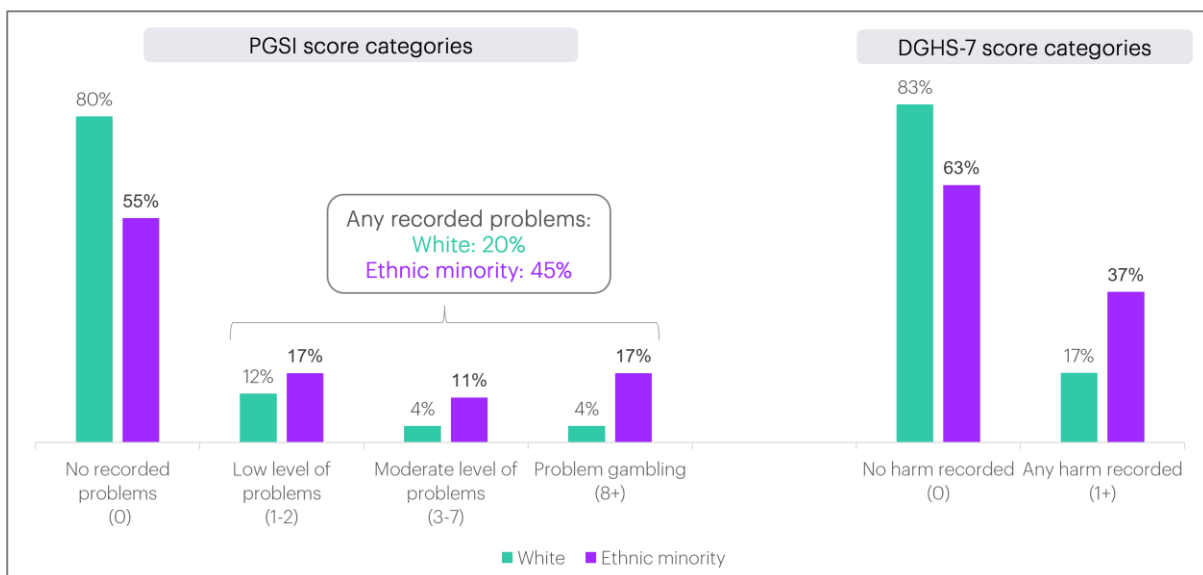
Analysis by age reflects similar gambling harm trends when using DGHS-7 and PGSI, with younger age groups being significantly more likely to be classified as experiencing some gambling harm (a score of 1+) than their older counterparts. While DGHS-7 and PGSI classified similar proportions of people who gamble as experiencing some harm (a score of 1+) in the middle and older age groups, the youngest group revealed some differences between the two tools. For those aged 18-34, 31% were classified with a score of 1+ by the DGHS-7 scale, compared to 39% by the PGSI scale (a relative decrease of around 20%).

Figure 23: Comparison of PGSI and DGHS-7 score categories – by age



Turning to look at ethnicity, using the DGHS-7 scale resulted in comparable trends to the PGSI scale; those who gamble from ethnic minority backgrounds are more likely to be classified as experiencing some level of harm (a score of 1+) than those from white backgrounds. The DGHS-7 tool assessed 37% of ethnic minorities as experiencing any harm (a score of 1+), while the PGSI tool classified 45% of ethnic minorities in this way. For white adults the equivalent figures are 17% and 20%. For both groups, the reduction from the PGSI to the DGHS-7 is of similar size, meaning that, if the DGHS-7 were used in place of the PGSI, the balance of ethnicity would remain similar.

**Figure 24: Comparison of PGSI and DGHS-7 score categories – by ethnicity**



Base: white (n=562), ethnic minority (n=67)

## 8 DSM-5

### 8.1 Introduction

The DSM-5 provides guidelines used for gambling disorders to indicate if the individual displays persistent and recurrent problematic gambling behaviour in a 12-month period. People who gamble are classified as displaying no persistent and recurrent problematic gambling behaviour if they score between 0 and 3, resulting in anyone who scores 4+ as displaying persistent and recurrent problematic gambling behaviour. Full questions can be found at DSM5 onwards in the appendix.

For analysis purposes, those with a score of 4+ on the DSM-5 have been compared with those with a score of 8+ on the PGSI. Both classifications aim to identify those experiencing more severe problems, so they seem to be more suitable for comparison than 4+ on the DSM-5 with PGSI 1+ would be.

### 8.2 Summary of key findings

When comparing this group (a score of 4+) with those who experience problem gambling on the PGSI scale (a score of 8+), analysis shows that the DSM-5 identifies a similar proportions of people (4%) as the PGSI scale (5%). The vast majority of those with a moderate levels of problems (a score of 3-7) on the PGSI are classified as having no persistent and recurrent problematic gambling behaviour by the DSM-5 tool (91%), along with two-fifths (40%) of those in the 'problem gambler' (8+) PGSI category.

