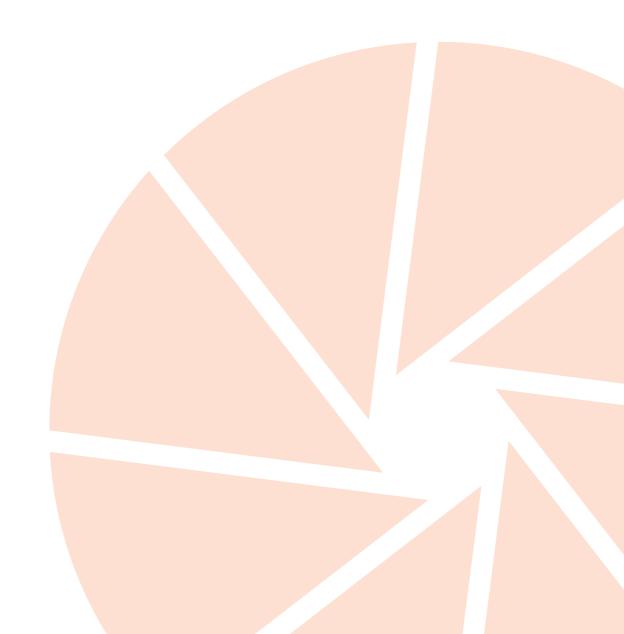


British Gambling Prevalence Survey 2007

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Prepared for the



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British Gambling Prevalence Survey 2007

FOREWORD

On behalf of the Gambling Commission I welcome this report of the British Gambling Prevalence Survey 2007. We are grateful to the report authors for producing a comprehensive analysis of British gambling behaviour and attitudes.

The Gambling Act 2005 tasks the Gambling Commission with a duty to advise the Secretary of State on the prevalence, nature and effects of gambling. The survey was commissioned to provide this information.

While the 2007 survey builds on the previous British study conducted in 1999, the main purpose is to provide a benchmark and picture of the landscape prior to 1 September 2007 when the Gambling Act 2005 was implemented. We will repeat the exercise in 2009/10 to allow us to measure the impact that the Act has on gambling behaviour and attitudes.

The Commission would like to thank all those who have contributed to the delivery of this report. It would not have been possible without the contribution of both the Prevalence Study Steering Group and Advisory Group who ensured that the questionnaire was fit for purpose. I would also like to thank Professor Max Abbott and Dr Rachel Volberg for their thorough review of the report. Their status as leading international academics in the field of gambling prevalence research adds further weight to this piece of work.

The findings in this report offer valuable information to the Commission, the Government and other key stakeholders and will help to develop future policy in the gambling field. It contains a wealth of information and we look forward to the further analysis and debate which the report will prompt.

Peter Dean

Chairman

Gambling Commission

ACKNOWLEDGEMENTS

Social surveys are the work of a large team, and the authors gratefully acknowledge the contributions of many colleagues. In particular, thanks are due to the interviewers who administered the survey; the operations team, notably Sarah Allcock, Sandra Laver and Janice Morris for organising the fieldwork and data processing; colleagues from NatCen's Survey Methods Unit, especially Shaun Scholes, Susan Purdon and Kevin Pickering for their time and expertise; Erroll Harper for producing all project computing systems; Laurent Martin and Merce Macanas at GIDE for designing the online survey; Heather McCracken for sharing her expertise of web surveys; and Laura Ringham, Elizabeth Becker and Hilde Stephansen for their time and assistance.

We would also like to give thanks to our sponsors, the Gambling Commission, and in particular to Helen O'Kane, Gavin Ellison and Ruth Callaghan for their support, advice and assistance throughout this project.

Our thanks go to the Steering Group and Advisory Group for their advice in the development of the questionnaire. We are also grateful to Professor Max Abbott and Dr Rachel Volberg for their review of the draft report and their advice which contributed to the final version of the report.

Above all, we would like to thank all respondents who gave up their time to take part in the survey.

EXECUTIVE SUMMARY

This report presents results from NatCen's British Gambling Prevalence Survey (BGPS) 2007. This is the second nationally representative survey of its kind, and its overall aim is to provide data on participation in gambling, and the prevalence of problem gambling, in Britain. A random sample of 9,003 individuals participated in the survey.

Since the 1999 survey, the nature of gambling in Britain has changed substantially – due to changes in legislation, and an increase in the number of gambling products available. As well as allowing comparison with results from 1999, this survey provides baseline data for the new Gambling Act which came into force on 1 September 2007.

Participation in gambling activities (chapters 2 and 3)

- 68% of the population, that is about 32 million adults, had participated in some form of gambling activity within the past year. This compares to 72% (about 33 million adults) in 1999.
- Excluding people who had only gambled on the National Lottery Draw in the last year, 48% of the population, or about 23 million, had participated in another form of gambling in the past year. This compares to 46% (about 22 million adults) in 1999.
- The most popular activity was the National Lottery Draw (57%), though participation rates had decreased since the previous survey in 1999 (from 65%).
- The National Lottery Draw was followed by scratchcards (20%), betting on horse races (17%), and playing slot machines (14%).
- There were only three activities that showed a reduction in participation between the two surveys; the National Lottery Draw (from 65% to 57%), football pools (from 9% to 3%) and scratchcards (from 22% to 20%).
- Only a small proportion of people (3%) gambled online (like playing poker or casino games etc) or placed bets with a bookmaker using the internet (4%). 3% used fixed odds betting terminals (FOBTs) and 4% gambled in a casino.
- Overall, 6% of the population used the internet to gamble in the past year.
- Men were more likely than women to gamble overall (71% compared with 65%), and on each individual activity, with the exception of bingo (4% of men compared with 10% of women).
- Respondents who described their ethnic origin as white were more likely to be past year gamblers (70%) than those who classified themselves as Black (39%) or Asian (45%).
- People in higher income households were more likely to gamble the rate increased from 61% among those in the lowest income households, to 72% for highest income households.

 In terms of education, respondents with higher levels were less likely to gamble – 61% of those with a degree compared with 73% who were educated to GCSE/Olevel equivalent.

Problem gambling (chapters 4 and 5)

- Two measures of problem gambling were used: the DSM IV¹ (using a threshold of 3) and the PGSI² (a threshold of 8). The rates of problem gambling in the population were 0.6% and 0.5% respectively. This equates to around 284,000 (DSM IV) and 236,500 (PGSI) adults (aged 16+) in Britain.
- The problem gambling prevalence rate, according to the DSM IV, was the same as it had been in 1999 (0.6%).
- The prevalence of problem gambling among past year gamblers was 0.9% for the DSM IV (compared to 0.8% in 1999), and 0.8% according to the PGSI.
- Excluding those who only played the National Lottery Draw increases the estimate
 of problem gambling, among past year gamblers, to 1.3% according to the DSM IV,
 and 1.2% according to the PGSI.
- Problem gambling was more prevalent among men than women, and tended to be more prevalent among younger age groups (though the association with age was less clear-cut than in 1999).
- In 1999, problem gambling was significantly associated with being male, reporting that a parent was or had been a problem gambler, and being in the lowest income category.
- In 2007, a significant association was again found between problem gambling and being male and also parental regular gambling (particularly if a parent had a gambling problem). Problem gambling was also associated with poor health, and being single.
- In addition, according to the DSM IV, problem gambling was significantly associated with being Asian/Asian British or Black/Black British, being separated/divorced, having fewer educational qualifications, and (according to the PGSI) being younger than 55 years old.
- Looking at international studies of problem gambling prevalence, the rate in Britain is higher than that found in Norway, and similar to that of Canada, New Zealand, Sweden and Switzerland, and lower than Australia, South Africa, the US, Singapore, Macao and Hong Kong. (Comparisons should be treated with caution, as different methodologies have been used in different countries).
- The highest prevalence of problem gambling was found among those who
 participated in the past year in spread betting (14.7%), fixed odds betting terminals
 (11.2%) and betting exchanges (9.8%) all estimates are from the DSM IV.

Attitudes to gambling (chapter 6)

- A new 14-item scale for measuring general attitudes towards gambling was developed for the 2007 survey.
- The overall sample average for the total scale, and for 12 of the separate items, indicated an attitude towards gambling that was more negative than positive. The average view was that gambling was more harmful than beneficial for individuals, and for society, and should not be encouraged.
- The two exceptions indicated that the average person tended to support the view that people had a right to gamble and to reject total prohibition.
- The most favourable attitudes to gambling were shown by: the under 35s; heavier drinkers; those who have engaged in more than four different types of gambling activity in the last 12 months; or more than three types in the last week; and those who were classified as a problem gambler according to either screen.
- The least favourable attitudes to gambling were shown by: the over 55s; the widowed; those describing themselves as Asian or Asian British or of one of the 'other' ethnic groups; non-gamblers; and those with a parent or close relative with a gambling problem.

Endnotes:

¹ The DSM IV screening instrument is taken from the fourth edition of the manual used by the American Psychiatric Association. The DSM IV consists of ten diagnostic criteria, and respondents are classified as problem gamblers if they fulfil at least three of the criteria.

² The Canadian Problem Gambling Severity Index (PGSI) constitutes 9 items of a larger screen (more than 30 items) - the Canadian Problem Gambling Inventory (CPGI).

1 INTRODUCTION

1.1 Background and aims

The first British Gambling Prevalence Survey, commissioned by *GamCare* and conducted by the *National Centre for Social Research*, took place in 1999. The findings were reported in *Gambling Behaviour in Britain: Results from the British Gambling Prevalence Survey*¹. An accompanying qualitative study was reported in *Exploring Gambling Behaviour In-depth: a Qualitative Study*². Both the main and qualitative studies were subsequently summarised in the book *Gambling and Problem Gambling in Britain*³.

Since then there have been substantial changes in national gambling policy in Britain, a wide ranging new Gambling Act, rapid development of varied forms of gambling, and a great deal of media attention on the topic. In mid-2001 the much-anticipated report of the Government's Gambling Review Body (GRB) was published. The GRB had wide terms of reference. It was asked to consider, "... the current state of the gambling industry and the ways in which it might change over the next ten years in the light of economic pressures, the growth of e-commerce, technological development and wider leisure industry and international trends... [and to consider] the social impact of gambling and the costs and benefits", and to make recommendations.

Though set up by the Home Office, the GRB reported to the Department for Culture, Media and Sport (DCMS), to which department government responsibility for gambling had been transferred in the meantime. The GRB made 176 separate recommendations. Whilst recognising the dangers of increased problem gambling and the need to protect children and others who might be vulnerable, the recommendations were largely in the direction of relaxing restrictions on gambling that were now considered to be out-of-date. They included, for example, lifting restrictions on the advertising of gambling, licensing and regulating internet gambling, and making it easier to open new casino facilities, including large 'regional' casinos where unlimited prize (category A) gambling machines would be permitted for the first time in the UK. DCMS published its response to the GRB report, A Safe Bet for Success, in March 2002; and in July of that year the House of Commons Culture, Media and Sport Select Committee produced its report The Government's Proposals for Gambling: Nothing to Lose? and the Government responded in October. The draft Gambling Bill appeared in 2003 and, after a period of consultation and debate in Parliament, the Gambling Act 2005 became law, and came into operation in September 2007. Meanwhile, the Gambling Commission, which under the new Act replaced the former Gaming Board, was constituted and began its work in 2005. Among its first actions was the commissioning of the second British Gambling Prevalence Survey which is the subject of the present report.

Although the new Gambling Act is only just fully operational, there have been considerable changes in the gambling landscape in Britain in the last seven years. For example, there has been much publicity around fixed odds betting terminals (FOBTs) and the increased availability of internet gambling sites; and it is thought that the numbers of people playing internet poker may have greatly increased. In general, gambling has been continually in the news, and the new Gambling Act has stimulated much controversy and criticism in many quarters. The view that it will lead to a significant increase in problem gambling is one that is often heard stated. Particularly newsworthy in February 2007 was the report of the Casino Advisory Panel.

