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Gambling behaviour in Great Britain in 2015

Evidence from England, Scotland and Wales

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Contents

List of Tables

List of Figures

Executive summary

This report provides information about gambling behaviour in Great Britain using data combined from the Health Survey for England (HSE) 2015, and the Scottish Health Survey (SHeS) 2015 and the Wales Omnibus in 2015.

The main aims and objectives of this report were:

- to describe the prevalence of gambling participation, at-risk gambling and problem gambling and;
- to explore characteristics associated with gambling participation, at-risk gambling, and problem gambling.

Participation in gambling activities

- 63% of adults (16+) in Great Britain had gambled in the past year, with men (66%) being more likely than women (59%) to do so.
- The most popular gambling activities were the National Lottery draws (46%), scratchcards (23%) and other lotteries (15%).
- Excluding those who only played the National Lottery draws, just under half of adults (45%) participated in other types of gambling activity; 49% of men and 42% of women.
- For both men and women, overall participation was highest among the middle age groups and lowest among the youngest and oldest age groups. Excluding those who only played the National Lottery draw, gambling participation was highest among younger adults.
- Past year gambling participation rates varied across regions, from 52% in London to 68% in Scotland.

At-risk gambling

- At-risk gambling was measured using the Problem Gambling Severity Index (PGSI). This identifies people who are at risk of problems related to their gambling behaviour but who are not classified as problem gamblers.
- Overall, 2.8% of adults were classified as low risk gamblers (a PGSI score of 1 or 2) and a further 1.1% as moderate risk gamblers (a PGSI score of 3 to 7), meaning that, overall, 3.9% of adults had a PGSI score which categorised them as at-risk gamblers.
- Rates of low risk and moderate risk gambling were higher among men than women and were higher among younger age groups.

Problem gambling

- Problem gambling is gambling to a degree that compromises, disrupts or damages family, personal or recreational pursuits. Estimates of problem gambling are

provided according to two different measurement instruments, the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) and the PGSI.

- According to the DSM-IV, problem gambling prevalence among adults living in private households was 0.7%. Men were more likely than women to be classified as a problem gambler according to the DSM-IV (1.3% and 0.2% respectively).
- According to the PGSI, problem gambling prevalence was 0.6%, with men again being more likely than women to be classified as a problem gambler (1.1% and 0.1% respectively).
- Problem gambling prevalence measured by either the DSM-IV or the PGSI was 0.8%, with men being more likely than women to be classified as problem gamblers (1.5% and 0.2% respectively).
- The highest rates of problem gambling were among those who had participated in spread betting (20.1%), betting via a betting exchange (16.2%), playing poker in pubs or clubs (15.9%), betting offline on events other than sports or horse or dog racing (15.5%) and playing machines in bookmakers (11.5%).
- Problem gambling was more prevalent among people who had participated in a number of gambling activities in the past year (prevalence was 11.9% for those who participated in seven or more activities compared to 0.3% of those who had taken part in just one gambling activity in the last year).

1 Introduction

1.1 Background and aims

Great Britain has one of the most accessible gambling markets in the world. Opportunities to gamble exist on most high streets and, with the spread of the internet, in virtually every home. The majority of British people have gambled at some point, be it buying a ticket for the National Lottery or having a flutter on a popular horse race like the Grand National. Most of those who gamble have no issues with keeping their gambling engagement within sensible and affordable limits. However, for some, gambling can be problematic, affecting their ability to live and work. People with gambling problems often experience a range of negative effects, including health issues, relationship breakdown, and difficulties with debt. In more severe cases gambling problems can lead to crime, thoughts of suicide or suicide itself[1].

Because of this, there are increasing calls for gambling to be recognised as a public health issue, where the enjoyment of the many should be balanced against the protection of the few. The gambling industry is increasingly being called upon to do more to protect participants and prevent problem gambling from occurring, and the National Responsible Gambling Strategy[2] emphasises the need for joint action between industry, government, healthcare providers and other public bodies to tackle gambling-related harm.

This report provides the latest estimates of gambling participation and problem and at-risk gambling in England, Scotland and Wales, based on data collected in 2015. Analysis was conducted as soon as all three datasets were made available. Where data is comparable for all three countries, estimates are provided for Great Britain as a whole. This is the first time that data about gambling behaviours has been available from a large sample of respondents in all three British nations, and collected in the same timeframe, since the British Gambling Prevalence Survey 2010.

1.2 Overview of study design

1.2.1 Sources of data

Until 2010, information about gambling in Britain was collected through the bespoke British Gambling Prevalence Survey (BGPS) series. Since 2012, questions about gambling participation and measures of problem gambling have been included on the Health Survey for England (HSE) and the Scottish Health Survey (SHeS).[3] Space could not be secured on the equivalent health survey for Wales (now part of the National Survey for Wales).

In 2014, data from the 2012 HSE and SHeS were combined to produce nationally representative estimates of gambling participation and problem gambling for England and Scotland.[4] This report repeats this process, combining data from the 2015 HSE and SHeS. HSE and SHeS are nationally representative surveys of people living in private households in Great Britain, which use similar sampling methods and the same approach to data collection, making these two surveys directly comparable. The same process used in 2014 to combine the two surveys was followed for this report.

The Gambling Commission attempted to secure the inclusion of gambling questions on the Welsh Health Survey (in 2012) and the National Survey of Wales (in 2015), but were unfortunately unable to do so. Therefore in 2015 the Gambling Commission used the Wales Omnibus, conducted by Beaufort Research, to collect information about Welsh gambling behaviour. This was with the express aim of providing a large enough Welsh sample to conduct robust analyses, the first insight about gambling behaviour in Wales since the 2010 BGPS and, with some caveats, to combine data with that from England and Scotland to produce estimates of gambling behaviour and problem gambling rates for the whole of Great Britain.

Unlike the English and Scottish health surveys, the Wales Omnibus used a different methodology to collect survey data. Combining these data has to be undertaken with extreme care. In order to do so, NatCen first produced a review of the methodology used by each study to assess where differences might affect estimates (see summary in Appendix A). We concluded that whilst the different methods were liable to produce differences for some estimates, comparison of the figures for England, Scotland and Wales showed that they were broadly similar. When combined and weighted to reflect the size of the population in each country, these methodological differences were unlikely to materially affect the overall estimates observed. Therefore, where possible, we present information on gambling participation for England, Scotland and Wales combined. However, we would caution against making cross national comparisons between Wales and the other two countries because of the underlying differences in how the data were collected. Cross national comparisons between England and Scotland can be made as the data were collected using very similar methods.

1.2.2 Weighting

Full details of the weighting strategies used for the HSE and SHeS individually can be found in their respective technical reports.[5,6] The Wales Omnibus is calibrated to the Welsh population by age, sex and Local Authority grouping. For analysis of the gambling data, some additional adjustments were applied to the standard survey weights in order to:

- weight the data for non-response to both the gambling participation questions and the problem gambling screens;
- scale the data so that it matched the population distribution of England, Scotland and Wales.

Further details are given in Appendix B.

1.3 Caveats

As with any survey, there are a number of caveats that need to be considered when interpreting the estimates presented in this report.

- Findings relate to adults aged 16 and over, living in private households in Great Britain. Those who live in institutions such as prisons, care homes or student halls of residence, and the homeless were outside the scope of the surveys. There is evidence to suggest that some of these sub-groups are more likely to be problem gamblers.[7] As a result, it is possible that the problem gambling estimates presented in this report may underestimate the prevalence of problem gambling in Great Britain.
- Survey methodology varied between countries, particularly in Wales (see Appendix A). Estimates for Great Britain may be marginally higher due to higher rates in

Wales; it is unclear whether this reflects a real difference for Wales or is an artefact of the differences in survey design.

- The HSE and SHeS are cross-sectional surveys. Associations between gambling behaviour and other characteristics are highlighted but these associations cannot be interpreted as causal effects.
- Questions about gambling are likely to be sensitive to some people and they may, as a result, give 'socially desirable' (and potentially dishonest) answers to a questionnaire and may underestimate the extent of their gambling behaviour.
- There is evidence showing that very frequent gamblers are less likely to be at home and available for interview than other sub-groups and are therefore less likely to be included in the study.[8] This therefore may lead to a potential underestimation of the prevalence of problem gambling in Great Britain.
- No screen for problem gambling is perfect. The best performing screens should aim to minimise both 'false positives' and 'false negatives'. A false positive is where someone without a gambling problem is classified as a problem gambler. A false negative is where a person with a gambling problem is classified as someone without a gambling problem. The number of false positives and false negatives is related to the thresholds used. The DSM-IV threshold used in this report is the same as in the BGPS series, the 2012 HSE and SHeS analysis and in other international studies. The threshold used for the PGSI follows the recommendation of the screen's developers and is the same as used in the BGPS 2007 and 2010 and the 2012 health surveys.
- The PGSI has been validated on a Canadian population. It has not been validated in Britain. The DSM-IV criterion was developed as a diagnostic tool and has not been validated for use with the general population.
- Finally, a survey estimate is subject to sampling error and should be considered with reference to the confidence intervals (specifically presented for problem gambling estimates) as well as the survey design and sample size. The confidence intervals presented in this report take into account the complex survey design (e.g. clustering and stratification) and weighting.

Where possible, the survey methodology used attempted to overcome these limitations. For example, the surveys were not gambling specific surveys; they used self-completion methods to encourage honest reporting of the gambling questions; the results were weighted to take into account non-response bias and careful consideration was given to the choice of gambling screen and appropriate thresholds for problem gambling.

1.4 Report and table conventions

The following conventions are used in this report:

- Unless otherwise stated, the tables are based on the responding sample for each individual question (i.e., item non-response is excluded). Therefore bases may differ slightly between tables.
- The group to whom each table refers is shown in the top left hand corner of each table; this description also indicates whether the data are based on England and Scotland or on all three nations.
- The data used in this report have been weighted. The weighting strategy is described in Appendix B. Both weighted and unweighted base sizes are shown at

the foot of each table. The weighted numbers reflect the relative size of each group of the population, not the number of interviews achieved, which is shown by the unweighted base.

- The following conventions have been used in the tables:

  - No observations (zero values)

  0 Non-zero values of less than 0.5% and thus rounded to zero

  [ ] An estimate presented in square brackets warns of small sample base sizes. If a group's unweighted base is less than 30, data for that group are not shown. If the unweighted base is between 30 and 49, the estimate is presented in square brackets.

  * Estimates not shown because base sizes are less than 30.

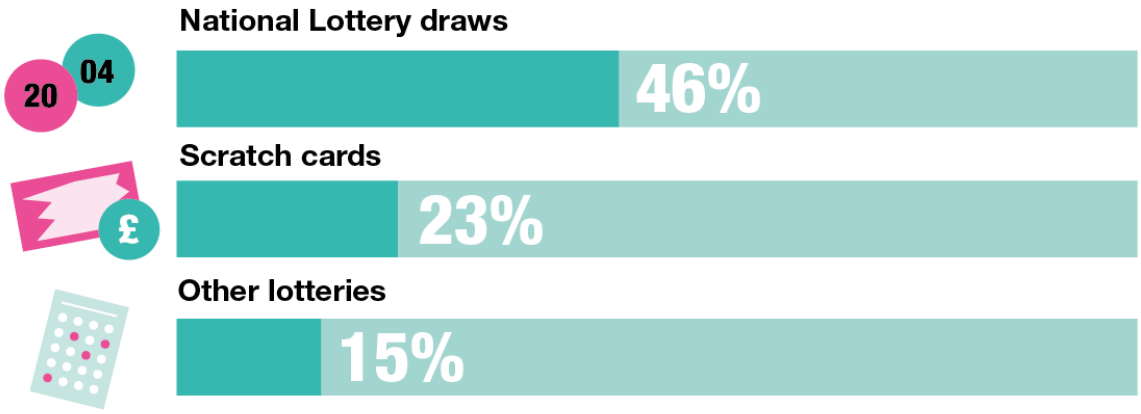
- Row or column percentages may not exactly add to 100% due to rounding.
- A percentage may be presented in the text for a single category that aggregates two or more percentages shown in the table. Because of rounding, the aggregated estimate may differ by one percentage point from the sum of the percentages in the table.
- Some questions were multi-coded (i.e. allowing the respondent to give more than one answer). The column percentages for these tables sum to more than 100%.
- The term 'significant' refers to statistical significance (at the 95% level) and is not intended to imply substantive importance.
- The report only comments on difference between groups, or over time, where these differences are greater than zero (at the 95% level of confidence).[9]

Notes and references

[1] Blaszczynski, A & Farrell, E. (1998) A case study of 44 completed gambling-related suicides. Journal of Gambling Studies. *Journal of Gambling Studies*, 14(2): 93-109.
[2] http://www.rgsb.org.uk/PDF/Strategy-2016-2019.pdf
[3] Gambling questions were included on HSE in 2012, 2015 and 2016. In Scotland, gambling questions have been included in every survey year since 2012.
[4] Wardle H., Seabury C., Ahmed H., et al (2014). *Gambling behaviour in England and Scotland.* http://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-behaviour-in-England-Scotland-Full-report.pdf
[5] http://www.content.digital.nhs.uk/catalogue/PUB22610/HSE2015-methods.pdf
[6] http://www.gov.scot/Resource/0050/00505795.pdf
[7] May-Chahal, C., Wilson, A., Humphreys, L., Anderson, J. (2012) Promoting an Evidence-Informed Approach to Addressing Problem Gambling in UK Prison Populations. The Howard Journal, 51(4): 372– 386.
[8] Analysis of the BGPS 2010 showed that those respondents for whom it took more effort to persuade to take part in the study (i.e. they required multiple calls to contact, were reissued or followed-up by the telephone unit) were more likely to be gamblers.
[9] Significance testing was carried out using a Wald test. This is statistical test used to establish whether the association among particular variables is statistically significant.

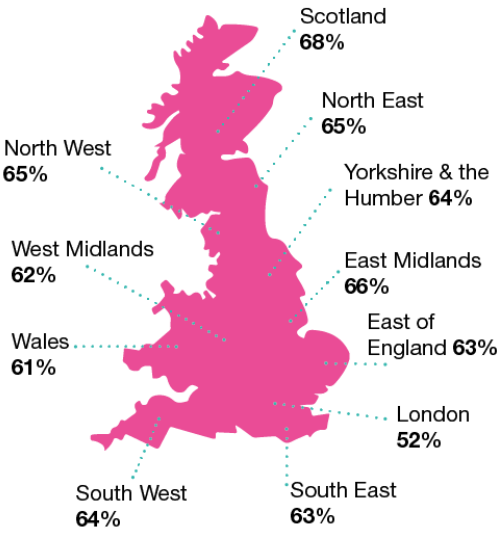
Gambling participation in Great Britain

The most popular gambling activities were:



Variation of activity by age

Participation by region



2 Gambling participation

2.1 Introduction

This chapter looks at levels of participation in gambling in the past 12 months, and whether this varies by a range of characteristics. For all gambling activities, participation was defined as having 'spent money' on the activity over the past year. Respondents were shown a list of gambling activities and were asked whether they had spent money on each of them in the past 12 months.