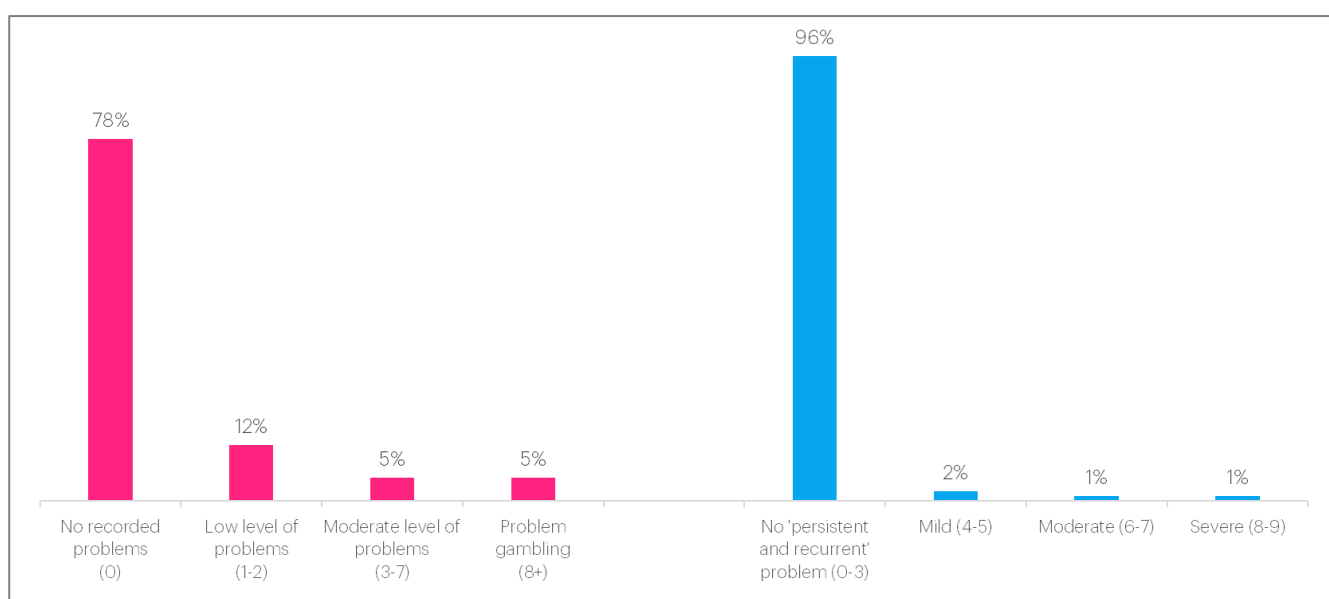
If the DSM-5 were to be used in place of the PGSI, slightly fewer respondents would be identified as experiencing high levels of harm, although general trends by age, gender and ethnicity would remain the same.

## 8.3 Prevalence of harm

### Overall prevalence of harm

Using the DSM-5 set of questions, the vast majority (96%) of those who have gambled in the past 12 months are classified as showing no 'persistent and recurrent problematic gambling behaviour' (a score of 0 to 3). The 4% classified as having a persistent and recurrent problem (a score of 4+) is comparable to the 5% classified by the PGSI scale as facing 'problem gambling' (a score of 8+). Hence, there is considerable concurrence between the two tools on more severe gambling-related harm.

**Figure 25: Comparison of PGSI and DSM-5 score categories**



Base: all who have gambled in the last 12 months (n=650)

However, two fifths (40%) of those experiencing 'problem gambling' on the PGSI scale (a score of 8+) are classified as having no persistent and recurrent problematic gambling behaviour by the DSM-5 tool, indicating that even among higher levels of gambling problems, the tools are not completely aligned.

At the other end of the scale, 100% of those who, on the PGSI scale, are classified as non-problem (a score of 0) are classified in the equivalent DSM-5 group of no persistent and recurrent problematic gambling behaviour (score of 0-3).

**Table 9. DSM-5 tool by PGSI category**

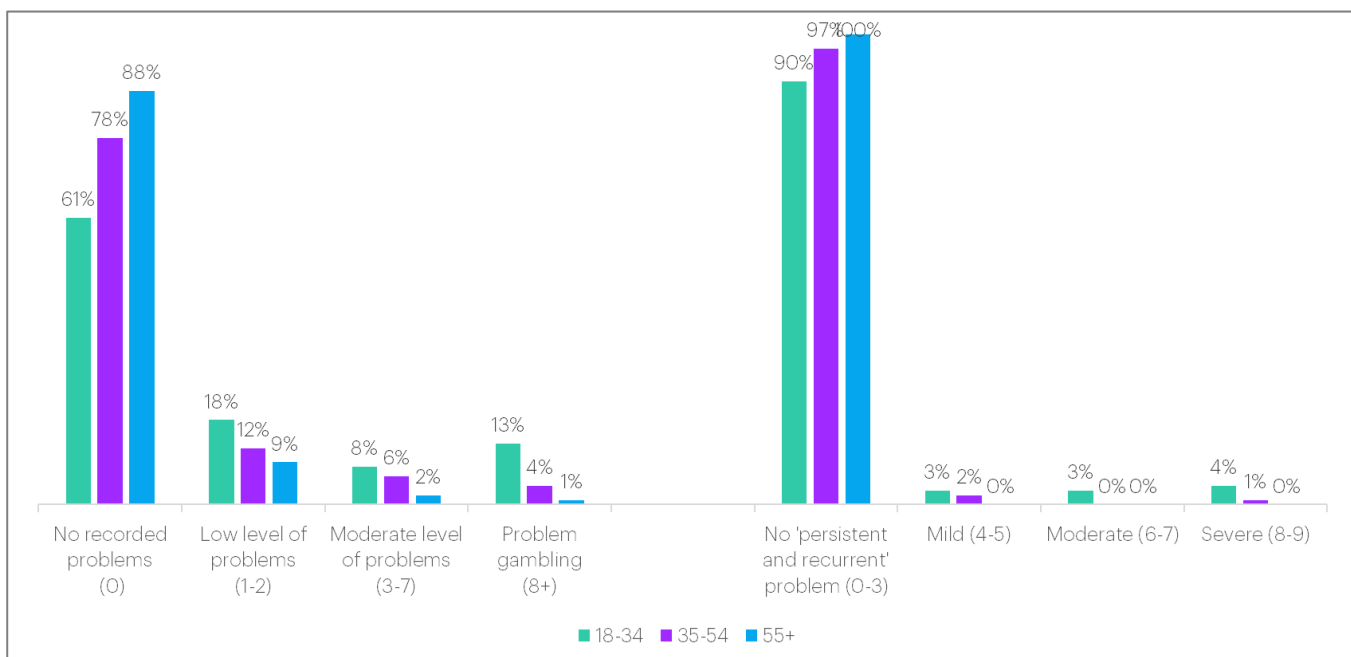
		PGSI category				
		Score 0 (n=400)	Score 1-2 (n=133)	Score 3-7 (n=59)	Score 8+ (n=58)	All 1+ (n=250)
DSM-5 tool category	No persistent or recurrent problematic gambling behaviour (0-3)	100%	96%	91%	40%	83%
	Mild (4-5)	-	2%	5%	25%	8%
	Moderate (6-7)	-	1%	3%	16%	4%
	Severe (8-9)	-	1%	2%	19%	5%
	Any persistent or recurrent problematic gambling behaviour	-	4%	9%	60%	17%

*Prevalence of harm among demographic groups*

Whilst picking up fewer people as experiencing some level of problematic gambling behaviour, analysis of the DSM-5 by key demographic groups shows some similar patterns when compared with PGSI when looking at age and ethnicity.