In addition to this, expenditure within the gambling industry has increased since 1999/2000. Gross gambling yield (i.e. the amount retained by operators after the payment of winnings, but before the deduction of the costs of the operation) has increased from just over £7 billion in 1999/2000 to just under £10 billion, about the same as the rate of growth in total expenditure across the economy as a whole.

The 2007 survey, carried out by the *National Centre for Social Research*, therefore took place in a situation which is fluid as far as gambling in Britain is concerned. It was unknown beforehand whether rates of gambling and problem gambling had increased since 1999. Since the full effects of the Gambling Act 2005 were not yet in operation, it might have been expected that there would have been little increase. On the other hand, because of changes that had taken place in the meantime (for example the increased availability of internet gambling) increases might have been expected. In any case, as eight years has elapsed since the first survey, a new survey was overdue. The Government has stated that, in order to monitor the effects of the new Act, a national survey should be carried out every three years from now on.

This report therefore provides the Gambling Commission and the Government with some important benchmark information which will be useful to help in the assessment of the overall impact of the Gambling Act, following its full implementation on the 1 September 2007.

A number of changes were made for the 2007 survey. When enquiring about engagement in different forms of gambling, it was necessary to add a number of new forms, such as playing fixed odds betting terminals in a bookmaker's, online betting with a bookmaker, and use of a betting exchange. Questions about gambling expenditure were modified in an attempt to collect net expenditure (see Chapter 2). An important change from the earlier survey was the choice of screening questions for estimating the prevalence of problem gambling. As explained in Chapter 4, one of the two sets of questions used in the earlier survey has been retained (questions based upon the fourth edition of the Diagnostic and Statistical Manual of the American Psychiatric Association) in order to allow direct comparison with the earlier results.

The second set of questions used in the earlier survey (the South Oaks Gambling Screen⁴) had in the meantime gone out of favour internationally, and it has therefore been replaced for the present survey with a new set of questions (the Canadian Problem Gambling Severity Index⁵) which has been showing good evidence of validity⁶. Because of the controversial nature of gambling and gambling policy, public attitudes for or against gambling have been more systematically studied in the present survey.

Specifically, the aims of the 2007 survey were to:

- Measure the prevalence of participation in all forms of commercial and private gambling (including estimates of expenditure and information on venue).
- Estimate the prevalence of 'problem gambling' and look at which activities have the highest prevalence of 'problem gamblers'.
- Investigate the socio-demographic factors associated with gambling and with 'problem gambling'.
- Assess attitudes towards gambling.

This report provides the main results of the survey. Chapters 2 and 3 describe participation in gambling activities, Chapters 4 and 5 present results on problem gambling, and Chapter 6 the results of the assessment of attitudes towards gambling.

1.2 Overview of survey design

1.2.1 Sample and response

9,003 individuals participated in the survey. A random sample of 10,144 addresses from England, Scotland and Wales were selected from the Postcode Address File (PAF). Interviewers visited each address and attempted to gain a face to face interview with an adult at that address to collect information about the household. All adults, aged 16 and over, within co-operating households were eligible to take part and were asked to complete an individual questionnaire (which could be filled in online, or as a self-completion booklet). The individual questionnaires collected detailed information about the respondent's gambling behaviour and attitudes to gambling.

Interviews were achieved at 5,832 households (representing a response rate of 63% once non-residential addresses were removed from the sample). Individual questionnaires were completed by 9,003 out of 11,052 adults residing within co-operating households (an individual response rate of 81%). The overall response rate was 52%.

1.2.2 Weighting

Data were weighted to reflect the age, sex and regional distribution of the British Population according to estimates by the Office of National Statistics. Further information about the survey methodology and weighting strategy is given in Appendix 2. Copies of the household and individual questionnaire are shown in Appendix 3.

1.3 Caveats

The methodology used for the 2007 study sought to maintain maximum comparability with the 1999 BGPS study. As such, many of the 1999 survey protocols were replicated in the 2007 study. As with any survey, possible biases may be introduced into the data by the method of data collection chosen. The 2007 gambling study is no exception to this. Sources of potential bias include non-response biases (introduced by varying participation rates among sub-sections of the population) and social desirability or acceptability biases in responses to certain questions. Furthermore, both the 1999 and 2007 studies were of people living in private households. This, by definition, excludes a number of sub-groups of the population, such as homeless people, those living in institutions, and prisoners, which should be borne in mind when interpreting study results.

These issues were carefully considered at the outset of the study, and the survey methodology used attempted to overcome these potential areas of bias in a number of ways. For example, given the perceived sensitive nature of the problem gambling screens, these questions were administered using a confidential self-completion questionnaire to encourage honest reporting. Data from the 1999 study were reanalysed and optimal stratifiers for the 2007 sample chosen, based on this analysis, to increase sample efficiency. Final data were weighted for non-response to account for differences in the sample profile compared to population estimates for Britain. Appendix 1 compares a number of key characteristics from the achieved 2007 sample against independent data, to examine where areas of bias may be introduced due to response rate differences among sub-groups. Overall, this shows that for most key characteristics (such as age, sex, NS-SEC of household reference person, marital status, ethnic group, and country of residence) the achieved BGPS sample is a close reflection of population estimates. However, this analysis also highlighted that the 2007 BGPS may slightly over-represent those in good health, those who are married. and those educated to degree (or higher) level. These differences should be kept in mind when interpreting study results.

Where appropriate, caveats of this nature have been highlighted within individual chapters throughout this report.

1.4 Report conventions

- 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 had corner of each table.

- The data used in this report have been weighted. The weighting strategy is described in Appendix 2. 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).
 - * 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 30-49, the estimate is presented in square brackets.
- Because of rounding, row or column percentages may not exactly add to 100%.
- A percentage may be presented in the text for a single category that aggregates two or more percentages shown in the table. The percentage for that single category may, because of rounding, 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.

Endnotes:

Sproston, K, Erens B & Orford J. Gambling behaviour in Britain: Results from the British Gambling Prevalence Survey (2000). National Centre for Social Research.

² White, Mitchell and Orford. *Exploring Gambling Behaviour In-depth: a Qualitative Study*. (2001). National Centre for Social Research.

³ Orford, J. Sproston, K., Erens, B., White, C. and Mitchell, L. (2003). *Gambling and Problem Gambling in Britain*. London: Brunner-Routledge.

⁴ Lesieur, HR & Blume, SB. *The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers*. Am J Psychiatry 1987; **144**: 1184-1188.

⁵ Ferris, J and Wynne H. *The Canadian Problem Gambling Index: Final Report*. The Canadian Centre on Substance Abuse (CCCSA) 2001.

⁶ Wenzel, M, McMillen J, Marshall D and Ahmed E. *Validation of the Victorian Gambling Screen*. Community Support Fund, Australia. 2004.

2 PARTICIPATION IN GAMBLING ACTIVITIES

2.1 Definition of gambling used in the survey

An important objective of the British Gambling Prevalence Survey 2007 was to provide data on current (2007) levels of participation in gambling. The aims were to look at change in participation rates over the past seven years by making comparisons with the first British Gambling Prevalence Survey in 1999; and to provide a measure of baseline data before the 2005 Gambling Act became fully operational in September 2007. The survey provides data on overall participation rates as well as for individual gambling activities.

As in the 1999 survey, respondents were shown a list of gambling activities and asked whether they had participated in each activity in the past 12 months. 'Participation' was defined as having 'spent money' on the activity, so that it would include, for example, having a lottery ticket purchased on their behalf if the money used to buy the ticket was the respondent's own.

There were two major differences with questions used in the earlier British Gambling Prevalence Survey. Firstly, the list included 16 activities instead of the 11 used in 1999, reflecting the expansion of different forms of gambling activities over the past decade. This increasing range of types of activities is mainly due to the internet (online gambling or betting), which was in its early stages at the time of the earlier survey. Secondly, the 2007 survey asked respondents *how often* they did each type of gambling activity in the past 12 months, whereas in 1999 they were simply asked whether or not they had done each type of activity in the past year.

The 16 activities included in the list were intended to cover all types of gambling available in Britain at the time of the survey. However, to allow for the possibility that an unfamiliar activity was missed by the research team, or that respondents may have missed or misunderstood an activity included in the list, the option was provided for respondents to write in another form of gambling activity not listed. (The full list of gambling activities is found in Section A of the individual questionnaire, which is included as Appendix 3.)

As well as asking about frequency of participation over the last year, the questionnaire also collected information about venue of gambling, and expenditure on each activity in the last seven days. This chapter presents the results for participation (section 2.2) and venue (section 2.3) and expenditure (section 2.4).

2.2 Gambling activities in the past year

2.2.1 Participation in gambling activities in the past year

Overall participation rates

Figure 2A and Table 2.1 show the percentages (of men, women, and all) saying they had participated in each of the sixteen gambling activities over the past 12 months¹. The National Lottery Draw was the most popular activity, with 57% of adults purchasing tickets in the past 12 months. This was nearly three times as many as the next most popular activity - scratchcards (20%). There were four other activities which at least one in ten of the population said they participated in within the past 12 months: betting on horse races (17%); playing slot machines (14%); buying tickets for a lottery other than the National Lottery Draw (12%); and private betting (10%).

Participation rates in the past 12 months for the other activities were: bingo (7%); betting on events like sports matches (aside from horse/dog races) in a bookmaker's, by phone or at the venue (6%); dog races (5%); playing table games in a casino (4%); online betting with a bookmaker on any event or sport (4%); football pools (3%); online gambling, such as playing poker, bingo, slot machines or casino games (3%); fixed odds betting terminals (3%); betting exchange (1%); and spread betting (1%).

Overall, 68% of people aged 16 and over said they participated in one or more of these activities in the past 12 months. The term 'past year gamblers' will be used for this group throughout the remainder of this report.

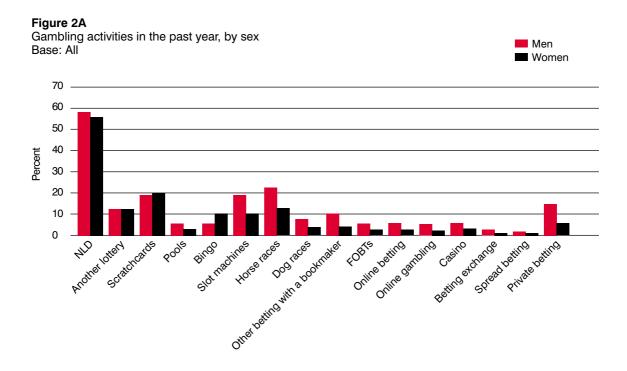


Table 2.1 Gambling activities in past year for all and for past year gamblers, by sex All and past year gamblers

Gambling activity	All			Past y	ear gamble	ers
	Men	Women	Totala	Men	Women	Totalª
	%	%	%	%	%	%
National Lottery Draw	59	56	57	83	85	84
Another lottery	12	12	12	16	18	17
Scratchcards	19	20	20	27	31	29
Football pools	5	2	3	7	2	5
Bingo	4	10	7	6	15	11
Slot machines	19	10	14	27	15	21
Horse races ^b	22	13	17	31	20	25
Dog races⁵	7	3	5	10	5	7
Betting with a bookmaker (other than on horse or dog races) ^b	10	3	6	14	4	9
Fixed odds betting terminals	4	1	3	6	2	4
Online betting with a bookmaker on any event or sport	6	1	4	9	2	6
Online gambling	4	1	3	6	2	4
Table games in a casino	6	2	4	9	3	6
Betting exchange	2	*	1	2	1	2
Spread betting	1	*	1	2	*	1
Private betting (e.g. with friends, colleagues)	15	6	10	21	10	15
Another gambling activity	1	*	*	1	1	1
Any gambling activity	71	65	68	100	100	100
Bases (weighted):	4333	4636	8972	3065	3021	6085
Bases (unweighted):	4241	4733	8978	3022	3139	6161

^aThe total column includes those for whom sex was not known.