The activities included in the list were intended to cover all types of gambling available. However, to allow for the possibility that an activity was missed or that respondents may have misunderstood an activity description, an option was provided for respondents to mention another form of gambling.

The first part of this chapter covers participation in individual gambling activities as well as overall participation levels in gambling. Participation levels are compared by the age and sex of the respondent, their ethnic group, highest educational qualification, economic activity, the socio-economic status (NS-SEC) of the household reference person and region.

2.2 Gambling participation by socio-demographic characteristics

2.2.1 Participation in gambling activities in the past 12 months, by age and sex

Overall participation by age and sex

In the past year in Great Britain, 63% of adults aged 16 and over had gambled. As in previous surveys[10,11], gambling participation continued to be higher among men (66%) than women (59%). Buying a ticket for the National Lottery draws continued to be the most popular gambling activity for both men (50%) and women (43%). Just under half of adults (45%) participated in other types of gambling activity, 49% of men and 42% of women.

Men remained significantly more likely than women to participate in nearly all gambling activities, with the exception of offline bingo where women continued to have higher levels of participation than men (8%, compared to 4%), and participation in scratchcards (23%) and other lotteries (15%), both of which had the same participation rates for men and women.

Table 2:1 Participation in gambling activities in the past 12 months, by sex

Aged 16 and over, England, Scotland and Wales			*2015*
Participation in gambling activities in the past 12 months	**Sex**		**Total**
	Men	Women	
	%	%	%
Lotteries and related products			
National Lottery draws	50	43	46
Scratchcards	23	23	23
Other lotteries	15	15	15
Machines/games			
Football pools	5	1	3
Bingo (not online)	4	8	6
Slot machines	10	5	7
Machines in a bookmakers	6	1	3
Casino table games (not online)	6	2	4
Poker played in pubs or clubs	2	0	1
Online gambling on slots, casino or bingo games	5	2	4
Betting activities			
Online betting with a bookmaker	12	2	7
Betting exchange	2	0	1
Horse races (not online)	14	9	11
Dog races (not online)	4	2	3
Sports events (not online)	10	1	5
Other events (not online)	3	0	2
Spread-betting	1	0	1
Private betting	8	2	5
Other gambling activity			
Any other gambling	3	1	2
Summary			
Any gambling activity	*66*	*59*	*63*
Any gambling (excluding National Lottery draws only)[a]	*49*	*42*	*45*
Any online gambling (excluding National Lottery draws)	*15*	*5*	*10*
No gambling in last 12 months	*34*	*41*	*37*
Bases (unweighted)[b]	*6,940*	*8,623*	*15,563*
Bases (weighted)	*7,606*	*7,897*	*15,503*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

Rates of gambling participation in the past 12 months varied by age (see Table 2:2). For both men and women, overall participation was highest among the middle age groups and lowest among the younger and older adults. Between 65% and 67% of adults aged 25 to 54 had participated in gambling in the past 12 months, compared with 54% of those aged 16 to 24 and 53% of those aged 75 and older.

However, when individuals who only participated in National Lottery draws were excluded, the pattern of participation by age changed. Participation in other forms of gambling was highest among younger age groups: 51% of adults aged 16 to 24 and 57% of those aged 25 to 34 had gambled on something other than National Lottery draws in the past 12 months. This decreased with age to 35% of adults aged 75 and older. This pattern was the same for men and women.

Participation in individual activities by sex and age

After National Lottery draws, in which 50% of men and 43% of women had participated, scratchcards were the next most popular form of gambling with 23% of men and women purchasing a scratchcard in the past 12 months. Equal proportions of men and women had participated in other lotteries (15%). 11% of adults had bet on horse races offline, 14% of men and 9% of women. After these activities, online betting with a bookmaker, betting offline on other sporting events and slot machines were the next most popular forms of gambling for men (12%, 10% and 10% respectively). All other gambling activities had participation rates of 10% or less among both men and women.

Patterns of participation in individual gambling activities varied with age. National Lottery draws were more popular with adults in the middle age groups. For example, 23% of adults aged 16 to 24 had participated in National Lottery draws, compared with between 46% and 55% of adults aged 25 to 64 and 38% of adults aged 75 and older. Other lotteries were most popular among older adults, with participation increasing from 5% of those aged 16 to 24 to 20% of those aged 65 to 74.

In contrast, scratchcards were most popular with younger adults, with participation declining from 35% of those aged 16 to 34 to 9% of those aged 75 and over. Participation was also higher among younger age groups for most other gambling activities, including betting offline on horse racing, playing on slot machines and machines in bookmakers, online betting with a bookmaker, and betting on sports events other than horse or dog racing. Online forms of gambling were popular with younger adults; 14% of adults aged 16 to 24 and 19% of adults aged 25 to 34 had participated in online gambling and betting in the past 12 months. This compares to 1% to 3% of adults aged 65 and over. Although young women were less likely than men to have participated in each of these forms of gambling, the pattern of participation by age was similar for men and women.

Table 2:2 Participation in gambling activities in the past 12 months, by age and sex

Aged 16 and over, England, Scotland and Wales — *2015*

Participation in gambling activities in the past 12 months	**Age group**						
	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%
Men							
Lotteries and related products							
National Lottery draws	25	48	59	57	56	52	46
Scratchcards	36	37	28	17	11	11	7
Other lotteries	9	12	14	16	17	22	22
Machines/games							
Football pools	14	6	3	2	2	2	2
Bingo (not online)	6	7	4	3	2	3	3
Slot machines	17	18	12	8	4	2	2
Machines in a bookmakers	14	11	5	3	1	0	1
Casino table games (not online)	10	13	4	3	2	1	1
Poker played in pubs or clubs	3	5	3	1	1	0	0
Online gambling on slots, casino or bingo games	10	11	6	4	2	1	1
Betting activities							
Online betting with a bookmaker	16	25	15	10	6	4	1
Betting exchange	4	3	3	1	0	0	0
Horse races (not online)	15	18	16	13	12	12	10
Dog races (not online)	5	5	5	5	3	2	2
Sports events (not online)	17	16	9	9	6	3	2
Other events (not online)	5	4	3	2	2	1	1
Spread-betting	2	2	1	1	1	0	0
Private betting	16	15	7	5	3	2	3
Other gambling activity							
Any other gambling	5	5	3	2	2	2	2
Summary							
Any gambling activity	*58*	*69*	*72*	*67*	*66*	*64*	*61*
Any gambling (excluding National Lottery draws only)[a]	*55*	*64*	*53*	*44*	*38*	*39*	*38*
Any online gambling or betting	*21*	*29*	*16*	*11*	*7*	*4*	*2*
No gambling in last 12 months	*42*	*31*	*28*	*33*	*34*	*36*	*39*
Bases (unweighted)[b]	*675*	*944*	*1,004*	*1,136*	*1,106*	*1,237*	*838*
Bases (weighted)	*1,110*	*1,312*	*1,246*	*1,340*	*1,069*	*898*	*631*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

Table 2:2 Continued

Participation in gambling activities in the past 12 months	Age group						
	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%
Women							
Lotteries and related products							
National Lottery draws	20	45	47	53	54	44	33
Scratchcards	34	34	26	21	16	11	10
Other lotteries	5	14	16	18	19	20	16
Machines/games							
Football pools	3	1	0	1	1	0	1
Bingo (not online)	11	9	8	7	5	7	10
Slot machines	7	7	7	3	3	2	1
Machines in a bookmakers	2	3	1	0	0	0	0
Casino table games (not online)	3	4	2	1	1	0	1
Poker played in pubs or clubs	1	0	0	-	0	0	-
Online gambling on slots, casino or bingo games	3	4	3	2	2	1	-
Betting activities							
Online betting with a bookmaker	3	5	3	3	1	1	0
Betting exchange	1	0	0	-	0	0	-
Horse races (not online)	9	11	10	9	9	5	4
Dog races (not online)	2	2	2	2	1	0	0
Sports events (not online)	3	3	2	1	0	0	0
Other events (not online)	1	0	0	0	0	0	-
Spread-betting	-	0	-	0	-	0	-
Private betting	5	3	1	2	1	2	2
Other gambling activity							
Any other gambling	1	0	0	1	0	0	1
Summary							
Any gambling activity	*50*	*62*	*63*	*64*	*65*	*58*	*48*
Any gambling (excluding National Lottery draws only)[a]	*46*	*50*	*45*	*44*	*38*	*35*	*33*
Any online gambling or betting	*6*	*8*	*6*	*4*	*3*	*1*	*0*
No gambling in last 12 months	*50*	*38*	*37*	*36*	*35*	*42*	*52*
Bases (unweighted)[b]	*813*	*1,264*	*1,374*	*1,459*	*1,392*	*1,320*	*1,001*
Bases (weighted)	*1,059*	*1,315*	*1,260*	*1,382*	*1,111*	*960*	*811*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

Table 2:2 Continued							
Participation in gambling activities in the past 12 months	**Age group**						
	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%
All							
Lotteries and related products							
National Lottery draws	23	46	53	55	55	48	38
Scratchcards	35	35	27	19	13	11	9
Other lotteries	5	14	16	18	19	20	16
Machines/games							
Football pools	9	4	2	1	1	1	1
Bingo (not online)	8	8	6	5	3	5	7
Slot machines	12	13	9	6	3	2	2
Machines in a bookmakers	8	7	3	2	1	0	1
Casino table games (not online)	7	8	3	2	1	1	1
Poker played in pubs or clubs	2	2	2	1	0	0	0
Online gambling on slots, casino or bingo games	6	7	4	3	2	1	0
Betting activities							
Online betting with a bookmaker	10	15	9	6	3	2	1
Betting exchange	2	1	2	0	0	0	0
Horse races (not online)	12	14	13	11	10	8	7
Dog races (not online)	3	4	4	3	2	1	1
Sports events (not online)	10	9	5	5	3	2	1
Other events (not online)	3	2	2	1	1	1	0
Spread-betting	1	1	1	0	0	0	0
Private betting	10	9	4	3	2	2	2
Other gambling activity							
Any other gambling	3	2	2	1	1	1	2
Summary							
Any gambling activity	*54*	*66*	*67*	*66*	*65*	*61*	*53*
Any gambling (excluding National Lottery draws only)[a]	*51*	*57*	*49*	*44*	*38*	*37*	*35*
Any online gambling or betting	*14*	*19*	*11*	*8*	*5*	*3*	*1*
No gambling in last 12 months	*46*	*34*	*33*	*34*	*35*	*39*	*47*
Bases (unweighted)[b]	*1,488*	*2,208*	*2,378*	*2,595*	*2,498*	*2,557*	*1,839*
Bases (weighted)	*2,168*	*2,627*	*2,505*	*2,722*	*2,180*	*1,858*	*1,442*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

2.2.2 Participation in gambling activities in the past 12 months, by ethnic group

Overall participation by ethnic group

Table 2:3 shows gambling participation in the past 12 months by ethnic group among respondents in Great Britain. Gambling participation varied by ethnic group. Two thirds of White or White British adults had gambled in the past 12 months (65%), compared with less than half of minority ethnic adults; 36% of Asian or Asian British respondents, 40% of Black or Black British respondents and 49% of adults in other minority ethnic groups. The same pattern was evident among those who gambled on activities other than National Lottery draws.

Participation in individual activities by ethnic group

White/White British respondents were more likely than other groups to participate in the National Lottery draws, although this was the most popular activity for all ethnic groups. White/White British respondents were also more likely than other groups to participate in other lotteries, offline bingo, and offline betting on horse races.

There was a slightly different pattern for scratchcards, and online gambling (on slots, casino or bingo games); similar proportions of White/White British respondents and those from other minority ethnic groups participated, and were more likely to do so than those from Asian/Asian British and Black/Black British backgrounds.

No such differences between ethnic groups were apparent for other forms of gambling, including football pools, slot machines, machines in bookmakers, casino table games, online betting with bookmakers, and private betting.

Table 2:3 Participation in gambling activities in the past 12 months, by ethnic group

Aged 16 and over, England, Scotland and Wales — *2015*

Participation in gambling activities in the past 12 months	**Ethnic group**			
	White/White British	Asian/Asian British	Black/Black British	Other, including mixed
	%	%	%	%
Lotteries and related products				
National Lottery draws	49	24	28	35
Scratchcards	24	9	14	23
Other lotteries	16	8	4	11
Machines/games				
Football pools	3	2	3	5
Bingo (not online)	7	1	3	4
Slot machines	7	5	7	7
Machines in a bookmakers	3	3	4	5
Casino table games (not online)	4	2	5	4
Poker played in pubs or clubs	1	0	0	2
Online gambling on slots, casino or bingo games	4	1	1	4
Betting activities				
Online betting with a bookmaker	8	3	4	7
Betting exchange	1	0	1	1
Horse races (not online)	12	2	2	6
Dog races (not online)	3	1	-	1
Sports events (not online)	6	2	3	5
Other events (not online)	2	0	-	3
Spread-betting	1	0	1	1
Private betting	5	2	5	7
Other gambling activity				
Any other gambling	2	2	2	2
Summary				
Any gambling activity	*65*	*36*	*40*	*49*
Any gambling (excluding National Lottery draws only)[a]	*48*	*24*	*26*	*36*
Any online gambling or betting	*10*	*5*	*5*	*8*
No gambling in last 12 months	*35*	*64*	*60*	*51*
Bases (unweighted)[b]	*14,631*	*471*	*225*	*221*
Bases (weighted)	*13,829*	*901*	*391*	*374*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

2.2.3 Participation in gambling activities in the past 12 months, by highest educational qualification

Overall participation by highest educational qualification

Table 2:4 shows past year gambling participation by the highest educational qualification of the respondents in England and Scotland. Information about educational qualifications was not available for respondents in Wales.

There were differences between participation rates according to respondents' level of education, although the pattern was not clear-cut. Participation was lowest among those with no qualifications (58%) or who reported having 'other' qualifications (56%). Among those with some qualifications, participation varied with no clear pattern; it was highest among those with higher educational qualifications below degree level (68%).

There was a broadly similar pattern for participation in gambling activities other than National Lottery draws. Participation was lowest among those with 'other' qualifications (31%) and highest among those with qualifications at GCSE level (48%), equivalent to A Level (51%) and those with higher qualifications education below degree level (49%).

Participation in individual activities by highest educational qualification

Table 2:4 shows how the pattern of participation in the individual activities varied by educational attainment. For many individual activities the pattern of participation was similar to the overall pattern of gambling participation described above; this was true for activities such as scratchcards, slot machines and offline betting on sports events. However, for all groups, the most popular activities were National Lottery draws, scratchcards and other lotteries.

Generally, those with degree level qualifications were less likely than those with lower educational qualifications to have participated in individual gambling activities in the past 12 months. However, for offline betting on horse races and online gambling and betting in general, their participation was similar to those with lower levels of educational attainment.