Indeed, younger people who gamble (18-34-year-olds) are more likely to show any persistent or recurrent problematic gambling behaviour (a score of 4+) than their older counterparts, consistent with the patterns shown by the PGSI scale. Virtually no 55+ year olds were classified as displaying problematic gambling behaviour with the DSM-5 tool, while a similarly low 1% of 55+ year-olds who gamble were recorded as experiencing some harm (a score of 8+) on the PGSI scale.

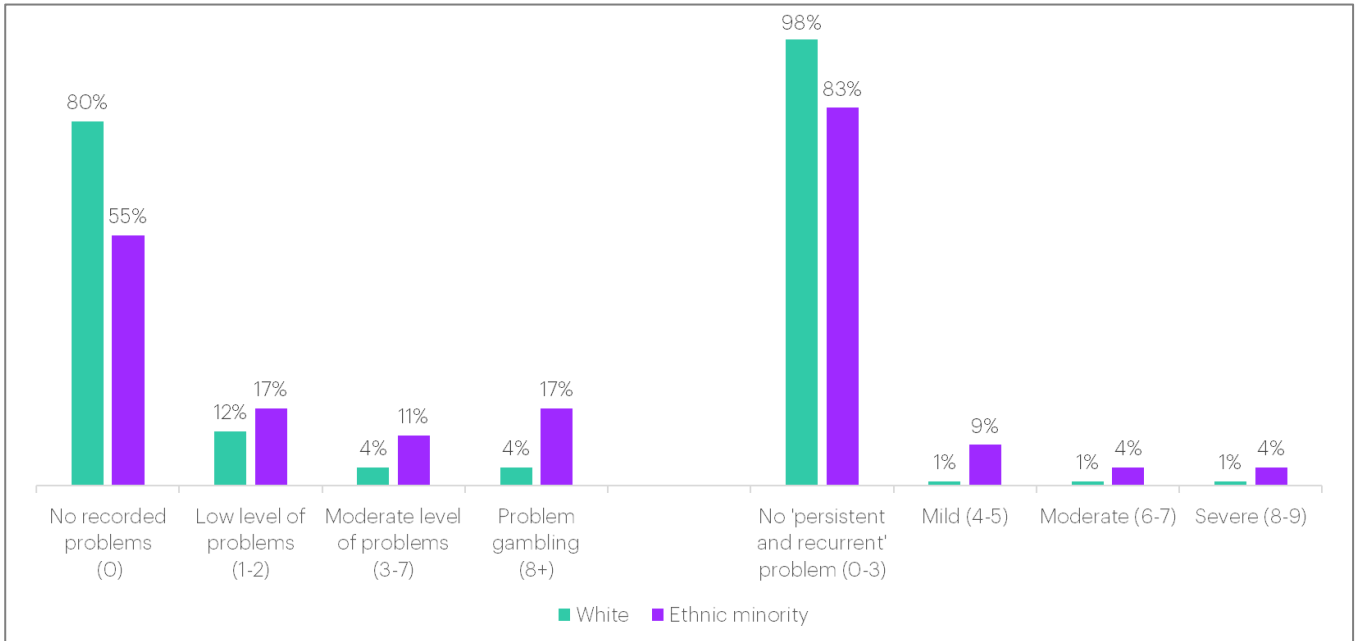
Figure 26: Comparison of PGSI and DSM-5 score categories – by age



Base: 18-34 (n=191), 35-54 (n=245), 55+ (n=214)

Turning to look at analysis by ethnicity, the DSM-5 tool again shows a similar general pattern to the PGSI in suggesting that those from ethnic minority backgrounds are more likely to experience harm. The DSM-5 tool classified 17% of ethnic minorities as displaying any persistent or recurrent problematic gambling behaviour, compared with just 2% of white people. This is broadly consistent with the PGSI which also identifies 17% of ethnic minorities as experiencing problem gambling (a score of 8+), however, it identifies more white people in this category than the DSM-5 (4%). Notably, this means white adults are half as likely to be identified as experiencing problem gambling by the DSM-5 as they are on the PGSI, whereas for ethnic minority adults, both tools produce the same proportion.

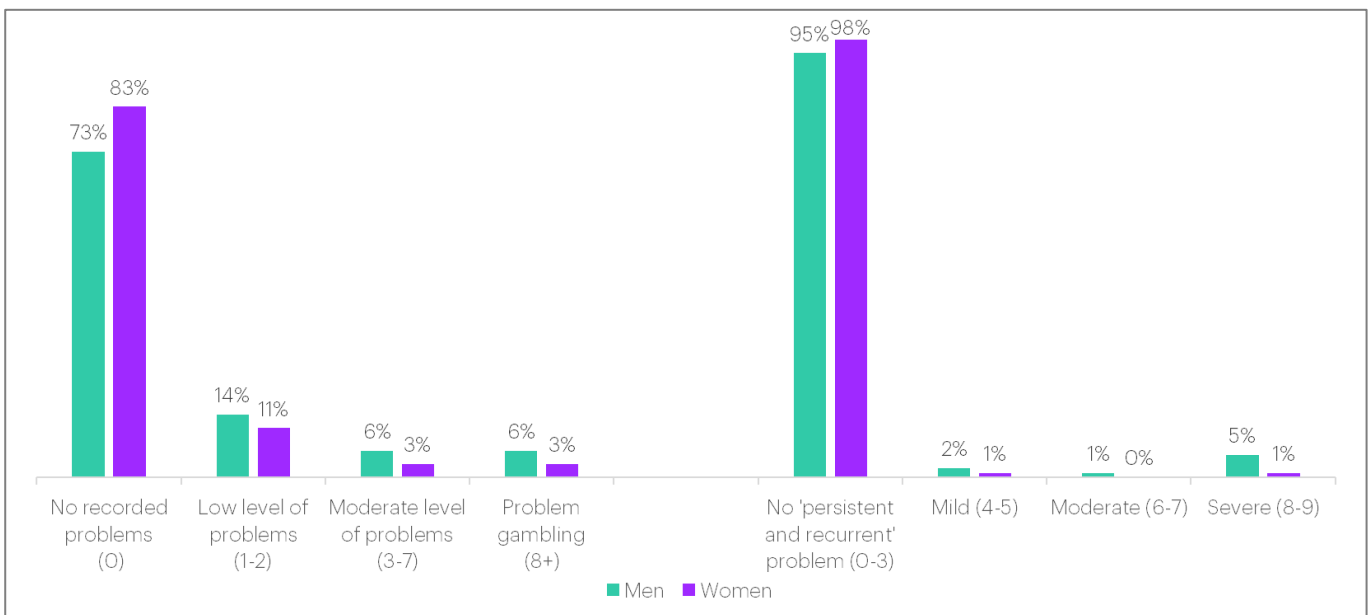
Figure 27: Comparison of PGSI and DSM-5 score categories – by ethnicity