Number of activities

Table 2.2 shows the number of gambling activities participated in within the past 12 months. One third (32%) of the general population did not participate in any activities. About one quarter (26%) participated in only one activity, just over one quarter (28%) participated in two or three activities, 9% in four or five activities, and 5% in six or more activities. The mean number of activities participated in was 1.7.

National Lottery Draw

Compared with the other gambling activities, the participation rates are much higher for people purchasing National Lottery (NL) tickets. This suggests that, for quite a high proportion of the population, their gambling activity is limited to the National Lottery Draw. In fact, 36% of people who bought National Lottery tickets in the past year said this was their only gambling activity during this period. Among the general population, this equates to 20% of adults who said their only gambling activity in the past year was purchasing National Lottery tickets. (Table not shown.)

^bThese activities do not include any bets made online.

Table 2.2 Number of gambling activities in past year for all and for past year gamblers, by sex A/I

Number of activities	All			Past y	ear gamble	rs
	Men	Women	Totala	Men	Women	Totala
	%	%	%	%	%	%
None	29	35	32	-	-	-
One	25	28	26	35	43	39
Two	16	18	17	23	28	25
Three	12	9	10	16	14	15
Four	7	5	6	10	8	9
Five	4	2	3	5	3	4
Six	3	1	2	4	2	3
Seven	2	1	1	2	1	2
Eight or more	3	1	2	4	1	3
Mean number of gambling activities	2.0	1.4	1.7	2.8	2.2	2.5
Bases (weighted):	4333	4636	8972	3065	3021	6085
Bases (unweighted):	4241	4733	8978	3022	3139	6161

^aThe total column includes those for whom sex was not known.

Participation rates by sex

Men were more likely than women to gamble in the past 12 months: 71% compared with 65% (Table 2.1). Looking at the individual activities, men were more likely than women to play slot machines (men 19% vs women 10%), bet with a bookmaker on horse races (22% vs 13%) dog races (7% vs 3%) or other events (10% vs 3%), buy National Lottery tickets (59% vs 56%), bet online with a bookmaker (6% vs 1%), participate in online gambling (4% vs 1%) or private betting (15% vs 6%), play table games in a casino (6% vs 2%), play football pools (5% vs 2%), use a betting exchange (2% vs <0.5%), do spread betting (1% vs <0.5%), or use FOBTs (4% vs 1%).

Similar proportions of men and women bought scratchcards (19% vs 20%) or played other lotteries (12% for each sex). Bingo was the only gambling activity which men were less likely to play than women (4% vs 10%).

Men also participated in more activities than women in the past 12 months: 18% of men compared with 10% of women participated in four or more activities, and the mean number of activities was 2.0 for men and 1.4 for women (Table 2.2).

World Cup betting

The 12 month period covered by the British Gambling Prevalence Survey 2007 included the FIFA (football) World Cup during the summer 2006. During the planning stage of the survey, there were concerns that some people who do not normally gamble may have made a bet on the World Cup, given the competition's immense popularity. Therefore, the questionnaire included two questions specifically about World Cup betting: firstly, whether the person bet with a bookmaker on the World Cup; and secondly, if they had, whether this was the only bet they made with a bookmaker in the past 12 months.

Overall, in response to the first question, 4% of the population said they bet with a bookmaker on the World Cup: 7% of men and 1% of women. In response to the second question, one-third (31%) of this group said their World Cup bet was the only one they made with a bookmaker in the past 12 months.

When based on the general population, only 1% of adults (men 2%, women 1%) said their World Cup bet was the only one they made with a bookmaker in the past 12 months. Moreover, since most of this group participated in at least one other gambling activity, the proportion of the population classified as past year gamblers is hardly affected, and remains at 68% overall (men 71%, women 65%).

Betting with a bookmaker

There are four activities in Table 2.1 that involve betting with a bookmaker: betting in a bookmaker's, by phone or at the track on horse races; dog races; other events or sports; and online betting with a bookmaker on any event or sport. The proportion of the population doing these activities ranged from 17% betting on horse races to 4% betting online with a bookmaker. Looking at all four activities combined, the proportion of the population who made *any* bets with a bookmaker in the past year was 22% (men 28%, women 16%). If the 1% of adults who said their only bet with a bookmaker in the past year was on the World Cup are excluded (as described in the section above), then the proportion who made bets with a bookmaker is slightly smaller at 21% (men 27%, women 15%).

Online betting

Table 2.1 includes three activities that involve betting online over the internet: online betting with a bookmaker on any event; online gambling (such as playing poker, bingo, slot machines or casino games); and using a betting exchange. Overall, 6% of the general population participated in one (or more) of these forms of online gambling in the past year (men 9%, women 3%).

2.2.2 Participation rates for past year gamblers only

Looking only at the group of people who participated in at least one gambling activity in the past 12 months, over eight in ten (84%) said they bought NL tickets. The next most popular activities among past year gamblers were buying scratchcards (29%), betting on horse races (25%), playing slot machines (21%), other lotteries (17%) and private betting (15%). Next came betting on other events with a bookmaker (9%), dog races (7%), table games in a casino (6%), online betting with a bookmaker (6%), football pools (5%), online gambling (4%) and fixed odds betting terminals (4%). Finally, very small proportions used a betting exchange (2%) and spread betting (1%). These results are shown on the right half of Table 2.1.

As Table 2.2 (right columns) shows, nearly two fifths of past year gamblers bet on only one (39%) activity, while a similar percentage bet on two (25%) or three (15%). 13% of past year gamblers bet on four or five activities and 7% bet on six or more. The mean number of activities for past year gamblers was 2.5 (men 2.8, women 2.2).

2.2.3 Frequency of gambling

For those who participated in each activity, Table 2.3 shows how often adults said they did so within the past 12 months. For 12 of the 16 activities, a majority of participants said they gambled less than once a month (and for two other activities it was close to half gambling less than monthly). The activities most likely to be done less than monthly by participants included betting on horse and dog races (82% and 80% respectively) and playing table games in a casino (81%). About two-thirds of participants said they did private betting (67%), played slot machines (65%) or did spread betting (64%) less than monthly.

The two activities which were done most frequently were playing the football pools and buying National Lottery tickets. Among those participating in these activities, over half said they gambled at least once a week (55% for each activity). About one third of participants played bingo once a week (34%). The next activities played most frequently by participants were online gambling and betting exchanges (both 29%). This was followed by playing fixed odds betting terminals and online betting with a bookmaker (21% and 20% respectively).

Playing table games in a casino at least once a week was done by 4% of participants, which was the lowest proportion of any of the activities. The next lowest was dog races, with 11% of participants betting at least once a week.

For about half the activities, there were few differences between men and women participants in the frequency with which they gambled. Where there were differences, it was men who had a higher frequency. This was particularly notable for the two groups of activities that involve either online gambling or online betting or betting with a bookmaker. Thus men were much more likely than women to participate at least once a week in: online gambling (34% vs 14%); online betting with a bookmaker (23% vs 8%); horse races (17% vs 3%); and dog races (15% vs 1%).

Table 2.3 Frequency of gambling in the past year, by sex

All doing the activity

Gambling activity	Fre	equency	of gamb	oling				
		2+ days/ week	Once/ week	Once/ month, <once <br="">week</once>	Less than once/ month	Participated frequency not known		Bases: (unweighted ₎
Men								
National Lottery Draw	%	20	37	18	25	1	2557	2553
Another lottery	%	2	15	13	58	11	505	508
Scratchcards	%	5	11	23	53	8	833	784
Football pools	%	7	50	13	17	13	225	220
Bingo	%	10	22	17	46	6	186	192
Slot machines	%	7	10	22	60	1	837	770
Horse races ^b	%	10	7	9	74	1	940	928
Dog races ^b	%	10	5	11	72	1	303	279
Betting with a bookmaker (other than on horse or								
dog races) ^b	%	6	9	16	49	20	425	395
Fixed odds betting terminals	%	13	11	26	45	5	170	144
Online betting with a bookmaker on any event or sport	%	12	11	17	48	12	278	253
Online gambling	%	25	10	18	43	15	15	143
Table games in a casino	%	4	1	16	76	3	261	229
Betting exchange	%	15	18	16	40	10	77	66
Spread betting	%	13	4	16	61	7	55	50
Private betting (e.g. with friends, colleagues)	%	6	10	20	62	2	635	569
Women								
National Lottery Draw	%	17	35	17	30	1	2573	2688
Another lottery	%	1	18	18	55	8	541	561
Scratchcards	%	5	12	22	56	5	936	956
Football pools	%	-	48	14	30	9	72	75
Bingo	%	14	21	16	47	2	458	479
Slot machines	%	2	7	12	76	2	460	463
Horse races ^b	%	1	2	2	95	0	593	616
Dog races ^b	%	1	_	3	94	1	146	147
Betting with a bookmaker (other than on horse or dog races) ^b	%	7	10	5	56	21	127	128
Fixed odds betting terminals	%	7	7	11	69	5	63	58
Online betting with a bookmaker on any event or sport	%	4	4	6	76	10	69	68
Online gambling	%	11	3	15	67	4	64	62
Table games in a casino	%	1	2	3	94	_	86	86
Betting exchange	%	С	С	С	С	С	20	18
Spread betting	%	С	С	С	С	С	9	9
Private betting (e.g. with friends, colleagues)	%	3	8	10	77	2	299	294

Continued

Table 2.3 continued All doing the activity

Gambling activity		Frequency of gambling													
		2+ days/ week	Once/ week	Once/ month, <once <br="">week</once>	Less than once/ month	Participated frequency not known		Bases: (unweighted,							
Alla															
National Lottery Draw	%	18	36	17	28	1	5130	5241							
Another lottery	%	2	17	16	56	10	1046	1069							
Scratchcards	%	5	12	23	55	6	1769	1740							
Football pools	%	5	49	13	20	12	297	295							
Bingo	%	13	22	16	47	3	645	671							
Slot machines	%	5	9	18	65	2	1297	1233							
Horse races ^b	%	7	5	6	82	1	1533	1544							
Dog races ^b	%	7	4	8	80	1	449	426							
Betting with a bookmaker (other than on horse or dog races) ^b	%	6	9	13	51	20	553	523							
Fixed odds betting terminals	%	11	10	22	52	5	233	202							
Online betting with a bookmaker on any event															
or sport	%	11	9	14	54	12	346	346							
Online gambling	%	21	8	17	50	4	234	205							
Table games in a casino	%	3	1	13	81	2	347	315							
Betting exchange	%	14	16	14	47	9	97	84							
Spread betting	%	13	3	13	64	6	64	59							
Private betting (e.g. with friends, colleagues)	%	5	10	17	67	2	934	863							

^a The total column includes those for whom sex was not known.

2.2.4 Comparison of participation rates in 2007 with those in 1999

Comparing participation rates between the first British Gambling Prevalence Survey in 1999 and the second in 2007 shows a small reduction in the proportion of the general population who gambled in the past 12 months, from 72% to 68% (Table 2.4). This is despite there being a wider range of gambling activities available in 2007: compared with the 16 activities included in 2007, there were only 11 activities in 1999. (Appendix 1 shows the characteristics of the samples in both the 1999 and 2007 surveys, as changes in some of these population characteristics over time may explain some of the changes in participation rates.)