Those with other or no qualifications were generally least likely to participate in most gambling activities, but this was not the case for other lotteries and for offline bingo.

Table 2:4 Participation in gambling activities in the past 12 months, by highest educational qualification

Aged 16 and over, England and Scotland — *2015*

Participation in gambling activities in the past 12 months	**Highest educational qualification**					
	Degree (or equivalent) or higher	Higher education below degree	A-level / Scottish Highers or equivalent	GCSE /Scottish Standard Grades or equivalent	Other	No qualifications
	%	%	%	%	%	%
Lotteries and related products						
National Lottery draws	44	50	46	50	48	43
Scratchcards	18	25	27	28	10	18
Other lotteries	14	17	15	16	17	15
Machines/games						
Football pools	2	5	4	3	2	2
Bingo (not online)	3	6	8	8	7	7
Slot machines	7	10	10	8	2	4
Machines in a bookmakers	3	6	5	3	1	3
Casino table games (not online)	4	6	5	3	2	2
Poker played in pubs or clubs	1	2	1	1	-	1
Online gambling on slots, casino or bingo games	3	6	5	4	1	3
Betting activities						
Online betting with a bookmaker	10	9	10	6	1	2
Betting exchange	1	1	2	1	-	0
Horse races (not online)	13	13	14	11	3	7
Dog races (not online)	2	4	4	3	1	2
Sports events (not online)	5	7	8	5	1	3
Other events (not online)	1	2	2	2	0	1
Spread-betting	1	1	1	1	-	0
Private betting	4	7	7	5	2	2
Other gambling activity						
Any other gambling	2	2	2	2	1	2

Table 2:4 Continued

Participation in gambling activities in the past 12 months	Highest educational qualification					
	Degree (or equivalent) or higher	Higher education below degree	A-level / Scottish Highers or equivalent	GCSE /Scottish Standard Grades or equivalent	Other	No qualifications
	%	%	%	%	%	%
Summary						
Any gambling activity	*60*	*68*	*64*	*66*	*56*	*58*
Any gambling (excluding National Lottery draws only)[a]	*43*	*49*	*51*	*48*	*31*	*39*
Any online gambling or betting	*11*	*12*	*13*	*9*	*2*	*4*
No gambling in last 12 months	*40*	*32*	*36*	*34*	*44*	*42*
Bases (unweighted)[b]	*3,184*	*1,306*	*1,834*	*2,865*	*146*	*2,186*
Bases (weighted)	*3,262*	*1,265*	*2,008*	*2,811*	*143*	*2,010*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

2.2.4 Participation in gambling activities in the past 12 months, by economic activity

Overall participation by economic activity

Table 2:5 shows past year gambling participation by the economic activity of the respondents in England and Scotland. Comparable information was not available for respondents in Wales. Economic activity was split into five categories: those in employment or training (including self-employment); those in full-time education; retired; unemployed; and economically inactive in some other way (for example, the long-term sick, carers and those looking after home or family). It should be noted that the sample only included adults living in private households meaning that people living in institutions, like students living in halls of residence, were excluded from the study.

Respondents in employment or training were most likely to have gambled in the past 12 months, with 69% having spent money on any gambling activity. Those in full time education had the lowest levels of participation with only 33% having gambled in the past 12 months. Among the unemployed, retired and other economically inactive groups, participation was between 55% and 57%.

Excluding participation in National Lottery draws, there was a slightly different pattern of participation; in particular, unemployed adults had similar rates of gambling to those in employment or training (48% and 51% respectively).

Participation in individual activities by economic activity

The pattern of participation in individual activities by economic activity also varied. National Lottery draws continued to be the most popular gambling activity for nearly all

economic activity groups aside from those in full time education and the unemployed, who were more likely to have purchased scratchcards (15% and 30% respectively, compared with 9% and 27% respectively who participated in National Lottery draws).

Those in employment or classed as unemployed were more likely than other groups to have participated in most gambling activities, for example offline betting on horse racing, slot machines and casino table games. Notably, unemployed adults were more likely than any other group to play machines in bookmakers (7%, compared with 4% or less in other groups). Generally, those in full time education had low rates of participation in most gambling activities. However, they had the highest participation rate for private betting at 9%. Other lotteries were most popular among retired people, with 19% participating in the past 12 months.

Table 2:5 Participation in gambling activities in the past 12 months, by economic activity

Aged 16 and over, England and Scotland — *2015*

Participation in gambling activities in the past 12 months	**Economic activity**				
	In employment, self-employed or training	In full-time education	Retired	Unemployed	Other inactive
	%	%	%	%	%
Lotteries and related products					
National Lottery draws	54	9	42	27	38
Scratchcards	27	15	10	30	23
Other lotteries	16	2	19	9	13
Machines/games					
Football pools	4	3	1	5	2
Bingo (not online)	6	2	6	7	7
Slot machines	10	5	2	10	4
Machines in a bookmakers	4	3	0	7	3
Casino table games (not online)	5	3	1	6	0
Poker played in pubs or clubs	2	1	0	1	1
Online gambling on slots, casino or bingo games	5	1	1	5	4
Betting activities					
Online betting with a bookmaker	11	4	2	5	4
Betting exchange	1	1	0	2	1
Horse races (not online)	14	5	7	10	7
Dog races (not online)	4	2	1	1	2
Sports events (not online)	8	5	1	6	3
Other events (not online)	2	1	1	1	1
Spread-betting	1	-	0	1	0
Private betting	7	9	2	8	2
Other gambling activity					
Any other gambling	2	1	1	3	1

Table 2:5 Continued					
Participation in gambling activities in the past 12 months	**Economic activity**				
	In employment, self-employed or training	In full-time education	Retired	Unemployed	Other inactive
	%	%	%	%	%
Summary					
Any gambling activity	*69*	*33*	*57*	*56*	*55*
Any gambling (excluding National Lottery draws only)[a]	*51*	*29*	*35*	*48*	*40*
Any online gambling or betting	*13*	*5*	*2*	*10*	*7*
No gambling in last 12 months	*31*	*67*	*43*	*44*	*45*
Bases (unweighted)[b]	*6,191*	*411*	*3,278*	*372*	*1,254*
Bases (weighted)	*6,726*	*537*	*2,516*	*504*	*1,201*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

2.2.5 Participation in gambling activities in the past 12 months, by NS-SEC of household reference person

Overall participation by NS-SEC of household reference person

Table 2:6 shows past year gambling participation based on the socio-economic classification (NS-SEC) of the household reference person for respondents in England and Scotland. Comparable information was not available for respondents in Wales, where social grade was captured rather than NS-SEC. Respondents are assigned to an NS-SEC category based on the occupation of the household reference person.[12]

There was no significant relationship between taking part in gambling overall and the NS-SEC of the household reference person. This was the case whether or not those who only played the National Lottery draws were included.

Participation in individual activities by NS-SEC of household reference person

Participation in some individual activities varied with NS-SEC. For example, those from households classed as routine and manual were most likely to have purchased scratchcards (26%) and to have played bingo offline (9%). Those living in households classed as managerial and professional were more likely than those from other types of household to have bet online with a bookmaker (10%) and to have bet offline on horse racing (13%).

Table 2:6 Participation in gambling activities in the past 12 months, by NS-SEC of household reference person

Aged 16 and over, England and Scotland — *2015*

Participation in gambling activities in the past 12 months	**NS-SEC of household reference person (HRP)**		
	Managerial and professional occupations	Intermediate occupations	Routine and manual occupations
	%	%	%
Lotteries and related products			
National Lottery draws	47	48	47
Scratchcards	19	23	26
Other lotteries	15	17	15
Machines/games			
Football pools	3	3	3
Bingo (not online)	3	7	9
Slot machines	7	7	8
Machines in a bookmakers	3	4	4
Casino table games (not online)	4	4	3
Poker played in pubs or clubs	1	2	1
Online gambling on slots, casino or bingo games	3	5	4
Betting activities			
Online betting with a bookmaker	10	7	5
Betting exchange	1	1	1
Horse races (not online)	13	9	11
Dog races (not online)	3	3	3
Sports events (not online)	5	5	6
Other events (not online)	1	2	2
Spread-betting	1	1	1
Private betting	5	6	5
Other gambling activity			
Any other gambling	2	2	2
Summary			
Any gambling activity	*62*	*63*	*65*
Any gambling (excluding National Lottery draws only)[a]	*45*	*45*	*48*
Any online gambling or betting	*11*	*10*	*8*
No gambling in last 12 months	*38*	*37*	*35*
Bases (unweighted)[b]	*4,779*	*2,351*	*4,098*
Bases (weighted)	*4,916*	*2,352*	*3,908*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

2.2.6 Participation in gambling activities in the past 12 months, by region

Overall participation by region

Table 2:7 shows past year gambling participation by region.[13] Note that estimates from Wales are not strictly comparable with those from the English regions and Scotland, because of differences in survey methodology (see Section 1.2 of this report).

Adults in Scotland were most likely to have taken part in any gambling activity, with 68% of people in Scotland spending money on gambling activities in the past 12 months, followed by the East Midlands (66%), the North East and the North West (both 65%). London had the lowest participation levels, with 52% of Londoners taking part in gambling.

This pattern remained broadly similar when those who only played the National Lottery draws were excluded from the analysis. Gambling activities remained most popular in Scotland and the East Midlands (both 49%) and least popular in London (37%).

Participation in individual activities by government office region

Patterns of gambling participation by region varied in different ways for individual activities. For example, Scotland had the highest rate of participation in National Lottery draws, football pools and online betting with bookmakers. London had the lowest participation rates in National Lottery draws, other lotteries, scratchcards, offline bingo, and offline betting on horse racing, but did not have the lowest rates for other forms of gambling, for example online gambling and playing machines in bookmakers.

Variation across regions was particularly pronounced for some forms of gambling. For example, participation in offline bingo was low in the North West, South East and South West (all 5%) and London (3%), but considerably higher in Yorkshire and the Humber (10%) and the North East (12%). Private betting was highest in the East of England (9%). Respondents in Scotland and the North East were the most likely to have taken part in any online gambling or betting (12% in both regions).

Only for minority activities – poker in pubs and spread betting – were regional differences not apparent.

Table 2:7 Participation in gambling activities in the past 12 months, by region

Aged 16 and over, England, Scotland, Wales — *2015*

Participation in gambling activities in the past 12 months	**Region**										
	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	Scotland	Wales
	%	%	%	%	%	%	%	%	%	%	%
Lotteries and related products											
National Lottery draws	50	50	49	49	46	44	35	46	49	53	48
Scratchcards	25	24	24	25	22	23	16	22	23	25	27
Other lotteries	17	16	14	18	18	14	9	15	16	18	17
Machines/games											
Football pools	3	2	2	3	4	3	3	2	2	6	2
Bingo (not online)	12	5	10	6	6	6	3	5	5	7	7
Slot machines	9	7	10	7	4	9	7	6	6	9	6
Machines in a bookmakers	4	4	5	2	3	5	4	3	1	5	2
Casino table games (not online)	4	4	5	4	1	4	5	4	2	5	2
Poker played in pubs or clubs	3	1	2	1	1	2	1	1	1	1	1
Online gambling on slots, casino or bingo games	7	4	6	2	3	4	3	4	3	5	3
Betting activities											
Online betting with a bookmaker	8	9	8	6	8	7	9	7	6	10	4
Betting exchange	1	1	1	1	1	1	1	1	1	1	1
Horse races (not online)	12	14	15	10	10	11	8	12	9	12	9
Dog races (not online)	3	3	4	3	3	4	2	3	1	2	2
Sports events (not online)	8	7	6	5	4	7	6	3	3	8	5
Other events (not online)	2	2	3	1	1	2	1	1	0	2	1
Spread-betting	1	0	1	0	0	1	0	1	0	1	1
Private betting	4	4	4	6	4	9	6	5	5	5	2
Other gambling activity											
Any other gambling	2	2	1	2	1	3	3	1	1	2	1
Summary											
Any gambling activity	*65*	*65*	*64*	*66*	*62*	*63*	*52*	*63*	*64*	*68*	*61*
Any gambling (excluding National Lottery draws only)[b]	*46*	*48*	*48*	*49*	*45*	*47*	*37*	*44*	*46*	*49*	*44*
Any online gambling or betting	*12*	*11*	*10*	*8*	*9*	*8*	*10*	*9*	*7*	*12*	*6*
No gambling in last 12 months	*35*	*35*	*36*	*34*	*38*	*37*	*48*	*37*	*36*	*32*	*39*
Bases (unweighted)[a]	*533*	*971*	*650*	*677*	*632*	*882*	*827*	*1,194*	*713*	*4,449*	*4,035*
Bases (weighted)	*655*	*1,749*	*1,325*	*1,151*	*1,387*	*1,493*	*2,078*	*2,192*	*1,363*	*1,333*	*778*

[a] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.
[b] Bases for individual activities vary; those shown are for participation in any gambling activity.

Notes and references

[10] Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D., Dobbie, F. (2011). *British Gambling Prevalence Survey 2010.* London: National Centre for Social Research

[11] Wardle H., Seabury C., Ahmed H., et al (2014). *Gambling behaviour in England and Scotland.* London: National Centre for Social Research

[12] The concept of a Household Reference Person (HRP) was introduced in the 2001 Census (in common with other government surveys in 2001/2) to replace the traditional concept of the head of the household. HRPs provide an individual person within a household to act as a reference point for producing further derived statistics and for characterising a whole household according to characteristics of the chosen reference person. The household reference person is identified among adults within a household according to household tenure (the person in whose name the accommodation is owned/rented), or highest income (if jointly owned/rented) or age (if equal income).

[13] Within England these are defined as the former Government Office Regions.