Base: white (n=559), ethnic minority (n=91)

Finally, the DSM-5 tool shows a similar pattern by gender to the PGSI, with men more than twice as likely to be placed in the 'any persistent or recurrent problematic gambling behaviour' category than women (5% vs. 2%). This mirrors the PGSI, in which 6% of men were placed in the 8+ problem gambling category compared to 3% of women.

Figure 28: Comparison of PGSI and DSM-5 score categories – by gender



Base: men (n=333), women (n=317)

## 9 Conclusions and implications

The key purpose of this study was to test alternative tools for measuring gambling harm in comparison with the PGSI, and consider the implications, in terms of overall harm incidence and the balance of different demographic groups, if each these tools was used in place of the PGSI in a hypothetical future survey. Naturally, using any different tool will result in some differences in the group of people identified as experiencing harm, and these differences may not necessarily be considered as inherently positive or negative, but simply as a reflection of the different range of experiences covered by each tool, or may be judged differently depending on context.

Additionally, any consideration of using a different measurement tool has important implications. If any of these alternative tools were to be used in place of PGSI, this would result in reclassifying considerable amounts of people into different gambling categories; many “problem gamblers” could now be classed as experiencing no harm, while many “non problem gamblers” could be shifted into the “experiencing harm” category, and the demographics of these categories are also likely to shift. This could have significant implications for research and monitoring, but also potentially for who gets access to treatment and support. It is therefore critical that any change is founded on solid evidence and reasoning.

We summarise the key findings and implications in relation to each tool below.

### *The PGSI mini-screen*

The PGSI mini-screen classifies fewer people who gamble as experiencing problems than the full PGSI (17% vs. 22%), which might perhaps be expected given that the mini-screen comprises only three items from the total of nine at the full PGSI. The ‘shortfall’ in people identified predominantly relates to those with a score of 1-2 on the full PGSI, of whom half are classified as experiencing no problems by the mini-screen, but the proportions affected in higher PGSI categories are not insubstantial (28% of the 3-7 category and 11% of those with a score of 8+).



If the mini-screen were to be used in place of the full PGSI, a substantial amount of people who are recorded as experiencing problems by the full PGSI would be 'missed' by the mini-screen (i.e. classified as not experiencing problems). This pool of 'missed' people would predominantly comprise those with lower full PGSI scores, but would also contain some people with higher scores. It would be skewed towards white adults and older age groups, and slightly skewed toward men.

Given the smaller proportion of people identified as experiencing problems, we do not consider that a general replacement of the full PGSI with the mini-screen is desirable. However, the mini-screen is concise, in contrast to most other tools, and it was developed for the specific purpose of covering the PGSI harms in fewer questions. Given these features, it might have value in certain circumstances where brevity is important.

### *The Gambling Commission tool*

Overall, the Gambling Commission tool classifies more people who gamble as experiencing problems than the PGSI (27% vs. 22%). It is worth noting that there is considerable divergence in both directions, so, while close to half of those classified as experiencing any problems on the PGSI (a score of 1+) were classified as not experiencing any problems (a score of 0) by the Gambling Commission questions, this is offset by a fifth of those classified as not experiencing any problems (a score of 0) on the PGSI who were classified as experiencing some level of problems by the Gambling Commission tool. This comprises a larger group of people, and is driving the larger overall percentage recorded by the Gambling Commission tool.

Almost all those with a score of 8+ on the PGSI (97%) recorded some level of harm via the Gambling Commission tool (i.e. a score of 1+). This suggests that, if the Gambling Commission tool were used in place of the PGSI, there might be lower concern about 'missing' cases with the highest harm levels than would be case with some other tools. There is also a reasonable fit for those experiencing a moderate level of problems on the PGSI (score 3-7), of whom the majority (69%) recorded some level of harm via the Gambling Commission tool.

The Gambling Commission tool shows much less difference by gender than the PGSI, with men and women similarly likely to be classified as experiencing any problems, whereas the PGSI picks up significantly more men. If the Gambling Commission tool were to be used in place of the PGSI, a substantial amount of women would be recorded as experiencing problems who are currently not classified in this way where the PGSI is used. Additionally, using this tool would pick up more respondents in older age groups and white ethnic groups when compared to the PGSI.

Given that it is recognised that PGSI does not necessarily capture the full range of possible harms that can be experienced, it may be desirable in some cases to cover a wider range of potential harms and thus identify a larger group of people. The Gambling Commission tool could be worthy of consideration in the context of these aims. If the Commission implements this tool officially or widely in the future, its use would also bring consistency with other published work.

We note that it would be possible to ask both the Gambling Commission tool and PGSI in the same survey, although a little lengthy, as the items do not directly conflict.