Among the 11 activities that were common to both surveys, participation rates were very similar for five of them, and were higher for three of the activities: playing other lotteries increased from 8% to 12%, while betting on horse races and on other events with a bookmaker also increased (from 13% to 17%, and 3% to 6%², respectively) over this period.

^b These activities do not include any bets made online.

 $^{^{\}circ}$ Figures not shown as unweighted base size is less than 30.

Plus, there were five new activities not available (at all for some, not widely for others) in 1999, and they all had participation rates ranging from 1% to 4%.

There were only three activities that showed a reduction in participation between surveys: the National Lottery Draw from 65% to 57% of the population, football pools from 9% to 3%, and a small decrease in scratchcards from 22% to 20%. In fact, the small decrease in overall participation rates is wholly explained by the reduction in the proportion of the population whose only gambling activity was to buy National Lottery tickets; if National Lottery Draw only players are not counted as past year gamblers, then the proportion of past year gamblers was similar between surveys, and actually shows a small, but significant, increase since 1999, from 46% to 48%³. This finding is supported by examination of Gross Gaming Yield (GGY). GGY is the amount of money retained by operators after the payment of winnings, but before the deduction of the costs of the operation. Between 1999 and 2006, total GGY for all gambling activities increased from £7.2 billion to £9.8 billion (though inflation would account for some of this growth). However, despite inflation, GGY for the National Lottery Draw alone has actually decreased from £2.6 billion to £2.5 billion for the same years.

Table 2.4 Comparison of gambling activities in past year in 1999 and 2007

All and past year gamblers in 1999 and 2007

Gambling activity	All		Past yea	r gamblers
	1999	2007	1999	2007
	%	%	%	%
National Lottery Draw	65	57	90	84
Another lottery	8	12	11	17
Scratchcards	22	20	30	29
Football pools	9	3	12	5
Bingo	7	7	10	11
Slot machines	14	14	19	21
Horse races ^a	13	17	18	25
Dog races ^a	4	5	5	7
Betting with a bookmaker (other than on horse or dog races) ^a	3	6	4	9
Fixed odds betting terminals	n.a.	3	n.a.	4
Online betting with a bookmaker on				
any event or sport	n.a.	4	n.a.	6
Online gambling	n.a.	3	n.a.	4
Table games in a casino	3	4	4	6
Betting exchange	n.a.	1	n.a.	2
Spread betting	n.a.	1	n.a.	1
Private betting (e.g. with friends, colleagues)	11	10	16	15
Another gambling activity	*	*	*	1
Any gambling activity in past year	72	68	100	100
Mean number of gambling activities	1.6	1.7	2.2	2.5
Bases (weighted):	7700	8972	5543	6085
Bases (unweighted):	7680	8978	5550	6161

The columns total more than 100% as more than one activity could be chosen. n.a. = activity not asked in 1999.

2.2.5 Relationship between different types of gambling activities

Table 2.5 shows the relationship between participation rates and the number of different activities men and women have gambled on over the past year. For example, among those who said they gambled on only one activity during this period, 4% said the activity they did was playing slot machines; among those doing two activities, 11% said they played slot machines; for those doing three activities, 29% said one of them was playing slot machines; etc.

^a These activities do not include any bets made online.

As mentioned in Section 2.2.1, among those who participated in only one activity, this was by far most likely to involve purchasing National Lottery tickets; this was named by 77% of men and women who did only one activity in the past year. Among those doing two activities, after the National Lottery Draw (86%) the purchase of scratchcards was the other activity done most commonly (32% of this group), followed by horse races (21%) and other lotteries (16%). In fact, scratchcards was the second most popular activity (after the NL Draw) among those who participated in one to four activities. Among those doing five activities, after the NL Draw (94%), slot machines (64%), horse races (62%) and scratchcards (61%) were of similar popularity.

Several gambling activities were very largely the preserve of people who participated in a wide range of activities (i.e. six or more). These include many of the newer gambling activities such as online gambling (done by 33% of those who participated in six or more activities), online betting with a bookmaker (38% of this group), playing fixed odds betting terminals (36%), spread betting and betting exchange (both 12%), as well as some older forms of gambling such as playing table games in a casino (41%), betting with a bookmaker on events other than horse/dog races (58%) and betting on dog races (43%).

The patterns for men and women were similar, with the National Lottery Draw being the most commonly reported activity in all categories for both sexes. There were, however, a few differences between men and women. For example, among those doing two activities, men were equally likely to report horse races (25%) and scratchcards (24%) as the second most common activity; whereas for women scratchards were more than twice as popular as horse races (38% vs 17%). Some other differences between the sexes were that, for each number of activities, women were more likely to play bingo, while men were more likely to participate in private betting, horse races and slot machines (at least up to those doing four activities, after which the differences between the sexes were less notable).

Table 2.5 Participation in gambling activities, by number of activities people participated in within the past year and sex

Past year gamblers

Gambling activity	Number	of activit	ies particip	oated in w	ithin pas	st year
	One	Two	Three	Four	Five	Six or more
	%	%	%	%	%	%
Men						
National Lottery Draw	77	84	88	87	94	90
Another lottery	5	14	22	24	31	38
Scratchcards	2	24	38	46	52	70
Football pools	1	6	8	11	12	26
Bingo	1	4	7	13	10	18
Slot machines	5	13	35	54	66	76
Horse races ^b	4	25	38	56	66	77
Dog races ^b	*	5	8	14	21	46
Betting with a bookmaker (other than						
on horse or dog races) ^b	*	4	13	21	34	65
Fixed odds betting terminals	*	*	2	7	9	38
Online betting with a bookmaker on						
any event or sport	*	3	8	14	18	44
Online gambling	-	1	3	7	8	35
Table games in a casino	1	2	4	10	21	45
Betting exchange	-	*	2	2	7	14
Spread betting	-	*	*	1	1	14
Private betting (e.g. with friends, colleag	ues) 4	12	22	31	46	71
Another gambling activity	-	1	1	2	3	2
Women						
National Lottery Draw	77	88	94	95	95	95
Another lottery	6	18	31	37	38	50
Scratchcards	4	38	57	65	75	81
Football pools	*	2	4	5	7	12
Bingo	3	13	25	40	48	50
Slot machines	3	9	22	41	61	81
Horse races ^b	3	17	34	49	56	79
Dog races ^b	*	3	7	11	22	35
Betting with a bookmaker (other than						
on horse or dog races) ^b	*	1	4	15	16	41
Fixed odds betting terminals	*	1	*	4	6	29
Online betting with a bookmaker on						
any event or sport	*	1	3	4	8	23
Online gambling	*	1	2	4	9	27
Table games in a casino	*	1	2	8	12	28
Betting exchange	-	*	1	0	4	7
Spread betting	-	*	-	0	-	6
Private betting (e.g. with friends, colleag	ues) 2	6	14	22	39	53
Another gambling activity	*	*	1	*	2	2

continued

Table 2.5 continued Past year gamblers

Gambling activity	Number	of activit	ies particip	oated in w	ithin pas	st year
	One	Two	Three	Four	Five	Six or more
	%	%	%	%	%	%
Alla						
National Lottery Draw	77	86	91	90	94	91
Another lottery	5	16	26	30	34	41
Scratchcards	3	32	47	54	61	73
Football pools	1	4	6	8	10	22
Bingo	2	9	15	25	25	27
Slot machines	4	11	29	48	64	77
Horse races ^b	3	21	36	53	62	78
Dog races ^b	*	4	7	13	22	43
Betting with a bookmaker (other tha	n					
on horse or dog races) ^b	*	3	9	18	27	58
Fixed odds betting terminals	*	1	1	5	8	36
Online betting with a bookmaker on			_			
any event or sport	*	2	6	10	14	38
Online gambling	*	1	2	6	8	33
Table games in a casino	1	2	3	9	18	41
Betting exchange	-	*	2	1	6	12
Spread betting	-	*	*	1	1	12
Private betting (e.g. with friends, col		9	18	27	43	66
Another gambling activity	*	1	1	1	2	2
Bases (weighted):						
Men	1072	700	501	306	167	319
Women	1295	842	434	227	104	118
All	2367	1543	935	533	271	437
Bases (unweighted):						
Men	1096	703	487	295	157	284
Women	1364	872	446	231	109	117
All	2460	1575	933	526	266	401

The columns (other than the column headed 'One') add to more than 100% as more than one response was given.

Table 2.6 shows, for the individuals doing each of the 16 types of activity, the proportion who also gambled in the past 12 months on each of the other 15 activities. The column headings indicate the group who said they gambled on that activity, while the column percentages show the other activities that group participated in (if any) in the past 12 months.

^aThe total column includes those for whom sex was not known.

^bThese activities do not include any bets made online.

For example, among all the people who played slot machines in the past 12 months, 79% bought National Lottery tickets, 49% bought scratchcards, 40% bet on horse races, 34% made private bets, etc.

As can be seen from Table 2.6, for each of the activities, at least three in four of the people who did that activity also purchased National Lottery tickets: this ranged from 74% of those who did private betting to 91% of those who bought scratchcards. For five of the activities (National Lottery Draw, another lottery, bingo, slot machines and horse races), scratchcards was the second most common activity after the National Lottery Draw. These activities tend to identify a group of the population with a fairly limited interest in gambling, which can also be seen from the lower mean number of activities participated in for these five activities (plus those purchasing scratchcards). In particular, over one-third (36%) of those who purchased National Lottery tickets said this was the only activity they did in the past year.

On the other hand, individuals who bet on dog races or with bookmakers, who do online gambling or online betting with bookmakers, who do spread betting, use betting exchanges, play fixed odds betting terminals, or table games in a casino, tend to have much higher levels of participation in a greater number of activities, as well as a higher mean number of activities participated in (especially for those doing spread betting, betting exchange, fixed odds betting terminals and online gambling).

Table 2.6 Participation in gambling activities, by other activities people participated in within the past year

Past year gamblers																
Gambling activity	People who participated in															
	% National Lottery Draw	% Another lottery	% Scratchcards	% Football pools	% Bingo	% Slot machines	% Horse races ^a	% Dog races*	% Other betting with a bookmaker	% FOBTs	% Online betting with bookmaker	% Online gambling	% Table games in a casino	% Betting exchange	% Spread betting	% Private betting
Also participated in:																
National Lottery Draw	-	80	91	84	82	79	82	81	84	76	78	79	77	89	82	74
Another lottery	16	-	23	28	21	20	22	22	23	28	21	28	24	26	47	21
Scratchcards	31	39	-	38	42	49	36	43	45	54	42	51	47	46	59	38
Football pools	5	8	6	-	6	7	8	10	17	17	19	20	14	28	37	9
Bingo	10	13	15	13	-	18	13	15	14	25	10	23	13	17	22	13
Slot machines	20	25	36	31	35	-	34	45	48	74	46	63	61	49	61	47
Horse races ^a	25	32	31	41	31	40	-	66	68	58	60	45	50	61	76	42
Dog races ^a	7	9	11	15	10	16	19	-	26	40	23	27	25	29	45	18
Betting with a bookmaker (other than on horse or dog races	s)ª 9	12	14	31	12	20	25	32	_	42	43	33	33	44	81	24
Fixed odds betting terminals	3	6	7	14	9	13	9	21	18	-	21	34	26	28	45	13
Online betting with a bookmaker on any event or sport	5	7	8	22	5	12	14	18	27	31	-	43	27	53	59	15

continued

Table 2.6 continued

Past year gamblers

Gambling activity	People who participated in															
	% National Lottery Draw	% Another lottery	% Scratchcards	% Football pools	% Bingo	% Slot machines	% Horse races ^a	% Dog races ^a	% Other betting with a bookmaker*	% FOBTs	% Online betting with bookmaker	% Online gambling	% Table games in a casino	% Betting exchange	% Spread betting	% Private betting
Also participated in:																
Online gambling	4	6	7	16	8	11	7	14	14	34	29	-	27	38	42	15
Table games in a casino	5	8	9	17	7	16	11	19	21	38	27	40	-	36	42	20
Betting exchange	2	2	3	9	3	4	4	6	8	11	15	16	10	-	29	4
Spread betting	1	3	2	8	2	3	3	6	9	12	11	11	8	19	-	4
Private betting (e.g. with friends, colleagues)	14	19	20	29	19	34	26	36	41	53	39	60	53	43	63	-
No other activity	36	12	4	4	8	7	5	2	1	2	2	1	4	-	-	8
Mean number of activities	2.6	3.7	3.8	5.0	4.0	4.4	4.1	5.4	5.6	7.0	5.9	6.8	6.0	7.1	8.9	4.6
Bases (weighted):	5130	1046	1769	297	645	1297	1533	449	553	233	346	234	347	97	64	934
Bases (unweighted):	5241	1069	1740	295	671	1233	1544	426	523	202	321	205	315	84	59	863

The columns add to more than 100% as more than one response could be given.