At-risk gamblers in Great Britain

According to the PGSI problem gambling screen; a score of 1 or 2 indicating low-risk and a score of 3 to 7 indicating moderate risk

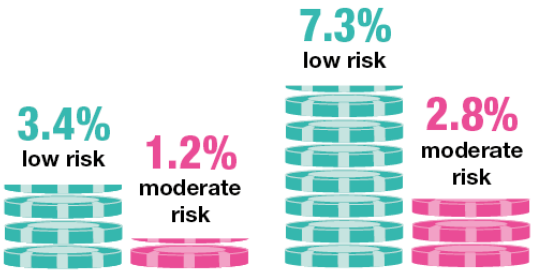
Percentage of adults classed as at-risk

3.9% of adults were classed as at-risk gamblers

2.8% were classed as low risk

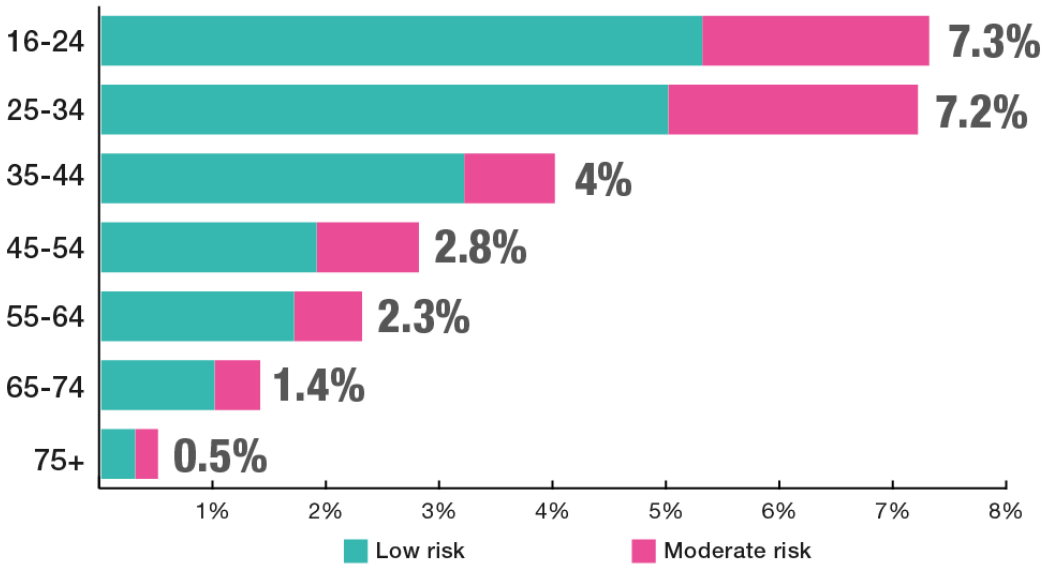
and a further as 1.1% as moderate

Variation by employment



Rates were significantly higher among men

At-risk gamblers by age



3 Prevalence and profile of at-risk gamblers

3.1 Introduction

This chapter uses the Problem Gambling Severity Index (PGSI)[14] to identify the proportion of adults whose experiences and behaviour indicate that they are at risk of gambling-related problems. It also describes patterns of at-risk gambling by participation in different activities and across different demographic groups.

At-risk individuals are those who show some signs of problematic gambling but remain below the threshold for problem gambling. These gamblers may still experience a range of negative outcomes and may be at risk of developing problems in the future. From a population health perspective, this group is important because the contribution that at-risk gamblers make to overall levels of harm across the whole population could be higher than that of problem gamblers due to the greater absolute number of the at-risk group.

The PGSI was developed with the express aim of identifying at-risk gamblers as well as those who could be classified as problem gamblers. Responses to nine PGSI items are summed to give a score of between zero and 27 and the following thresholds are then applied:

PGSI Score	*Category*
0	Non-problem gambler
1-2	Low risk gambler
3-7	Moderate risk gambler
8 or over	Problem gambler

The low and moderate risk gamblers identified in this scale represent those who fall below the threshold for problem gambling but do identify with one or more of the PGSI items. This suggests that they could be considered at risk of experiencing negative consequences from gambling. It is these at-risk groups which are the focus of this chapter, which explores both the prevalence and characteristics of at-risk gamblers living in Great Britain.

The PGSI thresholds are recognised standards. They have been used in a number of international prevalence surveys[15] and were the measures used in the BGPS report in 2010[16] and the 2012 health surveys. In Chapter 4, which discusses problem gamblers, the DSM-IV is also used but as the DSM-IV does not have recognised thresholds for at-risk gambling it is not used in this chapter.

Because of the generally low prevalence of at-risk gambling, estimates in this chapter are shown to 1 decimal place. This does not indicate a higher level of precision for the estimates.

3.2 Prevalence of at-risk gambling

Overall 2.8% of adults were classed as low risk gamblers (PGSI score of 1 or 2) and a further 1.1% were classed as moderate risk gamblers (PGSI score of 3 to 7). In total, 3.9% of adults had a PGSI score that categorised them as being at-risk gamblers (PGSI score of 1 to 7).

As shown in Table 3:1, the prevalence rates of at-risk gambling varied for men and women and varied by age. When comparing men and women, rates of both low and moderate risk gambling were significantly higher among men (4.4% and 1.6% respectively) than women (1.3% and 0.6% respectively).

The highest rate of low risk gambling was observed among younger adults aged 16 to 24 (5.3%) and the highest rate of moderate risk gambling among 24 to 35 year olds (2.2%). These rates typically declined with age to 0.3% and 0.2% for those aged 75 and over. The proportions of men and women of different ages with a PGSI score between 1 and 7 is shown in Figure 3:1.

Figure 3:1 At-risk gambling prevalence (PGSI score of 1 to 7), by age and sex

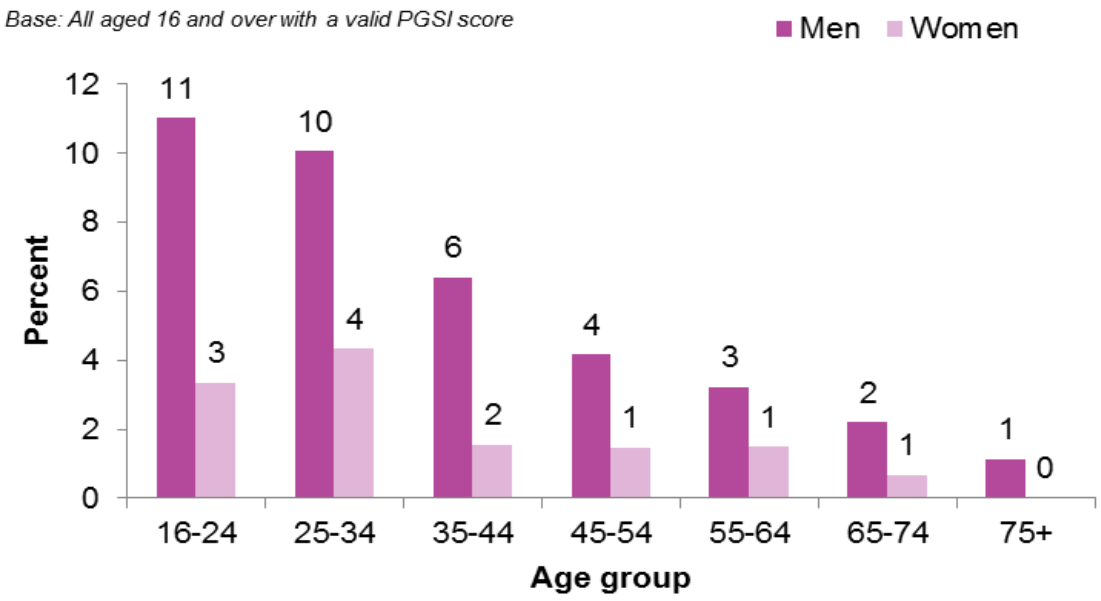


Table 3:1 PGSI Status, by age and sex								
Aged 16 and over with a valid PGSI score, England, Scotland and Wales,								*2015*
PGSI Status	**Age**							**Total**
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
Non problem gambler/non gambler	87.6	88.1	92.2	94.6	96.4	97.4	98.8	93.0
Low risk gambler	8.9	7.3	4.9	2.8	2.3	1.4	0.7	4.4
Moderate risk gambler	2.2	2.8	1.5	1.4	1.0	0.8	0.5	1.6
Problem gambler	1.4	1.9	1.3	1.3	0.3	0.4	0.0	1.1
Women								
Non problem gambler/non gambler	96.4	95.5	98.2	98.4	98.4	99.3	100.0	97.9
Low risk gambler	1.6	2.8	1.4	1.0	1.2	0.6	0.0	1.3
Moderate risk gambler	1.8	1.6	0.1	0.5	0.3	0.0	-	0.6
Problem gambler	0.2	0.2	0.3	0.1	0.1	-	-	0.1
All								
Non problem gambler/non gambler	91.9	91.8	95.2	96.5	97.4	98.4	99.5	95.5
Low risk gambler	5.3	5.0	3.2	1.9	1.7	1.0	0.3	2.8
Moderate risk gambler	2.0	2.2	0.8	0.9	0.6	0.4	0.2	1.1
Problem gambler	0.8	1.0	0.8	0.7	0.2	0.2	0.0	0.6
Bases (unweighted)								
Men	*660*	*924*	*980*	*1,075*	*1,046*	*1,177*	*789*	*6,651*
Women	*801*	*1,229*	*1,328*	*1,388*	*1,303*	*1,237*	*949*	*8,235*
All	*1,461*	*2,153*	*2,308*	*2,463*	*2,349*	*2,414*	*1,738*	*14,886*
Bases (weighted)								
Men	*1,056*	*1,257*	*1,190*	*1,286*	*1,024*	*867*	*612*	*7,293*
Women	*1,014*	*1,263*	*1,211*	*1,321*	*1,069*	*935*	*805*	*7,619*
All	*2,071*	*2,520*	*2,402*	*2,608*	*2,094*	*1,802*	*1,416*	*14,911*

3.3 Number of at-risk gamblers in the population

According to the PGSI screen, the number of low-risk gamblers in Great Britain was approximately 1,430,000 and the number of moderate-risk gamblers was 555,000.[17]

These estimates should be considered alongside the confidence intervals, as shown by Table 3:2. The confidence interval for the low-risk gamblers estimate was 2.4% to 3.2% and for the moderate risk gamblers estimate 0.9% to 1.4%. This equates to somewhere

between 1,220,000 and 1,640,000 low-risk gamblers and between 420,000 and 680,000 moderate-risk gamblers, according to the PGSI screen.[17]

Table 3:2 Number of at-risk gamblers (according to PGSI)[a]

Aged 16 and over with a valid PGSI score, England, Scotland and Wales			*2015*
Problem gambling measure	**Problem gambler**		
	Number in population	95% Confidence interval	
		Lower	Upper
Low risk gambler	1,429,897	1,220,742	1,639,052
Moderate risk gambler	553,830	424,004	683,655

[a] PGSI: Problem Gambling Severity Index. A score of 1-2 is indicative of low-risk gambling, a score of 3-7 is indicative of moderate-risk gambling.

3.4 Prevalence of at-risk gambling by activity

Table 3:3 presents the prevalence of at-risk gambling behaviour by gambling activity. When interpreting these findings it should be noted that those who gamble frequently tend to take part in a range of different activities. Such gamblers are therefore likely to be captured across a range of the activities below and these categories are not mutually exclusive.

Table 3:3 At-risk gambling prevalence, by activity

Past year gamblers aged 16 and over with a valid PGSI score, England, Scotland and Wales — *2015*

Gambling activity		**PGSI risk category**			*Bases (un-weighted)* [a]	*Bases (weighted)* [a]
		PGSI low risk gamblers	PGSI moderate risk gamblers	All PGSI at-risk gamblers		
Lotteries and related products						
National Lottery draws	%	4.4	1.6	6.0	*7,208*	*6,809*
Scratchcards	%	7.7	2.8	10.6	*3,344*	*3,285*
Other lotteries	%	4.5	1.9	6.4	*2,431*	*2,171*
Machines/games						
Football pools	%	14.9	6.1	21.1	*423*	*433*
Bingo (not online)	%	7.8	2.5	10.3	*992*	*896*
Slot machines	%	13.1	6.2	19.2	*972*	*1,068*
Machines in a bookmakers	%	23.6	8.2	31.7	*415*	*504*
Casino table games (not online)	%	14.3	10.2	24.5	*410*	*537*
Poker played in pubs or clubs	%	10.4	9.6	20.0	*155*	*165*
Online gambling on slots, casino or bingo games	%	21.6	13.4	34.9	*486*	*566*
Betting activities						
Online betting with a bookmaker	%	15.9	6.5	22.5	*898*	*1,092*
Betting exchange	%	14.0	10.2	24.3	*117*	*143*
Horse races (not online)	%	9.0	2.7	11.7	*1,571*	*1,674*
Dog races (not online)	%	11.4	5.9	17.3	*323*	*401*
Sports events (not online)	%	18.2	6.3	24.5	*739*	*805*
Other events (not online)	%	14.1	10.9	25.0	*209*	*217*
Spread-betting	%	20.2	8.6	28.7	*73*	*84*
Private betting	%	12.8	5.8	18.6	*524*	*740*
Other gambling activity						
Any other gambling	%	16.1	8.0	24.1	198	258
Summary						
Any gambling activity	*%*	4.6	1.8	6.4	*9,203*	*9,062*
Any gambling (excluding National Lottery draws only) [b]	*%*	6.1	2.4	8.5	*6,596*	*6,664*
Any online gambling or betting	*%*	16.0	7.0	23.5	*1,174*	*1,397*

[a] The base size for each row in the table differs. The percentage figures show at-risk gamblers among those who participate in a particular activity, or who belong to a summary group. Individual survey participants may be included in multiple rows.

[b] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.

The highest overall prevalence of at-risk gambling (low or moderate risk gambling) was observed among those who participated in online gambling on slots, casino or bingo

games (34.9%) followed by gambling on machines in bookmakers (31.7%) and spread-betting (28.7%). Looking at rates of low and moderate risk gambling by activity reveals some nuances within this. The highest prevalence of moderate risk gambling was observed among those who participated in online gambling on slots, casino or bingo games (13.4%), followed by offline betting on events other than horse racing, dog racing and other sports (10.9%) and then betting exchanges as well as offline casino table games (both 10.2%). The highest prevalence of low risk gambling behaviour was seen among those who had participated in gambling on machines in bookmakers (23.6%) followed by online gambling on slots, casino or bingo games (21.6%) and spread-betting (20.2%). Across both low and moderate risk gambling, the lowest prevalence rates were found among those who participated in National Lottery draws (4.4% and 1.6% respectively) or other lotteries (4.5% and 1.9% respectively).

3.5 At-risk gambling by number of activities

The prevalence of both low risk and moderate risk gambling increased with the number of gambling activities undertaken. 1.7% of those who participated in one gambling activity were at-risk gamblers (1.4% were low risk gamblers, 0.3% were moderate risk gamblers). The corresponding proportions were slightly higher for those who participated in two or three different activities; 4.5% were at-risk gamblers, 3.1% low risk and 1.4% moderate risk.

The proportions among those who participated in more than three activities were much higher. One in six (16.4%) of those who participated in four to six activities were at-risk gamblers, as were more than one in three of those who participated in seven or more activities (36.2%). This increase in risk associated with participating in higher numbers of activities was seen both for low risk gamblers (11.7% participating in four to six activities, and 26.1% in seven or more) and moderate risk gamblers (4.8% and 10.2% respectively).

Table 3:4 At-risk gambling prevalence, by number of gambling activities

Past year gamblers aged 16+ with a valid PGSI score, England, Scotland and Wales — *2015*

Number of gambling activities		**PGSI risk category**			*Bases (un-weighted)*	*Bases (weighted)*
		PGSI low risk gamblers	PGSI moderate risk gamblers	All PGSI at-risk gamblers		
1 activity	%	1.4	0.3	1.7	*3,810*	*3,694*
2-3 activities	%	3.1	1.4	4.5	*3,902*	*3,752*
4-6 activities	%	11.7	4.8	16.4	*1,109*	*1,191*
7 or more activities	%	26.1	10.2	36.2	*382*	*424*

3.6 At-risk gambling by socio-demographic characteristics

The prevalence of at-risk gambling by a number of socio-demographic factors is shown in Table 3:5. The prevalence of at-risk gambling varied by highest educational qualification and by economic activity.