### *The South Oaks Gambling Screen*

Using the SOGS tool, 31% of those gambling in the last 12 months were classified as experiencing some level of harm (a score of 1+), significantly higher than the 22% recorded by the PGSI scale. This is likely to relate to the timescale used, with items phrased as 'ever' whereas the PGSI refers to the last 12 months.

Generally, there is a good fit between SOGS and PGSI, with 82% of those classified as experiencing any problems on the PGSI scale (a score of 1+) are classified in an equivalent way (a score of 1+) using the SOGS tool. This includes almost all of those with a score of 8+ on the PGSI (99%), 89% of those experiencing a moderate level of problems on the PGSI (score 3-7), and 73% of those experiencing a low levels of problems on the PGSI (score 1-2).

Additionally, one in six (16%) of those with a score of 0 on the PGSI were classified as experiencing some level of harm by the SOGS tool, which is largely driving the higher overall proportion recorded as experiencing any harm by this tool.

If the SOGS tool were to be used in place of the PGSI, this change would particularly result in the identification of more older adults as experiencing harm – more so than younger age groups (potentially due to SOGS measuring harm experienced over a lifetime, rather than the last 12 months). It would also mean that significantly more white respondents were recorded as experiencing harm, while there would be little difference for ethnic minority respondents. The balance of gender would remain similar, with a substantial amount of both men and women recorded as experiencing harm who are currently not identified in this way where the PGSI is used.

Given the 'lifetime' timeframe of SOGS, it may not be considered most appropriate for typical survey situations where it is likely that respondents would need to have experienced current or recent harms in order to meaningfully answer the questions. However, there is growing interest in the longer term and legacy impacts of gambling, and the SOGS tool could perhaps be useful for particular situations where there is a specific focus on exploring these longer term impacts.

### *The Gambling Harm Screen (GHS-20) and SGHS (10-item)*

Using the Gambling Harm Screen's 20-item questions (GHS-20), 21% of those gambling in the last 12 months were classified as experiencing some level of harm (a score of 1 or higher) and using the SGHS tool a similar proportion (20%) were classified as experiencing some level of harm. Both are roughly in line with the PGSI scale which classifies 22% as experiencing any problems from gambling.

However, only half (50%) of those classified as experiencing any problems on the PGSI scale (a score of 1+) are also classified in the equivalent way (a score of 1+) using the GHS-20. This includes 92% of those with a score of 8+ on the PGSI, 60% of those with a score of 3-7 and just 30% of those with a score of 1-2. Conversely, 13% of those classified as experiencing no harm on the PGSI were classified as experiencing some level of harm on the GHS-20 (a score of 1+).

Similarly, just under half (48%) of those classified as experiencing some harm on the PGSI scale (a score of 1+) are classified in the same way by the SGHS tool. In line with the GSH-20 tool, 92% of those with a score of 8+ on the PGSI scale are recorded as experiencing some level of harm (a score of 1+) by the SGHS tool, and 88% of those with a score of 0 on the PGSI scale are also classified as experiencing no harm (a score of 0) on the SGHS scale.

The GHS-20 and SGHS tools pick up a similar pattern by gender to the PGSI, but classifies somewhat fewer young adults (18-34) and people from ethnic minority backgrounds as experiencing some level of harm (a score of 1+). The SGHS tool also classifies fewer men as experiencing some level of harm than the PGSI.

Indeed, identifying fewer young adults and people from ethnic minority backgrounds seems to be a negative, given that these groups are known to experience higher harm levels based on PGSI and other tools<sup>7</sup>.

### *The Victoria Gambling Screen*

The Victoria Gambling Screen classified only around half as many people as experiencing any problems than the PGSI (11% vs. 22%). It is notable that a score of 9+ is classified as 'any problems' on the Victorian Gambling Screen, which we have compared with a PGSI score of 1+. More than half (58%) of those classified as experiencing some level of harm by the PGSI scale (a score of 1+) were categorised by the Victoria Gambling tool as not experiencing any problems (a score of 0-8).

If the Victoria Gambling tool were to be used in place of the PGSI, the reduction in people identified as experiencing harm would disproportionately affect women, older adults and white adults, although there would also be a significant reduction for men, younger adults, and those from ethnic minority groups.

Given the small proportion of gamblers identified as experiencing harm by the Victoria Gambling Screen, this tool seems perhaps less useful than others. Additionally, the classification of score 0-8 on the tool as 'non problem' seems, by definition, to miss cases that should be included in the 'experiencing problems' category. For example, it is possible for someone to have a score of under 9 on this tool while sometimes experiencing feelings of guilt, feeling that they should gamble less, or having the urge to chase losses.

### *The Domain-General Gambling Harm (DGHS-7)*

The DGHS-7 screening tool classified 19% of gamblers as experiencing some level of harm (a score of 1+), slightly lower than the PGSI (22%).

---

<sup>7</sup> [Written evidence](#) submitted by GambleAware, February 2023

Only half (51%) of those classified as experiencing any problems on the PGSI were classified in an equivalent way using the DGHS-7 tool. This includes 90% of those with a score of 8+ on the PGSI, 62% of the 3-7 category and a third (33%) of those with a PGSI score of 1-2. Conversely, 10% of those classified as experiencing no harm on the PGSI scale were classified as experiencing some level of harm on the DGHS-7 (a score of 1+).

The lower proportion identified by the DHS-7 vs. the PGSI can be seen across both men and women at roughly similar levels, and the pattern also remains similar when looking at ethnic groups. However, the reduction is greater for younger people than for middle aged or older adults.

The DGHS-7 is interesting due to its focus on general areas where harm may manifest, instead of prompting with specific types of harm. However, identifying a smaller proportion of young adults in particular can be seen as a negative.

## *DSM-5*

The DSM-5's classification of 'persistent and recurrent problematic gambling behaviour' (a score of 4+) has been compared with a score of 8+ on the PGSI. Using the DSM-5, 4% were classified as having a 'persistent and recurrent problematic gambling behaviour', which is broadly comparable to the 5% classified by the PGSI scale as facing 'problem gambling' (a score of 8+).