2.3 Gambling activities in the past week

2.3.1 The questions asked

Section B of the questionnaire repeated the list of gambling activities in another grid format, and respondents were asked to report any activities they had participated in within the past seven days before the interview. The definition for 'participation' was the same as for the past 12 months, and specifically referred to the person having 'spent money' on the activity. For each activity respondents had participated in, they were asked two follow-up questions: firstly, where or how they did the activity⁴; secondly, how much money they had won or lost in the past seven days. This section reports on participation rates for each activity in the past seven days (Section 2.3.2), the number of activities participated in (Section 2.3.3), a comparison with the British Gambling Prevalence Survey 1999 (Section 2.3.4), the venue or method of gambling (Section 2.3.5) and expenditure on gambling (Section 2.4).

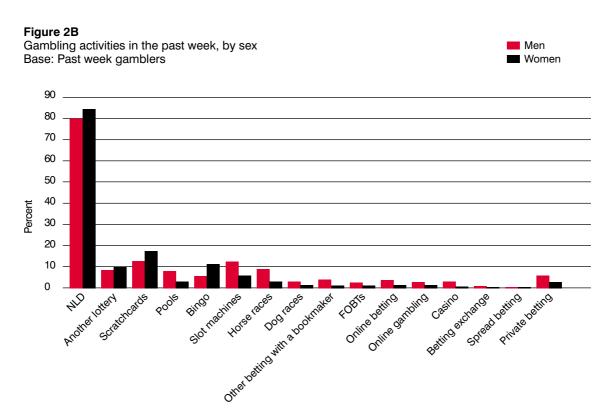
2.3.2 Participation in gambling activities in the past week

Two in five (41%) adults said they participated in one of the gambling activities in the past seven days (Table 2.7). This group is referred to as 'past week gamblers' throughout the rest of this report.

^aThese activities do not include any bets made online.

Aside from the third of the population who bought National Lottery tickets (33%), only small proportions of people participated in any of the other activities. The other most commonly mentioned activities included scratchcards (6%), slot machines (4%), other lotteries (3%), bingo (3%), private betting (3%), football pools and horse races (both 2%); all other activities were mentioned by less than 2% of the population.

Men were more likely than women to have gambled in the past seven days (45% vs 37%). A higher percentage of men than women reported participation in all activities except bingo, which was more often reported by women (men 2%, women 4%), scratchcards (both sexes 6%), other lotteries (both sexes 3%) and spread betting (both sexes less than 0.5%); due to the low participation rates, the differences between the sexes were not always statistically significant.



Over four in five past week gamblers purchased National Lottery tickets (82%). The next most common activity was scratchcards, with 15% participation. All other activities were mentioned by less than one in ten of past week gamblers. The most common activities were: slot machines (9%); other lotteries (8%); bingo (7%); horse races (6%); private betting (6%); and football pools (5%).

Women were more likely than men to report participation in the National Lottery Draw (men 80% vs women 84%), bingo (men 4% vs women 11%), scratchcards (men 13%, women 16%) and other lotteries (men 7% vs women 9%); for all the other activities, men were more likely than women to participate (although the differences were not always significant).

Table 2.7 Gambling activities in past week for all and for past week gamblers, by sex All and past week gamblers

Gambling activity	All			Past week gamblers		
	Men %	Women %	Total ^a %	Men %	Women %	Total ^a %
Another lottery	3	3	3	7	9	8
Scratchcards	6	6	6	13	16	15
Football pools	3	1	2	7	2	5
Bingo	2	4	3	4	11	7
Slot machines	6	2	4	13	4	9
Horse races ^b	4	1	2	9	2	6
Dog races ^b	1	*	1	3	1	2
Betting with a bookmaker (other than on horse or dog races) ^b	2	*	1	4	1	3
Fixed odds betting terminals	1	*	1	3	1	2
Online betting with a bookmaker on any event or sport	2	*	1	4	*	2
Online gambling	1	*	1	3	1	2
Table games in a casino	1	*	1	2	*	1
Betting exchange	1	*	*	1	*	1
Spread betting	*	*	*	*	*	*
Private betting (e.g. with friends, collect	agues) 4	1	3	9	3	6
Another gambling activity	*	*	*	*	*	*
Any gambling activity	45	37	41	100	100	100
Bases (weighted):	4353	4640	8996	1946	1703	3649
Bases (unweighted):	4257	4735	8996	1951	1798	3749

^aThe total column includes those for whom sex was not known.

2.3.3 Number of gambling activities in the past week

Over two-thirds (69%) of past week gamblers took part in only one activity, and a further 20% took part in two activities, in the past seven days (Table 2.8). 7% took part in three activities, and 5% in four or more activities. Among past week gamblers, women were more likely than men to participate in one or two activities (men 85%, women 93%), while men were more likely to do three or more activities (men 15%, women 7%). On average, male past week gamblers participated in 1.6 activities, and women in 1.4 activities.

^bThese activities do not include any bets made online.

Table 2.8 Number of gambling activities participated in within past week for all and for past week gamblers, by sex

All and past week gamblers

Number of activities	All			Past week gamblers		
	Men %	Women %	Total ^a	Men %	Women %	Total ^a %
None	55	63	59	-	-	-
One	29	27	28	65	74	69
Two	9	7	8	21	19	20
Three	4	2	3	8	5	7
Four	2	1	1	4	2	3
Five	1	*	*	1	1	1
Six or more	1	*	*	1	*	1
Mean number of gambling activities	0.7	0.5	0.6	1.6	1.4	1.5
Bases (weighted):	4353	4640	8996	1946	1703	3649
Bases (unweighted):	4257	4735	8996	1951	1798	3749

^aThe total column includes those for whom sex was not known.

2.3.4 Comparison with past week gambling in 1999

Despite the increasing availability of new forms of gambling since the earlier British Gambling Prevalence Survey, Table 2.9 shows a significant reduction in the proportion of the population who reported gambling in the past seven days, from 53% in 1999 to 41% in 2007. While this is largely accounted for by fewer people purchasing National Lottery tickets (1999 47%, 2007 33%), nearly all activities covered in both surveys showed a small reduction, or no change, in levels of participation over this period.

If National Lottery Draw only players are excluded from the comparison between survey years, then the reduction in the proportion of past week gamblers since 1999 is somewhat smaller, but still significant (1999 25%, 2007 18%).

Looking at past week gamblers only, there was very little change during this period, with participation in most activities at a similar level in 2007 as in 1999. The main exceptions were a decline in participation in two activities: the National Lottery Draw (from 89% in 1999 to 82% in 2007) and the football pools (from 11% to 5%).

Table 2.9 Comparison of gambling activities in past week in 1999 and 2007

All and past week gamblers in 1999 and 2007

Gambling activity	All	Past week gamblers		
	1999 %	2007 %	1999 %	2007 %
Another lottery	4	3	7	8
Scratchcards	8	6	16	15
Football pools	6	2	11	5
Bingo	4	3	7	7
Slot machines	6	4	11	9

continued

Table 2.9 continued

All and past week gamblers in 1999 and 2007

Gambling activity	All		Past we	ek gamblers
	1999	2007	1999	2007
	%	%	%	%
Horse races ^a	3	2	6	6
Dog races ^a	1	1	2	2
Betting with a bookmaker (other than on horse or dog races) ^a Fixed odds betting terminals	1 n.a.	1 1	2 n.a.	3 2
Online betting with a bookmaker on any event or sport Online gambling	n.a. *	1 1	n.a. *	2 2
Table games in a casino	*	1	1	1
Betting exchange	n.a.	*	n.a.	1
Spread betting	1	*	2	*
Private betting (e.g. with friends, colleagues)	4	3	7	6
Another gambling activity	-	*	-	*
Any gambling activity in past week	53	41	100	100
Bases (weighted):	7700	8996	4088	3649
Bases (unweighted):	7680	8996	4108	3749

The columns total more than 100% as more than one activity could be chosen. n.a. = activity not asked in 1999.

2.3.5 Where or how people gamble

Past week gamblers were asked to identify, from a list of possibilities, the venue (or method) of their participation for each activity they did in the past seven days. The responses are shown in Tables 2.10a for men, 2.10b for women and 2.10c overall.

Not surprisingly, there are large differences according to type of activity, as the venues activities are available in vary by type. Thus, newsagents were the most common outlet for three of the activities: purchasing National Lottery tickets (85%), scratchcards (73%) and other lottery tickets (41%). A betting shop was the overwhelming choice for betting with a bookmaker (84%), and betting on horse or dog races (83% and 71% respectively). The next most common venue for betting on dog races was at the track (26%), while for horse races it was over the phone (11%). Slot machines were most often played in a pub (64%), while bingo was most frequently played in a bingo hall (61%). Playing football pools was equally divided between a pools collector (25%), by post (24%) or at a betting shop (24%). Private betting was also done in a range of venues including the respondents' own home (32%), someone else's home (31%), at a pub (21%) or at work (19%).

Most activities showed little variation between men and women, especially National Lottery tickets, scratchcards or other lotteries; but some activities showed considerable variation: e.g. whereas 71% of women played bingo in a bingo hall, only 39% of men did; men were more likely to play in a social club (54%, compared with 30% of women).

^aThese activities do not include any bets made online.

Table 2.10a Where participated in gambling, men, by type of gambling activity

Past week gamblers: men

Location or method of gambling	Gambling activity									
	% National Lottery Draw	% Another lottery	% Scratchcards	% Football pools	% Bingo	% Slot machines	% Horse racesª	% Dog races⁴	% Other betting with a bookmaker ^a	% Private betting
Men		-							1	
At a newsagent, shop, post office	82	45	73	10						
At a large supermarket			26							
As part of a syndicate	16									
On the internet (online)	7	4	2	10						
At a betting shop				28		8	85	[82]	85	
At a pub		1			6	69				24
At a bingo hall					39	4				
At a social club					54	10				*
At the race track							7	[15]		
At a fast food shop/cafe						4				
At or through place of work				4		2				19
At an amusement arcade/centre					3	12				
From a friend, family, colleague		21								
Through a pools collector				22						
By post				26						
At a sports ground or centre						2			8	7
At own home										26
At someone else's home										31
Through a mobile phone/telephone	*	3		1			12	[2]	5	1
Through interactive TV	*	-								
At a casino						2				
At a fairground					-	*				
At a church					1					
At a railway station						1				
At a minicab office						1				
At a motorway service/petrol station	1		4			1				
Direct debit/standing order	*	5		1						
Hospice		1								
Email										1
Elsewhere	1	24	2	4	3	1	2	-	2	5
Bases (weighted):	1548	134	257	134	76	247	185	51	80	181
Bases (unweighted):	1586	139	248	136	81	228	192	45	76	164

The columns add to more than 100% as more than one response could be given.