The highest rates of low and moderate risk gambling were observed among those with higher education below degree level, 4.8% and 1.6% respectively. The prevalence of low risk gambling was lowest among those with other or no educational qualifications (1.7%) and prevalence of moderate risk gambling lowest among those educated to degree level or above (0.9%).

The association between economic activity and at-risk gambling was similar for low and moderate risk gamblers. Both low and moderate risk gambling rates were highest among those who were unemployed (7.3% and 2.8% respectively) and lowest among those who were retired (0.5% and 0.4% respectively).

There was no statistically significant variation in the prevalence rates of moderate and low risk gambling by ethnicity, socio-economic classification (NS-SEC) or region.

Table 3:5 At-risk gambling prevalence by socio-demographic characteristics

Aged 16 and over with a valid PGSI score, England, Scotland and Wales[a] *2015*

Socio-demographic characteristics		**PGSI risk category**				
		PGSI low risk gamblers	PGSI moderate risk gamblers	All PGSI at-risk gamblers	*Bases (un-weighted)*	*Bases (weighted)*
Ethnic group						
White/White British	%	2.8	1.1	3.9	*13,979*	*13,304*
Asian/Asian British	%	2.6	0.2	2.8	*455*	*860*
Black/Black British	%	4.9	1.1	6.0	*220*	*371*
Mixed/other	%	1.8	0.9	2.7	*217*	*366*
Highest educational qualification						
Degree or higher (or equivalent)	%	2.2	0.9	3.1	*3,039*	*3,109*
Higher education below degree level	%	4.8	1.6	6.4	*1,244*	*1,208*
A-level or equivalent	%	3.9	1.0	4.9	*1,736*	*1,884*
GCSEs or equivalent	%	2.7	1.0	3.7	*2,698*	*2,639*
Other/none	%	1.7	1.3	3.0	*2,145*	*2,019*
Economic activity						
In employment, self-employment or government training	%	3.4	1.2	4.6	*5,863*	*6,310*
Unemployed	%	7.3	2.8	10.1	*368*	*486*
In full-time education	%	3.4	1.5	4.9	*403*	*509*
Retired	%	0.5	0.4	1.0	*3,025*	*2,404*
Other inactive	%	2.3	0.9	3.1	*1,191*	*1,139*
NS-SEC of Household Reference Person						
Managerial & professional	%	2.6	0.9	3.4	*3,835*	*3,886*
Intermediate	%	2.7	1.1	3.7	*2,503*	*2,429*
Routine & manual	%	3.0	1.2	4.2	*4,006*	*3,853*

[a] Estimates by educational qualifications, economic activity, and NS-SEC are based on England and Scotland as comparable information was not available for respondents in Wales.

Table 3:5 Continued

Aged 16 and over with a valid PGSI score, England, Scotland and Wales[a]						*2015*
Socio-demographic characteristics		**PGSI risk category**				
		PGSI low risk gamblers	PGSI moderate risk gamblers	All PGSI at-risk gamblers	*Bases (un-weighted)*	*Bases (weighted)*
Region						
North East	%	4.4	1.7	6.0	*502*	*482*
North West	%	2.9	0.9	3.8	*926*	*1,292*
Yorkshire & the Humber	%	2.4	1.7	4.2	*621*	*975*
East Midlands	%	2.6	0.6	3.3	*640*	*851*
West Midlands	%	3.1	0.7	3.8	*603*	*1,033*
East of England	%	2.4	1.1	3.5	*857*	*1,098*
London	%	3.6	1.3	4.9	*800*	*1,542*
South East	%	2.4	1.2	3.6	*1,120*	*1,616*
South West	%	2.3	0.6	2.8	*668*	*1,007*
Scotland	%	2.7	1.2	3.9	*4,132*	*974*
Wales	%	2.6	1.7	6.0	*4,017*	*734*

[a] Estimates by educational qualifications, economic activity, and NS-SEC are based on England and Scotland as comparable information was not available for respondents in Wales.

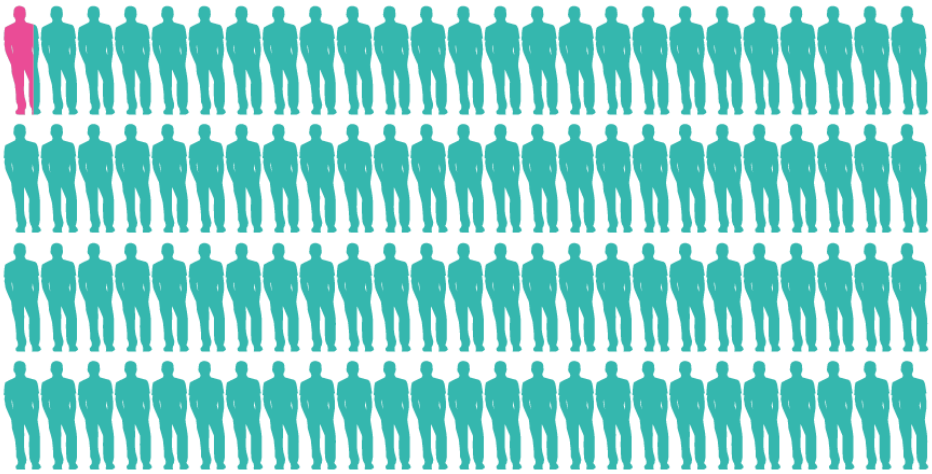
Notes and references

[14] Ferris, J., Wynne, H. (2001). *The Canadian Problem Gambling Index: Final report.* Ottawa: Canadian Centre on Substance Abuse.
[15] The PGSI has been used in surveys in eleven Canadian provinces, three Australian states and New Zealand as well as the Nordic countries of Iceland, Norway and Sweden.
[16] Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D., Dobbie, F. (2011). *British Gambling Prevalence Survey 2010.* London: National Centre for Social Research.
[17] Population estimates in text are rounded to the nearest 10,000.

Problem gamblers in Great Britain

According to either the DSM-IV or PGSI problem gambling screens

0.8%
of adults were identified as problem gamblers



It is more common in men than women

1.5%
of men

0.2%
of women

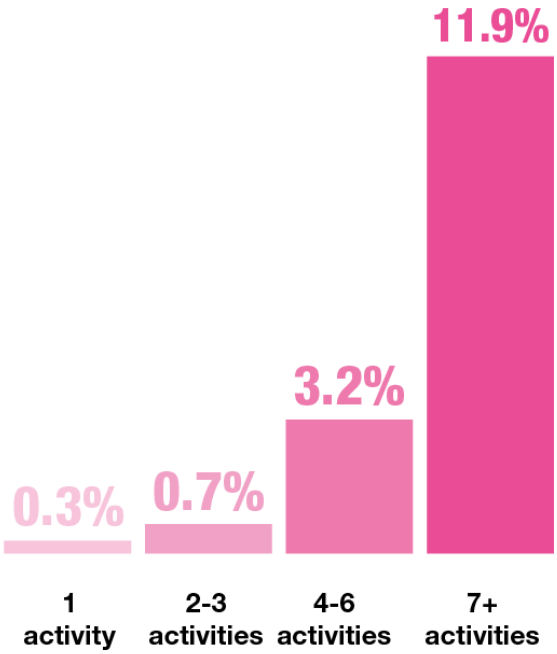
The highest problem gambling rates were among those who participated in:

20.1%
spread betting

16.2%
betting exchange

15.9%
playing poker in pubs/clubs

Problem gambling was most common among those who engaged in multiple activities



4 Prevalence and profile of problem gamblers

4.1 Introduction

This chapter presents information about the prevalence of problem gambling among adults (aged 16 and over) living in private households in Great Britain. It also examines how rates of problem gambling vary according to a range of socio-demographic and economic characteristics.

Problem gambling is typically defined as gambling to a degree that compromises, disrupts or damages family, personal or recreational pursuits.[18] There are a number of screening tools available to identify problem gambling. Previous gambling studies in Great Britain have screened for problem gambling using scales based on two different measures: the DSM-IV criteria[19] and the Problem Gambling Severity Index (PGSI).[20]

4.2 Problem gambling screens

4.2.1 The DSM-IV

The DSM-IV screening instrument is based on criteria from the fourth edition of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV).[21] It was created as a clinical diagnostic tool, and was not intended for use as a screening instrument among the general population. An adapted version of the DSM-IV for use in a survey setting was developed for the BGPS series and was subject to a rigorous development and testing process, including cognitive testing and piloting.

The DSM-IV contains ten diagnostic criteria ranging from 'chasing losses' to 'committing a crime to fund gambling'. Each item is assessed on a four-point scale, ranging from 'never' to 'very often'.[22] The scoring of each of the DSM-IV items is described in 0, including the threshold for a positive score, which varies across items. This report follows the scoring method used by the BGPS; each item is coded according to whether the respondent had a positive score, resulting in a total score between 0 and 10.

Among clinicians, a diagnosis of pathological gambling is made if a person meets five out of the ten criteria. Many surveys, when adapting the DSM-IV criteria into a screening instrument for use within a general population survey, have included a further category of problem gambler for those who meet at least three of the DSM-IV criteria.[23,24,25,26]This approach was adopted for the BGPS series and is used here.

4.2.2 The PGSI

The PGSI was designed for use among the general population rather than within a clinical context. It was developed, tested and validated within a general population survey of over 3,000 Canadian residents.[27] The instrument itself has been subject to critical evaluation and was revised in 2003.[28]

The PGSI consists of nine items ranging from 'chasing losses' to 'gambling causing health problems' to 'feeling guilty about gambling'. Each item is assessed on a four-point scale: never, sometimes, most of the time, almost always. Responses to each item are given the following scores: never = 0; sometimes = 1; most of the time = 2; almost always = 3. When scores to each item are summed, a total score ranging from 0 to 27 is possible. A PGSI score of 8 or more represents a problem gambler.[29] This is the threshold recommended by the developers of the PGSI and the threshold used in this report. The PGSI was also developed to give further information on sub-threshold problem gamblers.

PGSI scores between 3 and 7 are indicative of moderate risk gambling and a score of 1 or 2 is indicative of low risk gambling. The at-risk groups are discussed further in Chapter 3. This chapter focuses solely on the category of problem gambler.

4.3 Problem gambling prevalence

4.3.1 Prevalence according to the DSM-IV

Table 4:1 shows the prevalence of problem gambling (a DSM-IV score of 3 or more) by sex and age. Because the prevalence rates are very low, estimates are shown to one decimal place. This does not indicate a higher level of precision for the estimates.

According to the DSM-IV, problem gambling prevalence among adults was 0.7%. The confidence interval around this estimate is 0.5% to 1.0%, meaning that taking into account sampling error we can be 95% confident that the true estimate falls between these two values.[30]

Men were more likely than women to be classified as problem gamblers according to the DSM-IV (1.3% and 0.2% respectively). Mean DSM-IV scores followed a similar pattern, being higher among men (0.11) than women (0.03).

As Figure 4:1 illustrates, among men, problem gambling prevalence varied with age, being typically higher among younger age groups and decreasing as age increased. Problem gambling prevalence was highest among men aged between 25 and 34 (2.0%), falling to 0.2% for men aged 75 and over. Mean DSM-IV followed a similar pattern, being highest among the youngest age groups and lower among older men. Among women, there were too few observations of problem gamblers to indicate whether there was any pattern of problem gambling by age.

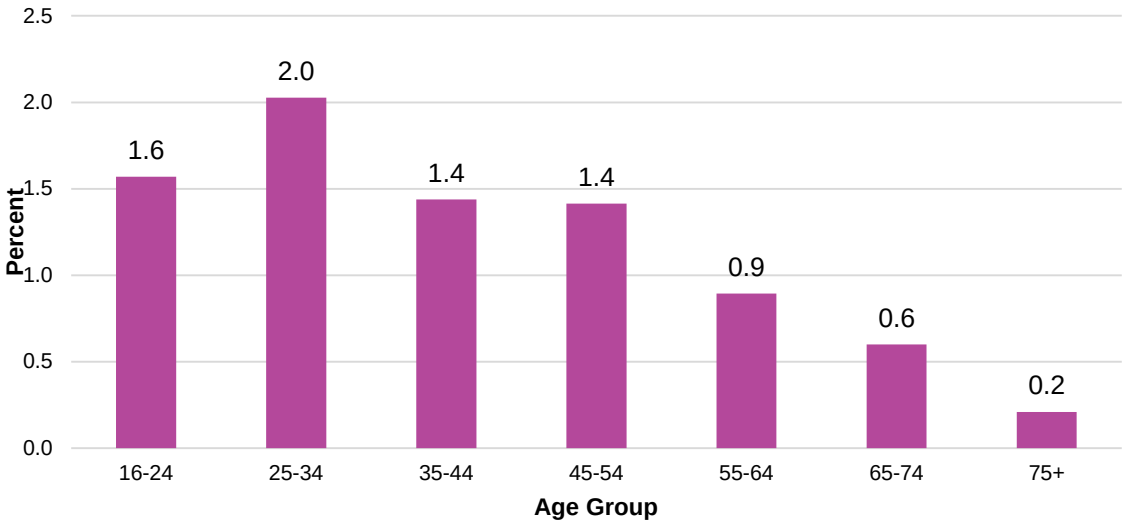
Table 4:1 Problem gambling prevalence rates according to the DSM-IV[a], by age and sex[b]

Aged 16 and over with a valid DSM-IV score, England, Scotland and Wales								*2015*
DSM-IV score	**Age group**							
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
Non problem gambler (DSM-IV score <3)	98.4	98.0	98.6	98.6	99.1	99.4	99.8	98.7
Problem gambler (DSM-IV score 3+)	1.6	2.0	1.4	1.4	0.9	0.6	0.2	1.3
Mean DSM-IV score	0.16	0.16	0.13	0.09	0.10	0.06	0.03	0.11
Standard error of mean	0.06	0.04	0.04	0.03	0.03	0.02	0.01	0.02
Women								
Non problem gambler (DSM-IV score <3)	99.8	99.6	99.7	99.7	100.0	100.0	100.0	99.8
Problem gambler (DSM-IV score 3+)	0.2	0.4	0.3	0.3	-	-	-	0.2
Mean DSM-IV score	0.04	0.03	0.03	0.03	0.04	0.02	0.01	0.03
Standard error of mean	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
All								
Non problem gambler (DSM-IV score <3)	99.1	98.8	99.2	99.2	99.6	99.7	99.9	99.3
Problem gambler (DSM-IV score 3+)	0.9	1.2	0.8	0.8	0.4	0.3	0.1	0.7
Mean DSM-IV score	0.10	0.10	0.08	0.06	0.07	0.04	0.02	0.07
Standard error of mean	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Bases (unweighted)								
Men	*661*	*925*	*981*	*1,080*	*1,049*	*1,176*	*791*	*6,663*
Women	*801*	*1,229*	*1,330*	*1,393*	*1,305*	*1,246*	*950*	*8,254*
All	*1,462*	*2,154*	*2,311*	*2,473*	*2,354*	*2,422*	*1,741*	*14,917*
Bases (weighted)								
Men	*1,059*	*1,259*	*1,193*	*1,289*	*1,027*	*869*	*613*	*7,307*
Women	*1,016*	*1,266*	*1,214*	*1,324*	*1,071*	*937*	*806*	*7,634*
All	*2,075*	*2,525*	*2,406*	*2,613*	*2,098*	*1,805*	*1,419*	*14,941*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] Estimates of prevalence are shown to one decimal place because of generally low problem gambling prevalence rates.