However, only 60% of those experiencing 'problem gambling' on the PGSI scale (a score of 8+) were classified as having 'persistent and recurrent problematic gambling behaviour' by the DSM-5 tool, showing a reasonable degree of divergence between the tools.

Patterns by gender and age are quite similar on the PGSI and DSM-5, however ethnicity shows a different pattern: ethnic minority adults are equally likely to be categorised as experiencing 'problem gambling' or 'persistent and recurrent problematic gambling behaviour' by both tools (17% in both cases), whereas white adults were half as likely to be classified this way on the DSM-5 (2%) than the PGSI (4%). This suggests that if the DSM-5 were to be used in place of the PGSI, there would be a big impact on the proportion of white adults identified, but little impact on those from ethnic minority backgrounds.

Generally, since the DSM-5 is intended to identify disordered gambling rather than less severe experiences of gambling harms, it seems unlikely to be suitable for general use, in place of PGSI, in future surveys. It might be applicable to certain specific situations (such as a scenario where only those experiencing more severe harms were applicable to a survey) but even then, it's difficult to make a strong case that it would be preferable to using the PGSI 8+ definition.

## 10 Technical appendix

### 10.1 Additional tables

**Table 10. Proportion identified as experiencing any harm by each tool (1+ / 9+ for VG)**

	Full PGSI (1+)	PGSI mini- screen (1+)	GC (1+)	SOGS (1+)	GHS-20 (1+)	VG (9+)	DGHS (1+)
Overall	22%	17%	27%	31%	21%	11%	19%
Men	27%	21%	28%	38%	25%	15%	23%
Women	17%	14%	27%	23%	18%	7%	14%
18-34	39%	32%	45%	51%	34%	25%	31%
35-54	22%	17%	28%	30%	21%	11%	21%
55+	12%	9%	16%	19%	14%	3%	10%
White	20%	15%	26%	30%	20%	9%	17%
Ethnic minority	45%	40%	42%	44%	40%	32%	37%

**Table 11. Proportion of those in each PGSI category identified as experiencing any harm (1+ / 9+ for VG) by each tool**

	PGSI mini- screen (1+)	GC (1+)	SOGS (1+)	GHS-20 (1+)	VG (9+)	DGHS (1+)
PGSI 1-2	47%	32%	73%	30%	17%	33%
PGSI 3-7	72%	69%	89%	60%	58%	62%
PGSI 8+	89%	97%	99%	92%	92%	90%
NET: PGSI 1+	62%	54%	82%	50%	42%	51%

**Table 12. Correlation between PGSI and each other tool**

	PGSI mini- screen	GC	SOGS	GHS-20	VG	DGHS	DSM-5
Correlation with full PGSI	0.72	0.78	0.85	0.67	0.82	0.60	0.69

## 10.2 Weighting

Weighting adjusts the contribution of individual respondents to aggregated figures and is used to make surveyed populations more representative of a project-relevant, and typically larger, population by forcing it to mimic the distribution of that larger population’s significant characteristics, or its size. The weighting tasks happen at the tail end of the data processing phase, on cleaned data.

To ensure representativeness of all groups, each sub-sample was subsequently weighted to be representative of adults who gamble in the UK by age, region, gender, social grade, and ethnicity. Ethnicity groups were classified as follows:

- White:
  - English, Welsh, Scottish, Northern Irish or British
  - Irish
  - Gypsy or Irish Traveller
  - Roma
  - Any other white background
- Ethnic minority:
  - White and Black Caribbean
  - White and Black African
  - White and Asian
  - Any other Mixed or Multiple background
  - Indian
  - Pakistani
  - Bangladeshi
  - Chinese
  - Any other Asian background
  - Caribbean
  - African background
  - Any other Black, Black British or Caribbean background
  - Arab
  - Any other ethnic group



Targets were drawn from the Treatment and Support survey and were split across PGSI scores, as shown below:

	<b>PGSI 0 (Score = 0)</b>	<b>PGSI 1-2 (Score=1-2)</b>	<b>PGSI 3-7 (Score =3-7)</b>	<b>PGSI 8+ (Score=8+)</b>
<b>Male 18-24</b>	1.12%	0.58%	0.25%	0.61%
<b>Male 25-34</b>	3.12%	0.92%	0.53%	0.70%
<b>Male 35-44</b>	3.76%	0.77%	0.57%	0.38%
<b>Male 45-54</b>	4.67%	0.88%	0.33%	0.16%
<b>Male 55-64</b>	4.21%	0.60%	0.20%	0.09%
<b>Male 65+</b>	5.91%	0.65%	0.13%	0.02%
<b>Female 18-24</b>	1.30%	0.35%	0.12%	0.32%
<b>Female 25-34</b>	3.39%	0.85%	0.25%	0.23%
<b>Female 35-44</b>	3.80%	0.56%	0.27%	0.22%
<b>Female 45-54</b>	4.94%	0.57%	0.16%	0.10%
<b>Female 55-64</b>	4.29%	0.37%	0.10%	0.02%
<b>Female 65+</b>	6.45%	0.41%	0.08%	0.02%
<b>ABC1</b>	25.07%	3.76%	1.33%	1.50%
<b>C2DE</b>	21.88%	3.75%	1.67%	1.36%
<b>White</b>	43.9%	6.6%	2.4%	1.9%
<b>Ethnic minority</b>	3.1%	1.0%	0.6%	1.0%
<b>North East</b>	2.1%	0.3%	0.1%	0.1%
<b>North West</b>	5.3%	0.8%	0.4%	0.3%
<b>Yorkshire and the Humber</b>	4.2%	0.7%	0.3%	0.2%
<b>East Midlands</b>	3.7%	0.6%	0.2%	0.2%
<b>West Midlands</b>	4.3%	0.8%	0.3%	0.3%
<b>East of England</b>	4.6%	0.7%	0.3%	0.2%
<b>London</b>	5.2%	1.1%	0.5%	0.8%
<b>South East</b>	6.5%	1.0%	0.4%	0.3%
<b>South West</b>	4.3%	0.6%	0.2%	0.1%
<b>Wales</b>	2.5%	0.3%	0.1%	0.1%
<b>Scotland</b>	4.2%	0.7%	0.2%	0.2%

## 10.3 Questionnaire

### *The PGSI – included for reference*

Thinking about the last 12 months...