^aThese activities do not include any bets made online.

Table 2.10b Where participated in gambling, women, by type of gambling activity

Past week gamblers: women		la l!-a a								
Location or method of gambling	1	mbiing	activit	y						
	% National Lottery Draw	% Another lottery	% Scratchcards	% Football pools	% Bingo	% Slot machines	% Horse races ^a	% Dog races ^a	% Other betting with a bookmaker⁴	% Private betting
Women		-	_	-			-		-	
At a newsagent, shop, post office At a large supermarket As part of a syndicate	87 16	38	72 28	[26]						
On the internet (online)	3	2	1	[2]						
At a betting shop At a pub At a bingo hall At a social club	3	۷	'	[7]	1 71 30	7 45 18 9	[77]	b	b	13
At the race track							[13]	b		
At a fast food shop/cafe At or through place of work At an amusement arcade/centre				[3]	_	8 2 10				17
From a friend, family, colleague Through a pools collector By post At a sports ground or centre		15		[38] [17]		-			b	_
At own home										53
At someone else's home										31
Through a mobile phone/telephone Through interactive TV At a casino	*	1 -		[3]		7	[10]	b	b	2
At a fairground					-	1				
At a church		1			1					
At a railway station						-				
At a minicab office						1				
At a motorway service/petrol station			1			1				
Direct debit/standing order Hospice Email	*	11 2		[-]						
Elsewhere	1	35	1	[10]	2	1	-	_	_	1
	•		•	[]	-	•				•
Bases (weighted):	1436	158	277	34	180	72	39	11	23	56
Bases (unweighted):	1524	163	288	38	193	74	40	12	26	55

The columns add to more than 100% as more than one response could be given.

^aThese activities do not include any bets made online.

^bFigures not shown as unweighted base is less than 30.

Table 2.10c Where participated in gambling, all, by type of gambling activity

Past week gamblers: all Location or method of gambling **Gambling activity** % National Lottery Draw % Other betting with a bookmaker^b % Another lottery % Private betting Slot machines % Football pools Scratchcards Horse races^b % Dog races^b Alla At a newsagent, shop, post office At a large supermarket As part of a syndicate On the internet (online) At a betting shop At a pub At a bingo hall At a social club At the race track At a fast food shop/cafe At or through place of work At an amusement arcade/centre From a friend, family, colleague Through a pools collector By post At a sports ground or centre At own home At someone else's home Through a mobile phone/telephone Through interactive TV At a casino At a fairground At a church At a railway station At a minicab office At a motorway service/petrol station Direct debit/standing order Hospice Email Elsewhere Bases (weighted): Bases (unweighted):

The columns add to more than 100% as more than one response could be given.

^aInformation for all includes those for whom sex was not known.

^bThese activities do not include any bets made online.

2.4 Expenditure

2.4.1 Introduction

Although a number of researchers in the field have stated that data about expenditure on gambling is important to collect when doing prevalence surveys⁵ ⁶, getting accurate and reliable data is not easy to do. The question 'How much do you spend on gambling?' appears simple to answer but can be interpreted in many different ways. For instance, consider the following scenario used by Blaszczynski et al⁷:

"You recently decided to gamble \$120 on your favourite form of gambling. You initially won \$60 but then following a bad run of luck, lost \$100. Feeling tired, you decided to leave and return home."

When participants (n=181) in Blaszczynski and colleagues' study were given the scenario above and asked "How much did you spend on gambling?", they made a number of different interpretations. There are four basic interpretations that 'spend' could relate to (adapted from Sproston et al⁸):

- (1) Stake: This refers to the amount staked (i.e. the amount bet on an individual event, such as a football match, a fixed odds betting terminal or a lottery ticket).
- (2) *Outlay:* This refers to the sum of multiple bets risked during a whole gambling session.
- (3) *Turnover:* This refers to the total amount gambled, including any re-invested winnings.
- (4) Net expenditure: This refers to the amount gambled minus any winnings.

In the study by Blaszczynski et al, approximately two-thirds of the participants (64%), answered \$40 (i.e. net expenditure) in the scenario above \$120-(\$120+\$60-\$100). Around one-sixth of the participants (17%) answered \$120 (i.e. stake). A small number of participants answered \$160. Here the participants reasoned the spend was equal to \$120+\$100-\$60. Alternatively some answered \$100 which equated to the amount lost. Finally, a very small number of participants (n=5) answered \$180 (i.e. turnover), where the participants reasoned that spend was equal to investment plus winnings. There are also issues surrounding what constitutes an individual session (especially if the person gambling goes to the toilet or has a snack or drink between or during a gambling episode). What this simple experiment shows is that questions relating to expenditure need to be very precise.

In the 1999 prevalence survey, ambiguity was minimised by separating gambling activities into two groups. Explicit instructions were given on how calculations should be made. One group of activities' spend was calculated in terms of stake (e.g. lottery tickets, bingo, football pools). The second group of activities was calculated in terms of net expenditure (e.g. fruit machines, sports betting, casino table games). In the 1999 study, no data were collected relating to the amount won. This made it possible to calculate the average loss but not the average net expenditure. To avoid recall error, data were only collected for gambling activities over the previous seven days. In addition, all participants had to say whether the expenditure was typical of an average week.

Over two-thirds of respondents said their spending in the week of the survey was typical.

Results in the previous prevalence study showed that of the four 'stake' activities, mean stake for bingo in the past week (£7.20) was over twice as high as the stake for National Lottery Draw, other lotteries, and the football pools. The mean past week stake for the other activities were £2.80 (NL), £3 (other lotteries), and £3 (football pools). The mean past week stake among men was higher than women in all activities (bar bingo).

The data relating to net expenditure activities were varied but tended to show that for the vast majority, total amounts lost in the last week were relatively small - £10 or less. Data also showed that a large proportion of past week gamblers in each activity claimed to have won or broke-even in the previous seven days. This ranged from 23% of those betting with a bookmaker (excluding dog and horse race bets) to 49% of those who engaged in spread betting. Men were more likely than women to say they won or broke-even.

Blaszczynski et al argued that the most relevant estimate of gambling expenditure is net expenditure, as it reflects the actual amount of money the gambler has gambled, and also represents the true cost of gambling to the individual. Therefore, in the 2007 prevalence survey, participants who had spent money on gambling in the past seven days were first asked for each activity that they had gambled on. "Overall, in the last seven days did you win or lose money?". To this particular question the gamblers could either answer that they lost, won, broke even, or were still awaiting the result. If gamblers had lost money they were asked how much, and were asked to tick one of six boxes indicating the total amount lost. Similarly, if gamblers had won money they were asked how much, and could tick one of six boxes indicating the total amount won. These questions were subjected to extensive cognitive testing and piloting (see Appendix 2). As with the previous survey, they were also asked to what extent the previous week's gambling activity had been typical.

2.4.2 Past week net expenditure

Table 2.11 shows the mean expenditure for each gambling activity in the last seven days. Participants reported five gambling activities on which they claimed there was an overall net loss over the past week, all of which were relatively small. These were weekly net losses on the National Lottery Draw (£1.58), other lotteries (£1.73), the football pools (£1.91), dog race betting (38 pence) and non-dog/horse race betting (36 pence). Participants reported nine gambling activities on which they claimed there was an overall net win over the past week. These were scratchcards (71 pence), bingo (91 pence), slot machines (£1.13), horse races (£1.49), fixed odds betting terminals (£3.27), casino table games (£17.22), online betting with a bookmaker (£4.89), online gambling (£10.72), and private betting with friends (£3.42). In general, the smaller the number of participants gambling on the activity, the greater the overall net win claimed.

2.4.3 Past week net expenditure by gender

The results showed some gender differences in net expenditure for a couple of activities. Male gamblers were more likely than female gamblers to lose overall on the National Lottery Draw (£1.81 vs. £1.33) and female gamblers were more likely than male gamblers to win overall on bingo (£2.75 win vs. £3.32 loss). Other differences in expenditure by gender were not significant. There were a number of gambling activities that were almost male-only, where no comparison could be made with female gamblers. On most of these activities (betting on horse races, fixed odds betting terminals, casino table games, online betting with a bookmaker, and online gambling), male gamblers claimed to have overall net wins in the past week (89 pence, £1.42, £22.38, £5.97 and £9.94 respectively). The two almost male-only gambling activities where there were net losses in the past week were dog races (6 pence) and non-dog/horse race betting (43 pence).

Table 2.11 Mean net expenditure for each activity in the last seven days, by sex Past week gamblers

Mean net expenditure for each activity	Sex					
	Men (£)	Women (£)	Total ^c (£)			
National Lottery Draw	-1.81	-1.33	-1.58			
Standard error of the mean	0.18	0.15	0.13			
Another lottery	-2.22	-1.29	-1.73			
Standard error of the mean	0.46	0.51	0.35			
Scratchcards	1.29	0.18	0.71			
Standard error of the mean	0.63	0.40	0.38			
Football pools	-1.87	[-2.10]	-1.91			
Standard error of the mean	0.74	[1.41]	0.67			
Bingo	-3.32	2.75	0.91			
Standard error of the mean	1.79	1.63	1.32			
Slot machines	0.56	3.17	1.13			
Standard error of the mean	1.12	2.19	0.95			
Horse races ^b	0.89	[4.26]	1.49			
Standard error of the mean	1.83	[2.72]	1.63			
Dog races⁵	[-0.06]	а	-0.38			
Standard error of the mean	[3.98]		3.16			
Betting with a bookmaker (other than on horse or dog races) ^b	-0.43	а	-0.36			
Standard error of the mean	2.43		1.99			
Fixed odds betting terminals	1.42	а	3.27			
Standard error of the mean	3.90		3.40			
Online betting with a bookmaker on any event or sport	5.97	a	4.89			
Standard error of the mean	3.01		2.65			
Online gambling	[9.94]	a	10.72			
Standard error of the mean	[3.55]		3.55			
Table games in a casino	[22.38]	а	[17.22]			
Standard error of the mean	[14.48]		[14.04]			
Betting exchange	а	а	а			
Standard error of the mean						
Spread betting	а	а	а			
Standard error of the mean						
Private betting (e.g. with friends, colleagues)	3.62	[2.75]	3.42			
Standard error of the mean	1.35	[1.65]	1.25			
Another gambling activity	а	а	а			
Standard error of the mean						
Bases (weighted):						
National Lottery Draw	1509	1400	2909			
Another lottery	130	143	273			
Scratchcards	243	263	507			
Football pools	131	32	163			
Bingo	75	173	248			

continued

Table 2.11 continued

Past week gamblers

Mean net expenditure for each activity	Sex					
	Men (£)	Women (£)	Total° (£)			
Slot machines	246	68	314			
Horse races ^b	176	38	213			
Dog races⁵	46	11	58			
Betting with a bookmaker (other than on horse or dog races) ^b	68	22	90			
Fixed odds betting terminals	64	9	72			
Online betting with a bookmaker on any event or sport	64	6	70			
Online gambling	57	19	76			
Table games in a casino	44	3	47			
Betting exchange	21	2	24			
Spread betting	4	1	5			
Private betting (e.g. with friends, colleagues)	162	49	211			
Another gambling activity	2	2	4			
Bases (unweighted):						
National Lottery Draw	1546	1485	3031			
Another lottery	135	147	282			
Scratchcards	234	274	508			
Football pools	133	36	169			
Bingo	80	186	266			
Slot machines	227	69	296			
Horse races ^b	182	38	220			
Dog races ^b	41	12	53			
Betting with a bookmaker (other than on horse or dog races)	67	25	92			
Fixed odds betting terminals	64	9	59			
Online betting with a bookmaker on any event or sport	64	6	70			
Online gambling	49	18	67			
Table games in a casino	34	3	37			
Betting exchange	19	2	21			
Spread betting	4	1	5			
Private betting (e.g. with friends, colleagues)	148	48	196			
Another gambling activity	2	2	4			

^a Figures not shown as unweighted base size is less than 30.