Figure 4:1 Problem gambling prevalence according to the DSM-IV among men, by age

Base: Men aged 16 and over, England, Scotland and Wales



4.3.2 Prevalence according to the PGSI

According to the PGSI, problem gambling prevalence among adults was 0.6%. The confidence interval around the estimate for all adults is 0.4% to 0.9%, meaning we can be 95% confident that the true estimate falls between these two values.

As with the DSM-IV, men were more likely than women to be classified as problem gamblers (1.1% and 0.1% respectively). Mean PGSI scores followed a similar pattern being higher among men (0.28) than women (0.06).

As shown in Figure 4:2, among men, PGSI problem gambling prevalence was associated with age, being typically higher among younger age groups and decreasing with advancing age. As with the DSM-IV, rates of problem gambling were highest among men aged 25 to 34 (1.9%), lowest among men aged 75 and over (less than 0.1%). Mean PGSI scores followed a similar pattern among men, being highest among the youngest age groups and lower among older men. For the PGSI, as with the DSM-IV, among women there were too few observations to indicate whether there was any pattern of problem gambling prevalence by age.

Table 4:2 Problem gambling prevalence according to the PGSI[a], by sex and age[b]

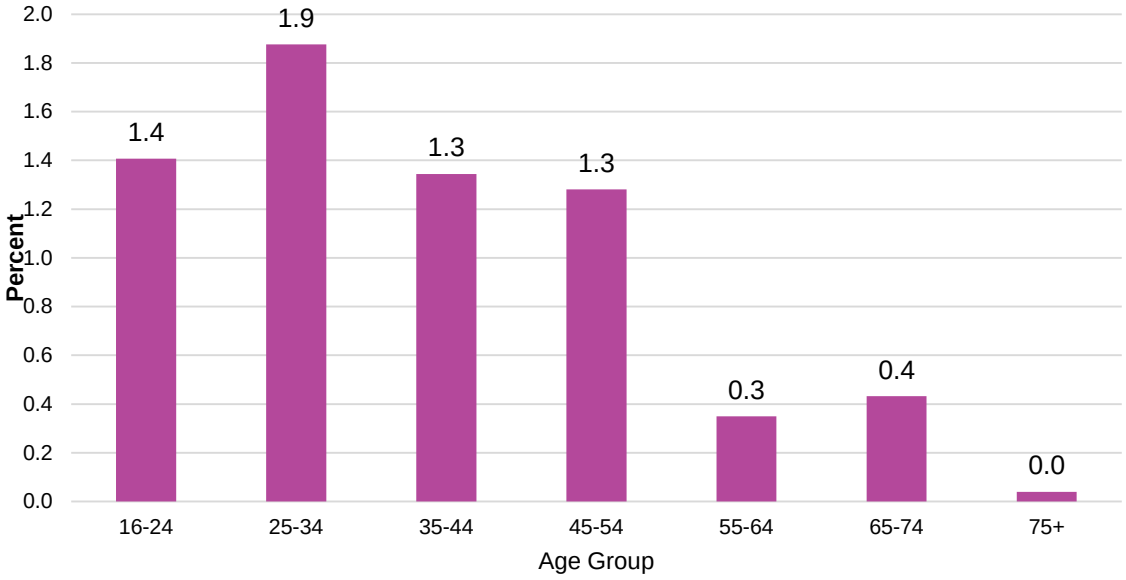
Aged 16 and over with a valid PGSI score, England, Scotland and Wales *2015*

PGSI scores	**Age group**							
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
PGSI								
Non problem (PGSI score 0)	87.6	88.1	92.2	94.6	96.4	97.4	98.8	93.0
At risk (PGSI score 1-7)	11.0	10.1	6.4	4.2	3.2	2.2	1.1	5.9
Problem gambler (PGSI score 8+)	1.4	1.9	1.3	1.3	0.3	0.4	0.0	1.1
Mean PGSI score	0.42	0.43	0.39	0.28	0.14	0.10	0.03	0.28
Standard error of mean	0.15	0.09	0.12	0.07	0.05	0.05	0.01	0.04
Women								
Non problem (PGSI score 0)	96.4	95.5	98.2	98.4	98.4	99.3	100.0	97.9
At risk (PGSI score 1-7)	3.4	4.3	1.6	1.5	1.5	0.7	-	2.0
Problem gambler (PGSI score 8+)	0.2	0.2	0.3	0.1	0.1	-	-	0.1
Mean PGSI score	0.14	0.12	0.06	0.04	0.05	0.01	-	0.06
Standard error of mean	0.05	0.03	0.03	0.01	0.02	0.00	-	0.01
All								
Non problem (PGSI score 0)	91.9	91.8	95.2	96.5	97.4	98.4	99.5	95.5
At risk (PGSI score 1-7)	7.3	7.2	4.0	2.8	2.3	1.4	0.5	3.9
Problem gambler (PGSI score 8+)	0.8	1.0	0.8	0.7	0.2	0.2	0.0	0.6
Mean PGSI score	0.28	0.28	0.22	0.16	0.10	0.05	0.01	0.17
Standard error of mean	0.08	0.05	0.06	0.03	0.03	0.02	0.01	0.02
Bases (unweighted)								
Men	*660*	*924*	*980*	*1,075*	*1,046*	*1,177*	*789*	*6,651*
Women	*801*	*1,229*	*1,328*	*1,388*	*1,303*	*1,237*	*949*	*8,235*
All	*1,461*	*2,153*	*2,308*	*2,463*	*2,349*	*2,414*	*1,738*	*14,886*
Bases (weighted)								
Men	*1,056*	*1,257*	*1,190*	*1,286*	*1,024*	*867*	*612*	*7,293*
Women	*1,014*	*1,263*	*1,211*	*1,321*	*1,069*	*935*	*805*	*7,619*
All	*2,071*	*2,520*	*2,402*	*2,608*	*2,094*	*1,802*	*1,416*	*14,911*

[a] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 to 7 is indicative of at-risk gambling.
[b] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates.

Figure 4:2 Problem gambling prevalence according to the PGSI among men, by age

Base: Men aged 16 and over, England, Scotland and Wales



4.3.3 Prevalence according to either screen

As explained in the introduction to this chapter, many different ways to measure problem gambling in population-based surveys exist. For this reason, surveys that measure rates of problem gambling in Britain have tended to include two different instruments as each captures a slightly different range of people and problems. It is therefore possible to produce a problem gambling estimate based on whether participants were categorised as a problem gamblers according to either the DSM-IV or the PGSI.

Problem gambling prevalence among adults as measured by either the DSM-IV or PGSI was 0.8%. The confidence interval around the total estimate is 0.6% to 1.1%, meaning we can be 95% confident that the true estimate falls between these two values.

Men were more likely than women to be classified as problem gamblers by one or other screen (1.5% and 0.2% respectively). This estimate was also associated with age for men (see Figure 4:3), with problem gambling prevalence being highest among those aged 25 to 34 (2.3%) and lowest among those aged 75 and over (0.2%). Neither screen, separately or in combination, identified sufficient women to demonstrate any pattern of problem gambling prevalence by age, and no women aged 65 or over were classified as problem gamblers by either screen.

Table 4:3 Problem gambling prevalence according to either the DSM-IV[a] or PGSI[b], by sex and age[c]

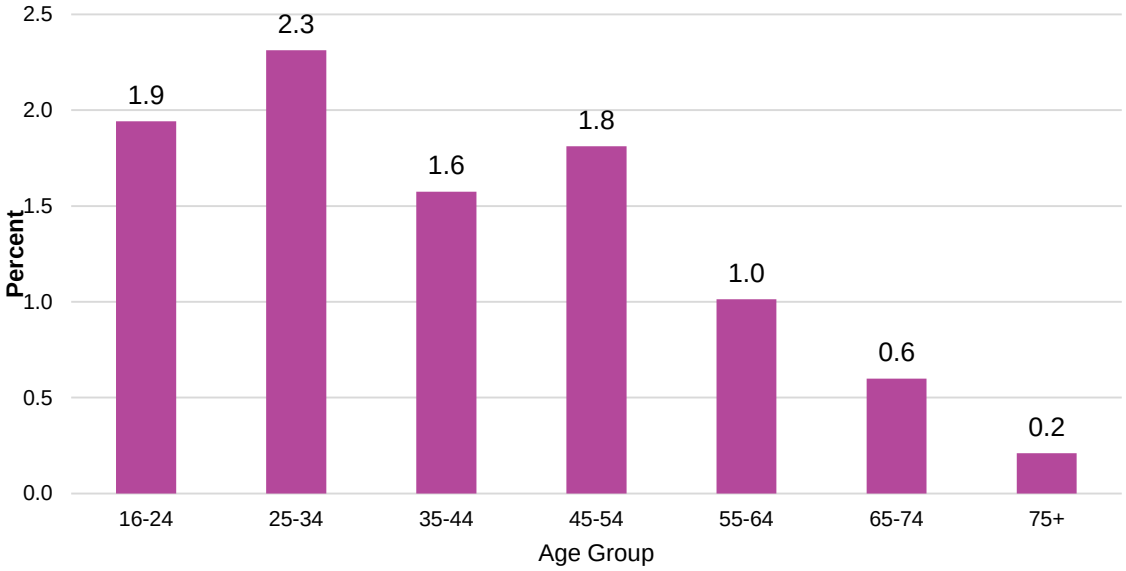
Aged 16 and over with a valid DSM-IV or PGSI score, England, Scotland and Wales *2015*

DSM-IV and PGSI scores	**Age group**							
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
Non-problem gambler according to either DSM-IV or PGSI	98.1	97.7	98.4	98.2	99.0	99.4	99.8	98.5
Problem gambler according to either DSM-IV or PGSI	1.9	2.3	1.6	1.8	1.0	0.6	0.2	1.5
Women								
Non-problem gambler according to either DSM-IV or PGSI	99.8	99.4	99.7	99.7	99.9	100.0	100.0	99.8
Problem gambler according to either DSM-IV or PGSI	0.2	0.6	0.3	0.3	0.1	-	-	0.2
All								
Non-problem gambler according to either DSM-IV or PGSI	98.9	98.6	99.1	99.0	99.4	99.7	99.9	99.2
Problem gambler according to either DSM-IV or PGSI	1.1	1.4	0.9	1.0	0.6	0.3	0.1	0.8
Bases (unweighted)								
Men	*662*	*925*	*981*	*1,080*	*1,049*	*1,178*	*793*	*6,668*
Women	*801*	*1,229*	*1,330*	*1,393*	*1,306*	*1,247*	*950*	*8,256*
All	*1,463*	*2,154*	*2,311*	*2,473*	*2,355*	*2,425*	*1,743*	*14,924*
Bases (weighted)								
Men	*1,062*	*1,258*	*1,193*	*1,292*	*1,026*	*869*	*615*	*7,313*
Women	*1,015*	*1,264*	*1,214*	*1,323*	*1,071*	*940*	*805*	*7,634*
All	*2,077*	*2,522*	*2,407*	*2,615*	*2,097*	*1,810*	*1,420*	*14,948*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.
[c] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates.

Figure 4:3 Problem gambling prevalence among men according to either the DSM-IV or PGSI

Base: Men aged 16 and over, England, Scotland and Wales



4.3.4 Number of problem gamblers in the population

The number of adult problem gamblers in Great Britain was approximately 370,000 according to the DSM-IV, 300,000 according to the PGSI and approximately 430,000 according to either screen.[31]

These estimates should be considered alongside the confidence intervals, as shown by Table 4:4. The confidence interval for the DSM-IV estimate was 0.5% to 1.0%, for the PGSI estimate 0.4% to 0.9% and for either screen 0.6% to 1.1%. This equates to somewhere between 250,000 and 480,000 adults according to the DSM-IV, between 180,000 and 420,000 adults according to the PGSI, and between 300,000 and 560,000 adults according to either screen.[31]

Table 4:4 Number of problem gamblers (according to DSM-IV[a], PGSI[b], or either)			
Aged 16 and over with a valid DSM-IV or PGSI score, England, Scotland and Wales			*2015*
Problem gambling measure	**Problem gambler**		
	Number in population	95% Confidence interval	
		Lower	Upper
DSM-IV	365,288	246,299	484,277
PGSI	303,379	182,912	423,845
Either DSM-IV or PGSI	429,708	296,463	562,953

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.

4.3.5 Problem gambling prevalence by activity

This section presents information about the associations evident between problem gambling and participation in individual gambling activities.

Table 4:5 presents problem gambling prevalence rates for each activity undertaken in the past year. Those who gamble frequently (at least once a month or more) tend to take part in a range of different activities, and the gambling activities shown are not mutually exclusive.

The highest rates of problem gambling prevalence were among those who had participated in spread betting (20.1%), betting with a betting exchange (16.2%), playing poker in pubs or clubs (15.9%), betting offline on events other than sports or horse or dog racing (15.5%) and playing machines in bookmakers (11.5%). These were generally activities with low levels of participation (see Table 2:1).

National Lottery draws (1.3%), other lotteries (2.0%) and scratchcards (2.4%) had the lowest problem gambling prevalence of all activities; across the population these were the most popular gambling activities.