1. Have you bet more than you could really afford to lose?
2. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?

3. When you gambled, did you go back another day to try to win back the money you lost?
4. Have you borrowed money or sold anything to get money to gamble?
5. Have you felt that you might have a problem with gambling?
6. Has gambling caused you any health problems, including stress or anxiety?
7. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
8. Has your gambling caused any financial problems for you or your household?

Have you felt guilty about the way you gamble or what happens when you gamble?

### *The PGSI mini screen*

**[Q5]** Thinking about the last 12 months:

- |         |  |
|---------|--|
| -[Q5_1] | Have you bet more than you could really afford to lose?  |
| -[Q5_7] | Have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true? |
| -[Q5_9] | Have you felt guilty about the way you gamble or what happens when you gamble?   |
| <1>     | Never  |
| <2>     | Sometimes  |
| <3>     | Most of the time   |
| <4>     | Almost always  |

### *The Gambling Commission question development*

**[GC\_1]** In the past 12 months, how often have you...

- |           |  |
|-----------|--|
| -[GC_1_1] | ...borrowed money or sold anything to get money to gamble?<br>(PGSI Item 4)                          |
| -[GC_1_2] | ...felt that gambling has caused you any health problems, including stress or anxiety? (PGSI Item 6) |
| -[GC_1_3] | ...felt guilty about the way you gamble or what happens when you gamble? (PGSI Item 9)               |

- |     |                  |
|-----|------------------|
| <1> | Never            |
| <2> | Sometimes        |
| <3> | Most of the time |
| <4> | Almost always    |

**[GC\_2]** Thinking about your own gambling, how often in the last 12 months has your own gambling led you to...

- [GC\_2\_1] ...reduce or cut back your spending on everyday items such as food, bills and clothing?
- [GC\_2\_2] ...use savings or borrow money e.g. from family/friends; credit cards; overdraft/loans; money lenders?
- [GC\_2\_3] ...experience conflict or arguments with friends, family and/or work colleagues?
- [GC\_2\_4] ...feel isolated from other people, left out or feel completely alone?
- [GC\_2\_5] ...lie to family, or others, to hide the extent of your gambling?
- [GC\_2\_6] ...be absent or perform poorly at work or study?"

- |     |              |
|-----|--------------|
| <1> | Never        |
| <2> | Occasionally |
| <3> | Fairly often |
| <4> | Very often   |

**[GC\_3]** In the past 12 months...

- [GC\_3\_1] ...have you lost something of significant financial value such as your home, business, car or been declared bankrupt because of your own gambling?
- [GC\_3\_2] ...has your relationship with someone close to you, such as spouse, partner, family member or friend broken down because of your own gambling?

-[GC\_3\_3] ...have you experienced violence or abuse because of your own gambling?

<1> Yes

<2> No

**[GC\_3b]** In the past 12 months...

-[GC\_3\_4] ...have you committed a crime in order to finance gambling or to pay gambling debts?

<1> Yes

<2> No

<3> Prefer not to say

*If respondents said Yes to any items at GC\_3 and GC\_3b they were classified as experiencing severe harms. If they said Yes to any other items but NOT to items at GC\_3 and GC\_3b they were classified as experiencing other negative consequences. Please note that the full Gambling Commission questionnaire also asks about suicidal ideation which has not been included in this study due to the sensitive nature of asking about this topic.*

## *The South Oaks Gambling screen scoring items*

**[SOGS\_4]** When you gamble, how often do you go back another day to win back money you have lost?

<1> Never

<2> Some of the time (less than half the time) I lost

<3> Most of the time I lost

<4> Every time I lost

**[SOGS\_5]** Have you ever claimed to be winning money gambling, but weren't really? In fact, you lost?

<1> Never

- <2> Yes, less than half the time I lost
- <3> Yes, most of the time

**[SOGS\_6]** Do you feel you have ever had a problem with betting or money gambling?

- <1> No
- <2> Yes, in the past, but not now
- <3> Yes

**[SOGS\_7]** Did you ever gamble more than you intended to?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_8]** Have people criticized your betting or told you that you had a problem, regardless of whether or not you thought it was true?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_9]** Have you ever felt guilty about the way you gamble, or what happens when you gamble?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_10]** Have you ever felt like you would like to stop betting money on gambling, but didn't think you could?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_11]** Have you ever hidden betting slips, lottery tickets, gambling money, IOUs, or other signs of betting or gambling from your spouse, children or other important people in your life?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_12]** Have you ever argued with people you live with over how you handle money?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**(To those who have argued with people they live with about how they handle money) [SOGS\_13]** Have money arguments ever centred on your gambling?

- <1> Never
- <2> Sometimes/Rarely
- <3> Most of the time
- <4> Always

**[SOGS\_14]** Have you ever borrowed from someone and not paid them back as a result of your gambling?

- <1> Never

<2> Sometimes/Rarely

<3> Most of the time

<4> Always

**[SOGS\_15]** Have you ever lost time from work (or school) due to betting money or gambling?

<1> Never

<2> Sometimes/Rarely

<3> Most of the time

<4> Always

**[SOGS\_16]** If you borrowed money to gamble or to pay gambling debts, who or where did you borrow from?

-[SOGS\_16\_1] From household money

-[SOGS\_16\_2] From your spouse

-[SOGS\_16\_3] From other relatives or in-laws

-[SOGS\_16\_4] From banks, loan companies or credit unions

-[SOGS\_16\_5] From credit cards

-[SOGS\_16\_6] From loan sharks

-[SOGS\_16\_7] You cashed in stocks, bonds or other securities

-[SOGS\_16\_8] You sold personal or family property

-[SOGS\_16\_9] You borrowed against your current account (e.g. wrote bad cheques)