Table 2.12 shows the extent to which the previous week's gambling activity was typical. Almost four-fifths of the participants (78%) reported that it was a typical week, whereas most of the remaining participants (20%) said they usually gambled less.

^b These activities do not include any bets made online.

^c The total column includes those for whom sex was not known.

Table 2.12 Whether expenditure on gambling in last seven days was typical, by sex Past week gamblers

Typical week	Sex					
	Men %	Women %	Total ^a %			
Would usually gamble more money in a week	3	1	2			
Would usually gamble less money in a week	19	20	20			
Would usually gamble about the same amount of money a week	77	79	78			
Bases (weighted):	1746	1527	3274			
Bases (unweighted):	1749	1612	3361			

^a The total column includes those for whom sex was not known.

2.4.4 Discussion

The results relating to net expenditure were interesting and perhaps somewhat predictable based on what has been reported in previous literature. Gamblers appeared to over-estimate how much they had won in the previous week, meaning that net expenditure was 'positive' in nine gambling activities (i.e. on these activities, gamblers claimed to have won more than they had lost). Similarly in the previous BGPS, though spend was measured differently, a large proportion of past week gamblers in each activity claimed to have won or broke-even in the previous seven days.

Given that all sectors of the gaming industry make 'considerable profits', the results in this study clearly show that many gamblers do not appear to be making a realistic assessment of their previous week's spending. However, this does not necessarily mean that they are 'lying', as there is a lot of evidence that gamblers over-estimate winnings and under-estimate losses, due to cognitive biases and heuristics like the 'fixation on absolute frequency bias' (using absolute rather than relative frequency as measure of success), concrete information bias (when concrete information such as that based on vivid memories or conspicuous incidents dominates abstract information such as computations or statistical data), and/or flexible attributions (the tendency to attribute successes to one's own skill and failures to other influences)^{9 10}. In short, winning experiences tend to be recalled far more easily than losses (unless the losses are very substantial and have a major detrimental effect on the day-to-day functioning of the individual).

Remembering wins and discounting losses is a consistent finding in the gambling literature^{10 11}. This is more likely to occur on those gambling activities that are played several days a week, rather than those activities that are engaged in once a week such as the National Lottery Draw and the football pools. It is in these latter activities that participants are more likely to have accurate recall of wins and losses, as the weekly outlay is usually identical every week (e.g. buying two lottery tickets every week or being part of a lottery syndicate). The results reported here do indeed seem to indicate this is the case, with activities such as the National Lottery Draw, and the football pools, reporting weekly net losses.

Furthermore, there are other more general effects (like social desirability) that may be skewing the results in a more socially positive direction. There is also the general observation that people tend to overestimate positive outcomes and underestimate negative ones which has been applied to the psychology of gambling¹².

Most of the positive net expenditures were fairly modest, but on those gambling activities where skill has the potential to be used, the net expenditures were much greater (e.g. online poker as part of online gambling, blackjack as part of casino table games). The results showing that the smaller the number of participants gambling on the particular activity, the greater the overall net win claimed, highlights the fact that individual variability was likely to be more pronounced among lower numbers of participants. It is also likely that some of the activities do indeed include gamblers who genuinely win more than they lose (online poker being a good example). However, the number of people doing this regularly is likely to be relatively small, as there are always more losers than winners in such activities.

The results also showed gender differences in net expenditure for a couple of activities. However, it is not clear why this is the case. There is no logical reason why male gamblers were more likely than female gamblers to lose overall on pure chance activities like the National Lottery Draw and other lottery draws; or that female gamblers were more likely than male gamblers to win overall on bingo. It is likely that these gender differences are due to chance, or a differential reporting bias.

The results also highlighted that there were a number of gambling activities that were almost male-only, and that no comparison could be made with female gamblers. This is perhaps unsurprising given that most of the gambling activities are traditionally male-dominated (dog race gambling, sports gambling, fixed odds betting terminals, casino table games, online betting with a bookmaker, and online gambling). The fact that almost all of these activities had a positive net expenditure was interesting, but not totally surprising. The males here may well have "exaggerated" the amounts that they had won through the cognitive distortions and heuristics that have been consistently identified in the literature.

The results indicating whether the previous week's gambling activity was typical were somewhat similar to the results found in the previous survey. Almost four-fifths of the participants in this survey (78%) reported that their expenditure was a typical week, compared with 72% in the 1999 survey. In the 1999 survey, 11% claimed they usually spent less in a typical week, compared to 20% in the current study. There was a difference in those who said they gambled more in a typical week, with only 2% in the current study saying they usually gambled more compared with 9% in the previous study. Again, there may have been some social desirability factors affecting the reporting, but the results are broadly similar in magnitude to the previous study.

Endnotes:

- ¹ For each of the 16 types of gambling activity asked about, for analysis purposes, respondents were counted as participants if they ticked one of the eight boxes giving a frequency for participation in the last 12 months (the eight options ranged from the minimum of 1-5 times a year to the maximum of every day/almost every day). Non-participants included those who ticked 'not at all in the last 12 months' and those who left the question blank for an individual activity. Only the 25 respondents who did not answer any of the 16 activities at question A1 were counted as missing. Thus, participation rates for all sixteen activities are based on the full sample of respondents (aside from those 25) aged 16 and over (even though the legal minimum age for participation in most of the gambling activities is 18 (except for the National Lottery Draw and some types of slot machines).
- ² If the individuals in the 2007 survey whose only bet with a bookmaker in the past 12 months was on the World Cup were excluded, then the increase in the proportion who bet on other events with a bookmaker would be smaller, from 3% to 5%.
- ³ This assumes that, if the National Lottery Draw was not available, these individuals would not participate in any other gambling activity.
- ⁴ Asking where the activity was done did not apply to several of the activities: fixed odds betting terminals, table games in a casino, online gambling, online betting with a bookmaker, betting exchange and spread betting. For the activities other than fixed odds betting terminals, respondents were instead asked what games they had played/activities they had bet on in the past seven days. For online gambling or betting with a bookmaker, they were asked whether they had bet online through a computer, a mobile phone or an interactive TV.
- ⁵ Walker, M.B. & Dickerson, M.G. (1996). *The prevalence of problem gambling: A critical analysis*. Journal of Gambling Studies, **12**, 233-249.
- ⁶ Ronnberg, S., Volberg, R.A., Abbott, M.W., Moore, W.L., Andren, A., Munck, I., Jonsson, J., Nilsson, T. & Svensson, O. (1999). *Gambling and problem gambling Sweden: report No.2 of the National Institute of Public Health Series on Gambling*.
- ⁷ Blaszczynski, A., Dumlao, V. & Lange, M. (1997). *How much do you spend gambling? Ambiguities in survey question items*. Journal of Gambling Studies, **13**, 237-252.
- ⁸ Sproston K, Erens B & Orford J (2000) *Gambling Behaviour in Britain, Results from the British Gambling Prevalence Survey.* London: National Centre for Social Research.
- ⁹ Wagenaar, W. (1988). Paradoxes of Gambling Behaviour. Hove: Lawrence Erlbaum Associates.
- ¹⁰ Griffiths, M.D. (1994). *The role of cognitive bias and skill in fruit machine gambling*. British Journal of Psychology, **85**, 351-369.
- ¹¹ Gilovich, T. (1983). *Biased evaluation and persistence in gambling*. Journal of Personality and Social Psychology, **44**, 1110-1126.
- ¹² Griffiths, M.D. & Wood, R.T.A. (2001). *The psychology of lottery gambling*. International Gambling Studies, **1**, 27-44.

3 PROFILE OF GAMBLERS

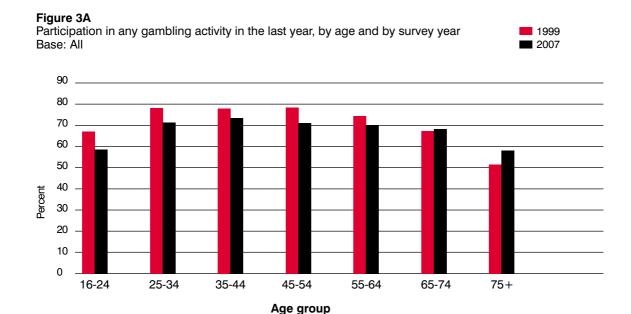
3.1 Introduction

This chapter examines differences in participation in gambling in the past year by a number of socio-demographic, health and lifestyle characteristics. Analyses for each sub-group focus on differences in the overall participation in gambling in the past year, participation in each type of activity, and the number of activities undertaken. The definition of participation and the categories of gambling are the same as in chapter 2.

3.2 Past year gambling by age

The prevalence of participation in gambling appears to be related to the age of respondents. Table 3.1 shows the proportion of respondents in each age group who had participated in each of the 16 gambling activities in the past year. Overall, gambling prevalence in the past year was lowest in the youngest and oldest age groups: 58% for those aged 16-24 and 57% for those aged 75 and over. Prevalence was highest among those aged 35-44 (73%). Similar patterns by age were observed in 1999.

Compared with prevalence rates from 1999, overall participation in gambling in each age group, except the two oldest, had decreased. For example, the proportion of those aged 25-34 who had gambled in the last year decreased from 78% in 1999 to 71% in 2007.



For many activities, prevalence was greatest among the younger age groups and decreased with advancing age. Scratchcards, slot machines, horse races, dog races, other betting with a bookmaker, online gambling, table games in a casino and private betting were all most popular among those aged 25-34, and then decreased with age. For example, with slot machines, the prevalence fell from 26% for those aged 16-34, to 2% of those aged 75 and over. Similarly, for scratchcards the prevalence fell from 30% of those aged 25-34 to 10% for those aged 75 and over. For the National Lottery Draw and other lotteries, the opposite pattern was true with prevalence being lowest among those aged 16-24.

Table 3.1 also shows the number of gambling activities participated in within the past 12 months. Despite having a large number of non-participants, those aged 16-24 who had gambled in the past year tended to take part in a greater number of activities: 20% took part in four or more activities in the last year. The only age group to have estimates in excess of this were those aged 25-34, where 24% had participated in four or more activities, and 10% had gambled on six or more different activities, in the past year.