Table 4:5 Problem gambling prevalence (according to either DSM-IV[a] or PGSI[b]), by activity[c]

All aged 16 and over with a valid DSM-IV or PGSI score, England, Scotland and Wales — *2015*

Gambling activity		**Problem gambler**		
		Problem gambler according to either DSM-IV or PGSI	*Bases (unweighted)*[d]	*Bases (weighted)*[d]
All				
Lotteries and related products				
National Lottery draws	%	1.3	*7,238*	*6,835*
Scratchcards	%	2.4	*3,356*	*3,293*
Other lotteries	%	2.0	*2,439*	*2,174*
Machines/games				
Football pools	%	3.5	*424*	*434*
Bingo (not online)	%	2.7	*994*	*898*
Slot machines	%	5.7	*973*	*1,068*
Machines in a bookmakers	%	11.5	*415*	*505*
Casino table games (not online)	%	7.3	*410*	*537*
Poker played in pubs or clubs	%	15.9	*155*	*165*
Online gambling on slots, casino or bingo games	%	10.6	*487*	*566*
Betting activities				
Online betting with a bookmaker	%	5.4	*899*	*1,093*
Betting exchange	%	16.2	*117*	*143*
Horse races (not online)	%	3.6	*1,573*	*1,678*
Dog races (not online)	%	8.5	*323*	*401*
Sports events (not online)	%	6.4	*740*	*806*
Other events (not online)	%	15.5	*209*	*217*
Spread betting	%	20.1	*73*	*85*
Private betting	%	5.9	*525*	*743*
Other gambling activity				
Any other gambling	*%*	*9.3*	*199*	*258*
Summary				
Any gambling activity	*%*	*1.4*	*9,241*	*9,097*
Any gambling (excluding National Lottery draws only) [e]	*%*	*1.8*	*6,615*	*6,678*
Any online gambling or betting	*%*	*5.1*	*1,175*	*1,398*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.
[c] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates
[d] The base size for each row in the table differs. The percentage figures show at-risk gamblers among those who participate in a particular activity, or who belong to a summary group. Individual survey participants may be included in multiple rows.
[e] This category excludes gamblers who only participated in the National Lottery draws and not in any other gambling activities.

4.3.6 Problem gambling prevalence by number of activities

Table 4:6 and Figure 4:4 show the prevalence of problem gambling by the number of gambling activities undertaken in the past 12 months. It was lowest among those who had taken part in just one gambling activity in the last year (0.3%), or two or three activities (0.7%). It increased to 3.2% of those who had taken part in four to six activities, and was highest among those who had participated in seven or more activities in the past year (11.9%).

These data do not show the frequency of gambling participation, which may be an even more salient measure of engagement, but was not covered in these surveys.

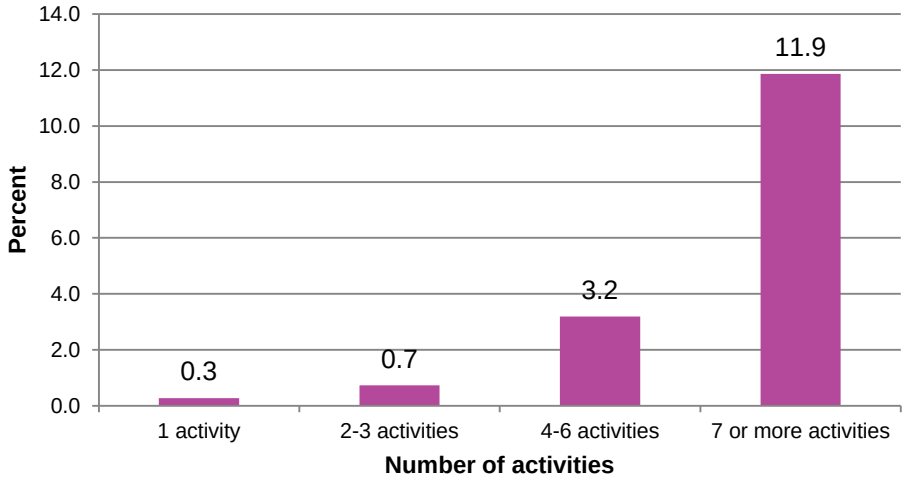
Table 4:6 Problem gambling prevalence (according to either DSM-IV[a] or PGSI[b]), by number of gambling activities[c]

Aged 16 and over with a valid DSM-IV or PGSI score, England, Scotland and Wales				*2015*
Number of gambling activities		**Problem gambler**		
		Problem gambler according to either DSM-IV or PGSI	*Bases (unweighted)*	*Bases (weighted)*
All				
1 activity	%	0.3	*3,837*	*3,725*
2-3 activities	%	0.7	*3,910*	*3,755*
4-6 activities	%	3.2	*1,112*	*1,192*
7 or more activities	%	11.9	*382*	*424*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.
[c] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates.

Figure 4:4 Problem gambling prevalence, by number of gambling activities

Base: All aged 16 and over, England, Scotland and Wales



4.4 Profile of problem gamblers

This section examines whether problem gambling prevalence varies by various socio-demographic characteristics.

Problem gambling prevalence (according to either the DSM-IV or PGSI) varied by economic activity. No full-time students within the sample were classified as problem gamblers[32], and problem gambling was low among retired people (0.2%). The highest prevalence of problem gambling was found among those who were economically inactive (for example, the long-term sick, carers and those looking after home or family) but not students, unemployed or retired (1.8%).[33]

The differences in problem gambling rates between ethnic groups were on the margins of statistical significance, although similar to the pattern previously observed[34,35], with lower prevalence among White/White British respondents. Problem gambling prevalence rates did not vary significantly by other socio-demographic characteristics: educational qualifications, socioeconomic classification (NS-SEC) of the household or region.

Table 4:7 Problem gambling prevalence (according to either DSM-IV[a] or PGSI[b]), by socio-demographic characteristics[c]

Aged 16 and over with a valid DSM-IV or PGSI score, England, Scotland and Wales[d]				*2015*
Socio-demographic characteristics		**Problem gambler**		
		Problem gambler according to either DSM-IV or PGSI	Bases (unweighted)	Bases (weighted)
Ethnic group				
White/White British	%	0.7	*14,013*	*13,330*
Black/Black British	%	1.0	*221*	*374*
Asian/Asian British	%	1.5	*458*	*868*
Mixed/Other	%	3.3	*217*	*367*
Highest educational qualifications				
Degree or higher (or equivalent)	%	0.6	*3,044*	*3,115*
Higher education below degree level	%	1.0	*1,247*	*1,210*
A-levels or equivalent	%	0.5	*1,739*	*1,890*
GCSEs or equivalent	%	1.0	*2,710*	*2,649*
Other / No qualifications	%	1.2	*2,158*	*2,029*
Economic activity				
Paid work	%	1.0	*5,879*	*6,326*
Unemployed	%	0.9	*368*	*487*
Full time education	%	-	*404*	*512*
Retired	%	0.2	*3,040*	*2,415*
Other inactive	%	1.8	*1,195*	*1,141*
NS-SEC of household reference person				
Managerial & professional	%	0.6	*3,842*	*3,893*
Intermediate	%	1.0	*2,513*	*2,438*
Routine & manual	%	0.9	*4,023*	*3,866*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.
[c] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates.
[d] Estimates by educational qualifications, economic activity, and NS-SEC are based on England and Scotland as comparable information was not available for respondents in Wales.

Table 4:7 Continued				
Socio-demographic characteristics		**Problem gambler**		
		Problem gambler according to either DSM-IV or PGSI	Bases (unweighted)	Bases (weighted)
Region				
North East	%	0.7	*506*	*484*
North West	%	0.9	*927*	*1,294*
Yorkshire & the Humber	%	1.8	*623*	*979*
East Midlands	%	0.5	*645*	*856*
West Midlands	%	0.5	*603*	*1,035*
East of England	%	1.1	*859*	*1,100*
London	%	0.8	*800*	*1,546*
South East	%	0.8	*1,123*	*1,621*
South West	%	0.4	*671*	*1,010*
Scotland	%	0.7	*4,148*	*977*
Wales	%	1.1	*4,019*	*735*

[a] DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, fourth version (1994). A score of 3 or more is indicative of problem gambling.
[b] PGSI: Problem Gambling Severity Index. A score of 8 or more is indicative of problem gambling. A score of 1 or more is indicative of at-risk gambling.
[c] Estimates are shown to one decimal place because of generally low problem gambling prevalence rates.
[d] Estimates by educational qualifications, economic activity, and NS-SEC are based on England and Scotland as comparable information was not available for respondents in Wales.

Notes and references

[18] Lesieur, H.R., Rosenthal, M.D. (1991). Pathological gambling: A review of the literature (prepared for the American Psychiatric Association Task Force on DSM-IV Committee on disorders of impulse control not elsewhere classified). *Journal of Gambling Studies*, 7 (1), 5-40.
[19] American Psychiatric Association (1993). *Diagnostic and statistical manual of mental disorders, 4th edition*. Washington DC: American Psychiatric Association.
[20] Ferris, J., Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Canada: The Canadian Centre on Substance Abuse.
[21] The HSE and SHeS were both planned and implemented prior to the formal publication of the DSM-V and therefore used the DSM-IV. This replicates the version used in the BGPS series.
[22] This is with the exception of the 'chasing losses' item which is rated on a scale ranging between 'never' to 'every time I lost'. See Appendix D for the full question wording.
[23] Fisher, S.E. (1996). *Gambling and problem gambling among casino patrons, Report to the British Casino Industry Consortium,* Plymouth UK
[24] National Gambling Impact Study Commission (NGISC) 1999. [USA] *Final Report*. http://govinfo.library.unt.edu/ngisc/reports/fullrpt.html
[25] Australian Productivity Commission (APC) (1999). *Australia's Gambling Industries*. Report No. 10, Canberra: Ausinfo.

[26] Clarke D., Abbott M., Tse S., Townsend S. (2006). Gender, Age, Ethnic and Occupational Associations with Pathological Gambling in a New Zealand Urban Sample. New Zealand *Journal of Psychology*, 35(2), 84-91.
[27] Ferris, J., Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Canada: The Canadian Centre on Substance Abuse.
[28] Wynn, H. (2003). *Introducing the Canadian Problem Gambling Index*. Wynne Resources: Canada.
[29] More recently, some academics have recommended that a lower threshold be used to identify problem gamblers using the PGSI. However, this report maintains the original scoring so as to preserve comparisons with the BGPS series.
[30] Surveys involve interviewing a sample of people drawn from a population, with responses from that sample being generalised back to the wider population. This process introduces random error into survey results because of differences in who is sampled (e.g., it is possible to randomly choose a sample which gambles more often than the population as a whole, by chance). Because of this, survey estimates exist within a range of values known as a 'confidence interval'. In this report, confidence intervals are presented at the 95% level, meaning that we can be 95% certain that the 'true' (and unmeasurable) population estimate lies within the range quoted.
[31] Population estimates in text are rounded to the nearest 10,000.
[32] Note that the sample only included adults living in private households meaning that people living in institutions, like students living in halls of residence, were excluded from the study.
[33] The other economically inactive group includes people not otherwise classifiable, for example the long-term sick, carers and those looking after home or family.
[34] Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D., Dobbie, F. (2011). British Gambling Prevalence Survey 2010. London: National Centre for Social Research
[35] Wardle H., Seabury C., Ahmed H., et al (2014). Gambling behaviour in England and Scotland. London: National Centre for Social Research

5 Trends in gambling behaviour

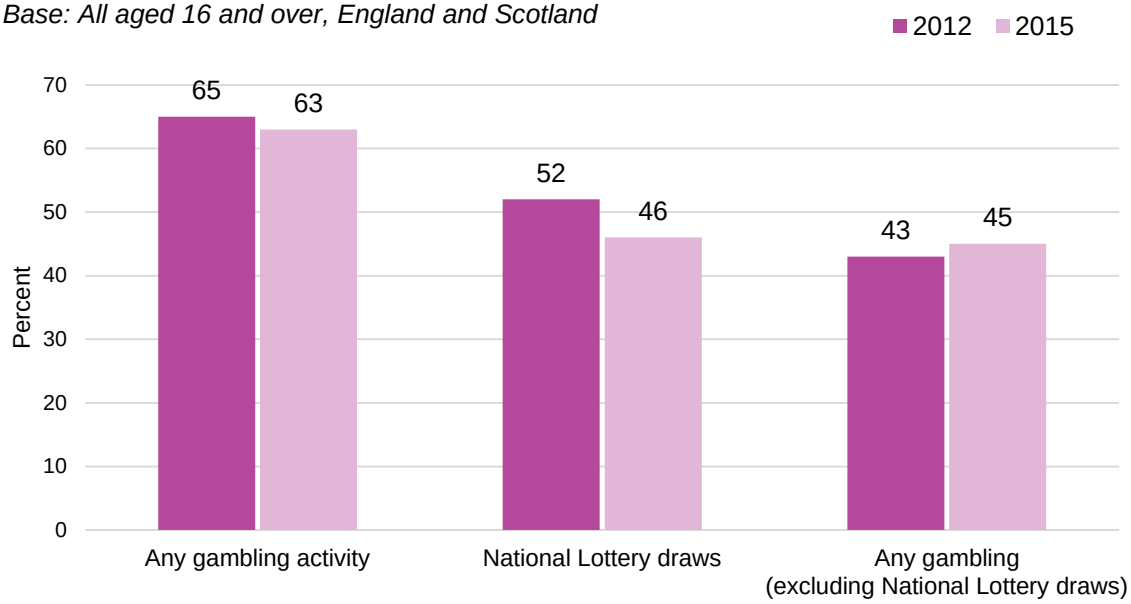
Gambling continues to be popular, with the majority of British people gambling in the past year. A comparison of current estimates for England and Scotland with those collected in 2012 shows that National Lottery draws remain the most popular form of gambling, although less popular in 2015 than 2012. The proportion of adults who participated in National Lottery draws in the past year fell from 52% of adults in 2012 to 46% of adults in 2015.[36] (The cost of participating in the National Lottery Lotto draws increased from £1 to £2 in 2013). The fall in National Lottery draws participation rates has had a modest impact on gambling participation overall, with past year gambling rates falling from 65% in 2012 to 63% in 2015 (see Figure 5:1).

The fall in past year gambling participation was not as large as the fall in participation on National Lottery draws. This is because participation in other gambling activities, excluding National Lottery draws, increased somewhat. Overall, 45% of adults in 2015 had gambled on something other than National Lottery draws, an increase from 43% in 2012. Statistically significant increases in participation rates were evident for scratchcards (19% in 2012; 23% in 2015), online betting (5% in 2012; 7% in 2015) and online gambling on casino, bingo or slot machine style games (3% in 2012; 4% in 2015).

For all other activities, there were no changes in rates of participation between 2012 and 2015. Most gambling activities, ranging from bingo to machines in bookmakers and casino table games continued to be undertaken by less than 10% of adults.

Figure 5:1 Past year gambling participation, by survey year

Base: All aged 16 and over, England and Scotland



As noted in previous studies, gambling participation is not equally distributed – some people are more likely to gamble than others. Men are more likely to gamble overall and in most individual activities, whilst those who were younger (under 44 years) were the most likely to gamble on activities other than the National Lottery draws. Differences in gambling participation by ethnicity continued to be evident, with those from White/White British backgrounds being more likely to gamble than other ethnic

groups. As in previous years, those who were unemployed were just as likely to gamble on non-lottery activities as those in paid employment, though gambling on machines in bookmakers remained more popular among those who were unemployed (7%) than those who were employed (4%). Notable regional differences were evident, with past year rates of gambling being highest in Scotland and the North of England and lowest in London.

Looking at problem and at-risk gambling, rates were similar to those published in 2012.[37] In 2015, approximately 0.8% of adults in Great Britain were estimated to be problem gamblers (according to either screen) and a further 3.9% were either low or moderate risk gamblers according to the PGSI.[38] Taken together, this means that one in twenty adults (5%) experienced some difficulty with gambling in the past year; the same as observed in 2012.