-[SOGS\_16\_10] You have (had) a credit account with a bookmaker

-[SOGS\_16\_11] You have (had) a credit account with a casino

<1> Yes

<2> No

## The 20-item Gambling Harm Screen

**[GHS\_2]** During the last 12 months, did any of these issues occur as a result of your gambling?

- |            |   |   |            |  |
|------------|---|---|------------|--|
| -[GHS_2_1] | Reduction of my available spending money  | - | [GHS_2_11] | Had regrets that made me feel sorry about my gambling                            |
| -[GHS_2_2] | Less spending on recreational expenses such as eating out, going to movies or other entertainment | - | [GHS_2_12] | Felt like a failure  |
| -[GHS_2_3] | Reduction of my savings   | - | [GHS_2_13] | Felt ashamed of my gambling  |
| -[GHS_2_4] | Sold personal items   | - | [GHS_2_14] | Felt distressed about my gambling  |
| -[GHS_2_5] | Increased credit card debt  | - | [GHS_2_15] | Felt insecure or vulnerable  |
| -[GHS_2_6] | Less spending on essential expenses such as medications, healthcare and food                      | - | [GHS_2_16] | Felt worthless   |
| -[GHS_2_7] | Used my work or study time to gamble  | - | [GHS_2_17] | Spent less time with people I care about   |
| -[GHS_2_8] | Reduced performance at work or study (i.e. due to tiredness or distraction)                       | - | [GHS_2_18] | Social isolation (felt excluded or shut-off from others)                         |
| -[GHS_2_9] | Was absent from work or study   | - | [GHS_2_19] | Experienced greater conflict in my relationships (arguing, fighting, ultimatums) |



- Increased experience of  
[GHS\_2\_10] depression

<1> Yes

<2> No

- Promised to pay back  
[GHS\_2\_20] money without  
genuinely intending to  
do so

## *The Victoria Gambling screen*

### **[VG\_4]**

- Nowadays, when you gamble, do  
[VG\_4\_4] you feel as if you are on a slippery  
slope and can't get back up again?

- Has your need to gamble been too  
[VG\_4\_5] strong to control?

- Has gambling been more important  
[VG\_4\_6] than anything else you might do?

- Have you felt that after losing you  
[VG\_4\_7] must return as soon as possible to  
win back any losses?

- Has the thought of gambling been  
[VG\_4\_8] constantly in your mind?

- Have you lied to yourself about your  
[VG\_4\_9] gambling?

- Have you gambled in  
[VG\_4\_10] order to escape from  
worry or trouble?

- Have you felt bad or  
[VG\_4\_11] guilty about your  
gambling?

- Have you thought you  
[VG\_4\_12] shouldn't gamble or  
should gamble less?

- How often has anyone  
[VG\_4\_13] close to you complained  
about your gambling?

- How often have you lied  
[VG\_4\_14] to others to conceal the  
extent of your  
involvement in gambling?

- How often have you  
[VG\_4\_15] hidden betting slips,  
Lottery tickets, gambling  
money or other signs of  
gambling from your  
spouse, partner, children

or other important people  
in your life?

- |     |           |
|-----|-----------|
| <1> | Never     |
| <2> | Rarely    |
| <3> | Sometimes |
| <4> | Often     |
| <5> | Always    |
| <6> | Can't say |
| <7> | N/A       |

**[VG\_19\_grid]** How often...

- |                 |   |
|-----------------|---|
| -[VG_19_grid_1] | have you spent more money on gambling than you can afford?                          |
| -[VG_19_grid_2] | has your gambling made it harder to make money last from one<br>payday to the next? |
| -[VG_19_grid_3] | have you had to borrow money to gamble with?  |
| <1>             | Never   |
| <2>             | Rarely  |
| <3>             | Sometimes   |
| <4>             | Often   |
| <5>             | Always  |
| <6>             | Can't say   |
| <7>             | N/A   |

*The 7-item Domain-General Gambling Harm screen*

**[DGHS\_1]** Please consider your gambling during the last 12 months when answering the following questions.

What level of negative impact, if at all, did your gambling have upon each of the following?

- |             |   |
|-------------|---|
| -[DGHS_1_1] | Your financial security during this time? |
|-------------|---|

- [DGHS\_1\_2] Your personal relationships (family, friends, spouse, partner, etc.) during this time?
  - [DGHS\_1\_3] Your emotional or psychological wellbeing during this time?
  - [DGHS\_1\_4] Your physical or mental health during this time?
  - [DGHS\_1\_5] Your work or study performance during this time?
  - [DGHS\_1\_6] Your cultural or religious community during this time? (For example, feeling less connected or contributing less to cultural/religious community.)
- 
- <0> No impact
  - <1> Minor impact
  - <2> Some impact
  - <3> Moderate impact
  - <4> Major impact

**[DGHS\_1\_b]** Please consider your gambling during the last 12 months when answering the following questions.

What level of negative impact, if at all, did your gambling have upon each of the following?

- [DGHS\_1\_7] Your law-abidingness during this time? (For example, taking money or items from friends or family without asking first.)
- 
- <0> No impact
  - <1> Minor impact
  - <2> Some impact
  - <3> Moderate impact
  - <4> Major impact

### *The DSM-5 Gambling Disorder screen*

**[DSM5]** In the last 12-months, have you...

- [DSM5\_1] Needed to gamble with increasing amounts of money in order to achieve the desired excitement?
  - [DSM5\_2] Felt restless or irritable when attempting to cut down or stop gambling?
  - [DSM5\_3] Made repeated unsuccessful efforts to control, cut back, or stop gambling?
  - [DSM5\_4] Felt preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble)?
  - [DSM5\_5] Gambled when feeling distressed (e.g., helpless, guilty, anxious, depressed)?
  - [DSM5\_6] After losing money gambling, returned another day get even (“chasing” your losses)?
  - [DSM5\_7] Lied to conceal the extent of your involvement with gambling?
  - [DSM5\_8] Jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling?
  - [DSM5\_9] Relied on others to provide money to relieve desperate financial situations caused by gambling?
- <1> Yes
- <2> No