As with gambling participation, problem and at-risk gambling varied among different types of people. Men and those who were younger were more likely to experience gambling problems. Most notable were rates of problem and at-risk gambling among young men, where 2% of men aged 16 to 34 were identified as problem gamblers and a further 10% were either moderate or low risk gamblers. Taken together this means that around one in eight men (12%) aged 16 to 34 experienced some difficulty with gambling in the past year.

Problem gambling rates were also higher among those who were economically inactive for reasons other than unemployment, full-time study[39] or retirement (such as long-term illness or disability, or were looking after the family home) and, at the margins of statistical significance[40], were higher among non-white ethnic groups. This pattern by ethnicity has been found in every study of problem gambling since 1999 and highlights a harm paradox for these groups; non-White groups are less likely to gamble but those that do are more likely to experience problems.

Problem gambling rates varied by the number of gambling activities undertaken in the past 12 months (0.3% of those who had taken part in just one gambling activity were problem gamblers compared to 11.9% of those who had participated in seven or more activities in the past year). Finally, rates of problem gambling continued to vary according to which gambling activities people had undertaken. The lowest rates of problem gambling were found among those who gambled on the National Lottery (1.3%) and the highest were among those who spread bet (20.1%), bet with a betting exchange (16.2%), played poker in pubs or clubs (15.9%), bet on other events with bookmaker (not online) (15.5%) and played machines in bookmakers (11.5%). Whilst we are uncertain of the nature of the link between these activities and problem gambling, this certainly suggests that looking at people who participate in these activities is a good place to start in order to identify and intervene with problem gamblers.

Notes and references

[36] Significance testing for differences between survey years was conducted on the subsample of respondents from England and Scotland as no comparable Welsh data for 2012 was available. However, with one exception (scratchcards) the figures quoted in this section for 2015 are the same regardless of whether they include or exclude Wales. For scratchcards, the 2015 prevalence estimate including Wales was 23% and excluding Wales was 22%.

[37] In 2012, problem gambling estimates (according to either screen) for England and Scotland were 0.6% (see Wardle H., Seabury C., Ahmed H., et al (2014). *Gambling behaviour in England and Scotland.* London: National Centre for Social Research); comparable estimates in 2015 were 0.8%. This is not a statistically significant difference. The p-value was 0.174.

[38] This figure is based on those at-risk who were not defined as problem gamblers according to either the PGSI or the DSM-IV.
[39] Note that the sample only included adults living in private households meaning that people living in institutions, like students living in halls of residence, were excluded from the study.
[40] The p-value was 0.08.

Appendix A. Survey methodology review

Gambling behaviours in Britain were measured in 1999, 2007 and 2010 through the British Gambling Prevalence Survey (BGPS). Following public consultation and a review of the available survey vehicles, the decision was taken to include questions about gambling participation and the experience of gambling problems in various national surveys rather than commissioning a fourth BGPS study. Whilst survey questions were included in the Health Survey for England (HSE) 2012 and the Scottish Health Survey (SHeS) 2012, the Gambling Commission was unable to secure survey space in the Welsh Health Survey 2012.

In 2015 questions regarding gambling behaviours were again included on the Health Survey for England and the Scottish Health Survey. The Commission again attempted to secure survey space in the National Survey of Wales (the successor of the Welsh Heath Survey), but unfortunately were unable to do so. They decided to procure standalone data of gambling behaviour in Wales using a face-to-face omnibus survey conducted by Beaufort Research (called the Wales Omnibus hereafter).

Prior to undertaking analysis using combined data from the three surveys carried out in England, Scotland, and Wales, NatCen conducted a review to examine the methodological approaches undertaken on the three surveys.

The review found important differences between the Wales Omnibus and HSE and SHeS methodologies, which are summarised in the table below.

Table A:1 Summary of survey features and their implications

	HSE	SHeS	Wales Omnibus	Implications
Sample design	Random probability	Random probability	Quota	HSE and SHeS comparable; Wales Omnibus different, with a potential for more bias because of increased flexibility of interviewers to choose who to interview within fairly broad areas and quota specifications
Timing of data collection	Year round	Year round	Two weeks per quarter	Minimal impact on past year gambling and problem gambling questions. Potential impact on the sample composition due to the types of people available to take part at different parts of the year
Survey description	Health survey	Health survey	Survey on a wide variety of interesting topics	May impact on who was more likely to take part in each survey and thus affect gambling estimates

Table A:1 Continued				
	HSE	**SHeS**	**Wales Omnibus**	**Implications**
Data collection method	Paper self completion	Paper self completion	Computer-assisted self completion	Wales Omnibus survey has lower item non-response to problem gambling questions
Gambling questions	Past year gambling on 18 activities; DSM-IV and PGSI	Past year gambling on 18 activities; DSM-IV and PGSI	Past year gambling on 18 activities; DSM-IV and PGSI	Questions and routing identical
Other questions	Full range of socio-economic, demographic and health questions	Full range of socio-economic, demographic and health questions	Limited range of socio-economic and demographic questions	Analysis opportunities limited to a few variables which are comparable between surveys
Weighting	Non-response, calibration and selection weights. Gambling weights for item non-response to PG screens	Non-response, calibration and selection weights. Gambling weights for item non-response to PG screens can be created	Single stage calibration weighting. Calibrated to age group and sex within Local Authority grouping.	Weighting schemes between HSE and SHeS comparable, but Wales Omnibus weighting does not mitigate all socio-economic/demographic differences.

The methodological review concluded that:

1) The similarities of the HSE and SHeS are such that combining estimates from both datasets is appropriate.

2) The extent of differences in sampling, weighting and data collection methods between the health surveys and the Wales Omnibus are of a scale whereby combining them with the Health Surveys should only be done with suitable caveats about potential biases.

The main objective for the Gambling Commission in combining data is to produce a national estimate of the prevalence of problem gambling for Great Britain. This can be done by combining the three estimates and weighting them in proportion to the population size of each country. Although the estimate for Wales is relatively high, the overall impact on the national estimate will be minimal due to the small population in Wales. It is unclear whether this reflects a real difference for Wales or is an artefact of the differences in survey design.

Appendix B. Weighting

Full details of the weighting strategies used for the HSE and SHeS individually can be found in their respective technical reports.[41,42] The Wales Omnibus data uses quotas and weighting by age group within sex within Local Authority grouping to give each cell its correct incidence within the total Welsh population derived from the results of the 2011 Census.

For analysis of the gambling data, some additional adjustments were applied to the standard survey weights in order to:

- weight the data for non-response to both the gambling participation questions and the problem gambling screens;
- scale the data so that it matched the population distribution of England, Scotland and Wales.

Gambling participation weights

The sub-sample of 15,563 respondents to the three surveys who answered at least one of the gambling participation questions was calibrated separately within each survey, so that the weighted distributions of age-by-gender and region (SHA for the HSE, Health Board for the SHeS, local authority grouping for Wales) matched the ONS 2012 mid-year population estimates.

For each eligible case, the combined weight was calculated by dividing the calibrated (grossed) weight by the overall mean.

Problem gambling (DSM-IV and PGSI) weights

The sub-sample of respondents who completed the problem gambling screens (DSM-IV: 14,917, PGSI: 14,886) was calibrated separately within each survey, so that the weighted distributions of age-by-gender and region (SHA for the HSE, Health Board for the SHeS, local authority grouping for Wales) matched the ONS 2012 mid-year population estimates for England and Scotland respectively.

For each eligible case, the combined weight was calculated by dividing the calibrated (grossed) weight by the overall mean, separately for DSM-IV and PGSI.

[41] http://www.content.digital.nhs.uk/catalogue/PUB22610/HSE2015-methods.pdf
[42] http://www.gov.scot/Resource/0050/00505795.pdf

Appendix C. Scoring the problem gambling screening instruments

Introduction

Two screening instruments were used to identify problem gamblers: the DSM-IV and the PGSI. This section explains how each instrument was scored and the thresholds used to classify a problem gambler.

Scoring the DSM-IV: dichotomous scoring

The bulk of this report uses the dichotomous scoring system for the DSM-IV. The DSM-IV criteria, along with the corresponding question number from the questionnaire from the self-completion booklet are shown in Table C:1 below. The second column shows which responses were counted as positive.

Table C:1 DSM-IV items	
Chasing losses	Every time I lost/Most of the time I lost
A preoccupation with gambling	Fairly Often/Very Often
A need to gambling with increasing amounts of money	Fairly Often/Very Often
Being restless or irritable when trying to stop gambling	Fairly Often/Very Often
Gambling as escapism	Fairly Often/Very Often
Lying to people to conceal the extent of gambling	Fairly Often/Very Often
Having tried but failed to cut back on gambling	Fairly Often/Very Often
Having committed a crime to finance gambling	Occasionally/Fairly Often/Very Often
Having risked or lost a relationship/job/educational opportunity because of gambling	Occasionally/Fairly Often/Very Often
Reliance on others to help in a financial crisis caused by gambling	Occasionally/Fairly Often/Very Often

The threshold for problem gambling was 3 or over, in line with previous research and the 2007 and 1999 prevalence survey. Cases were excluded from the problem gambling analysis if more than half the DSM-IV items were missing (and the score was <3). Only four cases were excluded for this reason.

Scoring the PGSI

The PGSI criteria are shown in Table C:2.

Table C:2 PGSI items
Bet more than can afford to lose
A need to gamble with increasing amounts of money
Chasing losses
Borrowed money or sold items to get money to gamble
Felt had a problem with gambling
Gambling causing health problems including stress and anxiety
People criticising gambling behaviour
Gambling causing financial problems for you or your household
Felt guilty about way that you gamble or what happens when you gamble

All nine PGSI items have the following response codes: never, sometimes, most of the time, almost always. The response codes for each item are scored in the following way:

- score 0 for each response of 'never';
- score 1 for each response of 'sometimes';
- score 2 for each 'most of the time';
- score 3 for each 'almost always'.

This means a PSGI score of between 0 and 27 points is possible. There are four classifications categories for PGSI scores. Their description and scored cut-off points are shown in Table C:3.

Table C:3 PGSI category	
PGSI classification category	**PGSI score**
Non-problem gambler	0
Low risk gambler	1-2
Moderate risk gambler	3-7
Problem gambler	8+

The threshold for problem gambling was 8 or over, in line with previous research.[43] Cases were excluded from the problem gambling analysis if more than half the PGSI items were missing (and the score was <8). A total of four cases were excluded for this reason (these are the same four cases as were excluded from the DSM-IV analysis).

Notes and references

[43] Wynne, H. (2003). *Introducing the Canadian Problem Gambling Index,* Canada http://www.gamblingresearch.org/download.sz/The%20CPGI%20V5%20-%20from%20Hal.pdf?docid=6446

Appendix D. Survey questions

Qa Have you spent any money on any of the following activities **in the last 12 months?** Please tick **ONE box** for each activity.

	Tick ONE box	
	Yes	**No**
Tickets for the National Lottery Draw, including Thunderball and Euromillions and tickets bought online	1	2
Scratchcards (but not online or newspaper or magazine scratchcards)	1	2
Tickets for any other lottery, including charity lotteries	1	2
The football pools	1	2
Bingo cards or tickets, including playing at a bingo hall (not online)	1	2
Fruit or slot machines	1	2
Virtual gaming machines in a bookmakers to bet on virtual roulette, poker, blackjack or other games	1	2
Table games (roulette, cards or dice) in a casino	1	2
Playing poker in a pub tournament/ league or at a club	1	2
Online gambling like playing poker, bingo, instant win/scratchcard games, slot machine style games or casino games for money	1	2

Online betting with a bookmaker on any event or sport	1	2
Betting exchange *This is where you lay or back bets against other people using a betting exchange. There is no bookmaker to determine the odds. This is sometimes called 'peer to peer' betting.*	1	2
Betting on **horse** races in a bookmakers, by phone or at the track	1	2
Betting on **dog** races in a bookmakers, by phone or at the track	1	2
Betting on **sports events** in a bookmakers, by phone or at the venue	1	2
Betting on **other events** in a bookmakers, by phone or at the venue	1	2
Spread-betting *In spread-betting you bet that the outcome of an event will be higher or lower than the bookmaker's prediction. The amount you win or lose depends on how right or wrong you are.*	1	2
Private betting, playing cards or games for money with friends, family or colleagues	1	2
Another form of gambling in the last 12 months	1	2

IF YOU TICKED 'YES' FOR ANY OF THE ACTIVITIES AT Qa, PLEASE GO TO Qb OTHERWISE GO TO THE NEXT SECTION.

For the next set of questions about gambling, please indicate the extent to which each one has applied to <u>you in the last 12 months.</u>

	In the last 12 months…	**Tick ONE box**			
		Every time I lost	**Most of the time**	**Some of the time (less than half the time I lost)**	**Never**
Qb	When you gamble, how often do you go back another day to win back money you lost?	1	2	3	4

		Tick ONE box for each question			
		Very often	**Fairly often**	**Occasionally**	**Never**
Qc	How often have you found yourself thinking about gambling (that is reliving past gambling experiences, planning the next time you will play, or thinking of ways to get money to gamble)?	1	2	3	4
Qd	Have you needed to gamble with more and more money to get the excitement you are looking for?	1	2	3	4
Qe	Have you felt restless or irritable when trying to cut down gambling?	1	2	3	4
Qf	Have you gambled to escape from problems or when you are feeling depressed, anxious or bad about yourself?	1	2	3	4
Qg	Have you lied to family, or others, to hide the extent of your gambling?	1	2	3	4
Qh	Have you made unsuccessful attempts to control, cut back or stop gambling?	1	2	3	4
Qi	Have you committed a crime in order to finance gambling or to pay gambling debts?	1	2	3	4
Qj	Have you risked or lost an important relationship, job, educational or work opportunity because of gambling?	1	2	3	4
Qk	Have you asked others to provide money to help with a desperate financial situation caused by gambling?	1	2	3	4

In the past 12 months, how often...

		Tick ONE box for each question			
		Almost always	**Most of the time**	**Sometimes**	**Never**
Ql	...have you bet more than you could really afford to lose?	1	2	3	4
Qm	...have you needed to gamble with larger amounts of money to get the same excitement?	1	2	3	4
Qn	...have you gone back to try to win back the money you'd lost?	1	2	3	4
Qo	...have you borrowed money or sold anything to get money to gamble?	1	2	3	4
Qp	...have you felt that you might have a problem with gambling?	1	2	3	4
Qq	...have you felt that gambling has caused you any health problems, including stress or anxiety?	1	2	3	4
Qr	...have people criticised your betting, or told you that you have a gambling problem, whether or not you thought it is true?	1	2	3	4
Qs	...have you felt your gambling has caused financial problems for you or your household?	1	2	3	4
Qt	...have you felt guilty about the way you gamble or what happens when you gamble?	1	2	3	4