Table 3.1 Participation in gambling activities within the past year, by age AII

	Age							
	16-24	25-34	35-44	45-54	55-64	65-74	75+	Total
	%	%	%	%	%	%	%	%
Type of gambling activity								
National Lottery Draw	39	59	65	63	62	58	47	57
Another lottery	8	12	12	12	13	12	12	12
Scratchcards	26	30	22	19	13	12	10	20
Football pools	5	3	2	4	3	3	4	3
Bingo	7	7	7	7	7	7	7	7
Slot machines	26	26	16	12	6	4	2	14
Horse races ^b	12	22	21	19	16	13	10	17
Dog races ^b	6	9	6	4	4	2	1	5
Betting with a bookmaker (other than on horse or dog races) ^b	7	11	8	7	3	2	1	6
Fixed odds betting terminals	7	5	2	1	1	0	0	3
Online betting with a bookmaker on any event or sport	5	8	5	3	2	1	1	4
Online gambling	6	5	3	1	1	0	0	3
Table games in a casino	7	8	4	3	1	1	0	4
Betting exchange	2	2	1	1	0	0	0	1
Spread betting	1	2	1	0	0	0	0	1
Private betting (e.g. with friends,								
colleagues)	21	17	10	8	5	5	3	10
Another gambling activity	1	0	1	1	0	0	0	0
Any gambling activity in past year 2007	58	71	73	71	70	68	57	68
Any gambling activity in past year 1999	66	78	77	78	74	66	52	72

continued

49

Table 3.1 continued

ΑII

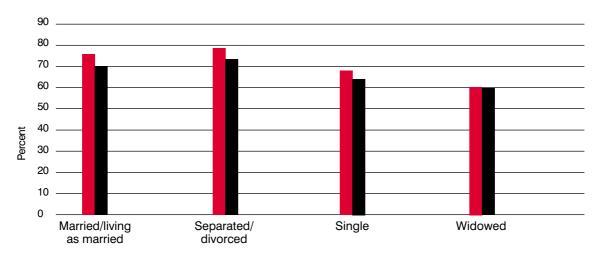
	Age									
	16-24	25-34	35-44	45-54	55-64	65-74	75+	Total		
	%	%	%	%	%	%	%	%		
Number of gambling activities										
None	42	29	27	29	30	32	43	32		
One	16	18	27	28	33	37	31	26		
Two	12	18	17	18	19	19	16	17		
Three	10	12	12	12	10	6	6	10		
Four	6	9	7	6	4	3	2	6		
Five	4	5	4	3	1	2	0	3		
Six or more	9	10	5	4	2	1	1	5		
Bases (weighted):										
2007	1286	1462	1731	1430	1338	915	793	8972		
1999	1045	1503	1386	1267	960	812	709	7700		
Bases (unweighted):										
2007	1032	1324	1719	1518	1566	1020	780	8978		
1999	931	1374	1494	1384	1030	848	601	7680		

^a The total column includes those for whom age was not known.

3.3 Past year gambling by marital status

Gambling in the past 12 months was found to be related to marital status, although this is likely to be a reflection of the relationship between age and marital status. As in 1999, married and divorced/separated respondents were more likely than widowed respondents to have gambled in the past year (70% of married, 72% of divorced/separated and 60% of widowed respondents).

Figure 3B
Participation in any gambling activity in the last year, by marital status and survey year
Base: All
■ 1999
■ 2007



Marital status

^b These activities do not include any bets made online.

This is likely to be due to the fact that widowed respondents are older, on average, and older people are less likely to gamble.

For those who were single, a relatively high proportion had not gambled at all in the past year (36%), but of those who had, a greater number had participated in six or more activities (8% compared with 5% overall). Compared with 1999, gambling prevalence had decreased significantly among those who were married/living as married and separated/divorced.

When looking at the individual activities, single respondents were more likely to participate in slot machines, betting with a bookmaker, fixed odds betting terminals, online betting with a bookmaker, online gambling, table games in a casino and private betting, than those who were married, divorced/separated or widowed. For example, 21% of single adults had used slot machines in the last year, compared with 14% of respondents overall.

Participation in the National Lottery Draw was higher among those who were married (61%) or divorced/separated (63%) than among those who were single (49%) or widowed (52%). Respondents who were divorced/separated (10%) were more likely to participate in bingo than those who were single (7%) or married (7%). Participation in spread betting, football pools and betting exchanges did not appear to vary by marital status.

Table 3.2 Participation in gambling activities in the past year, by marital status ΔII

	Marital status				
	Married/living as married	Separated/ divorced	Single	Widowed	Totalª
	%	%	%	%	%
Type of gambling activity					
National Lottery Draw	61	63	49	52	57
Another lottery	13	12	10	9	12
Scratchcards	19	22	23	11	20
Football pools	3	3	4	3	3
Bingo	7	10	7	9	7
Slot machines	12	13	21	4	14
Horse races⁵	18	19	17	11	17
Dog races⁵	5	6	7	2	5
Betting with a bookmaker (other than on horse or dog races) ^b	6	5	8	2	6
Fixed odds betting terminals	2	3	5	1	3
Online betting with a bookmaker					
on any event or sport	3	3	6	1	4
Online gambling	2	2	5	0	3
Table games in a casino	3	3	7	1	4
Betting exchange	1	1	2	-	1

continued

Table 3.2 continued
All

N	larital status				
N	Married/living as married	Separated/ divorced	Single	Widowed	Total
	%	%	%	%	%
Type of gambling activity					
Spread betting	1	1	1	-	1
Private betting (e.g. with friends, colleagues)	8	12	16	3	10
Another gambling activity	0	1	1	-	0
Any gambling activity in past year 20	07 70	72	64	60	68
Any gambling activity in past year 19	99 75	78	67	60	72
Number of gambling activities					
None	30	28	36	40	32
One	29	26	21	31	26
Two	18	19	15	17	17
Three	11	13	10	6	10
Four	6	6	7	3	6
Five	3	4	4	1	3
Six or more	4	5	8	1	5
Bases (weighted):					
2007	4775	690	2587	653	8972
1999	4783	527	1611	643	7700
Bases (unweighted):					
2007	4976	735	2327	671	8978
1999	4915	547	1492	594	7680

^a The total column includes those for whom marital status was not known.

3.4 Past year gambling by ethnic group

Prevalence of gambling was significantly higher among respondents whose ethnic group was White: 70% of White respondents had gambled in the past year compared with 39% of Black or Black British, 45% of Asian or Asian British, and 51% from 'other' ethnic groups. White respondents were also more likely to have participated in two or more different gambling activities in the past year: 43% of those from White ethnic groups had participated in two or more activities in the past year, compared with 30% for those from 'other' ethnic groups, 25% for Asian or Asian British and 18% for Black or Black British. This is an interesting finding given the fact that respondents from non-White groups were more likely to be problem gamblers than White respondents (see chapter 5).

^b These activities do not include any bets made online.

Looking at the individual activities, White respondents were more likely to have taken part in the National Lottery Draw, bingo and horse racing than the other ethnic groups. For example, 59% of White respondents participated in the National Lottery Draw, compared with 32% from Black/Black British origin. White, and 'other' ethnic groups, were also more likely than people from Black or Asian groups to participate in private betting, scratchcards, slot machines and betting with a bookmaker.

Table 3.3 Participation in gambling activities in the past year, by ethnic group AII

	Ethnic g	roup			
	White %	Black %	Asian %	Other %	Total ^a
Type of gambling activity					
National Lottery Draw	59	32	40	42	57
Another lottery	12	6	8	7	12
Scratchcards	20	12	13	19	20
Football pools	3	2	3	3	3
Bingo	8	1	4	4	7
Slot machines	15	6	8	13	14
Horse races ^b	18	3	6	8	17
Dog races ^b	5	2	3	3	5
Betting with a bookmaker (other than on horse or dog races) ^b	6	2	3	6	6
Fixed odds betting terminals	3	2	4	2	3
Online betting with a bookmaker on any event or	sport 4	1	2	2	4
Online gambling	3	1	2	3	3
Table games in a casino	4	2	1	4	4
Betting exchange	1	0	0	1	1
Spread betting	1	1	2	1	1
Private betting (e.g. with friends, colleagues)	11	5	3	11	10
Another gambling activity	1	-	0	1	0
Any gambling activity in past year	70	39	45	51	68
Number of gambling activities					
None	30	61	55	49	32
One	27	21	20	20	26
Two	18	9	14	12	17
Three	11	5	5	5	10
Four	6	2	0	5	6
Five	3	1	3	6	3
Six or more	5	2	3	2	5
Bases (weighted):	8060	327	211	236	8972
Bases (unweighted):	8180	281	182	208	8978

^a The total column includes those for whom ethnic group was not known.

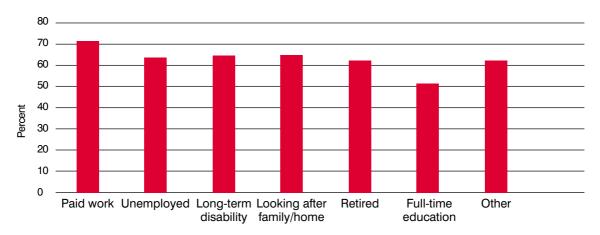
^b These activities do not include any bets made online.

3.5 Past year gambling by economic activity of household reference person

Information about the main economic activity of the household reference person (HRP) was collected from all participating households. The HRP is defined as the person in whose name the accommodation is owned or rented, or, if the household is owned or rented in more than one person's name, the person with the highest personal income¹.

This section examines respondents' participation in gambling in the past year by the economic activity of the HRP. Participation in any gambling activity in the last year was highest among those who resided in households where the HRP was in paid employment (71%), and lowest for those where the HRP was in full time education (51%).

Figure 3CParticipation in gambling in the past year by main economic status of household reference person (HRP) Base: All



Main economic status of HRP

Overall, those from paid work households, and full time education households, reported gambling on a similar number of activities in the past year, with 9% of those from full time education households and 6% of those from paid work households participating in six or more activities in the last year. Respondents from households where the HRP was retired gambled on significantly fewer activities than those from all other groups (with the exception of those within the 'other' category). Just 1% of those from retired households had gambled on six or more activities in the past year.

Table 3.4 Participation in gambling activities within the past year, by economic activity of the household reference person (HRP)

ΑII

	Economi	c activit	y of HRI)				
	Paid work	Unemployed	Long-term disability	Looking after family/ home	Retired	Full-time education	Other	Total ^a
	%	%	%	%	%	%	%	%
Type of gambling activity								
National Lottery Draw	60	50	56	53	53	28	53	57
Another lottery	12	12	12	10	13	7	14	12
Scratchcards	22	29	20	31	11	16	28	20
Football pools	3	6	4	2	4	5	1	3
Bingo	7	4	11	11	7	8	8	7
Slot machines	18	18	13	18	5	14	10	14
Horse races ^b	20	17	17	13	12	8	10	17
Dog races ^b	6	4	3	4	2	5	3	5
Betting with a bookmaker (other that on horse or dog races) ^b	n 8	7	5	7	2	6	4	6
Fixed odds betting terminals	3	4	4	3	1	7	5	3
Online betting with a bookmaker	Ū	•	•	J	•	•	Ü	Ü
on any event or sport	5	5	3	1	1	8	4	4
Online gambling	3	5	2	2	0	10	2	3
Table games in a casino	5	2	4	2	1	12	1	4
Betting exchange	1	3	2	1	0	3	-	1
Spread betting	1	3	1	-	0	2	1	1
Private betting (e.g. with friends,								
colleagues)	12	16	10	11	5	18	8	10
Another gambling activity	1	-	-	0	0	2	1	0
Any gambling activity in past year	71	63	64	64	62	51	62	68
Number of gambling activities								
None	29	37	36	36	38	49	38	32
One	26	21	21	21	32	19	20	26
Two	17	14	19	18	17	8	20	17
Three	12	10	11	9	7	9	9	10
Four	7	7	5	5	3	3	6	6
Five	4	3	2	5	1	2	5	3
Six or more	6	7	6	6	1	9	3	5
Bases (weighted):	5706	114	277	380	2033	204	104	8972
Bases (unweighted):	5613	108	296	364	2189	151	106	8978

^a The total column includes those for whom economic activity was not known.

^b These activities do not include any bets made online.

3.6 Past year gambling by NS-SEC of household reference person

NS-SEC is a classification of social position that has similarities to the Registrar General's Social Class. Respondents are assigned to an NS-SEC category based on the current or former occupation of the household reference person. Overall, past year gambling prevalence was highest for those from lower supervisory and technical households (75%), and lowest for those from managerial and professional households and intermediate households (both 67%). This pattern was also observed among the more prevalent individual activities with participation in the National Lottery Draw being some seven percentage points (pp) higher among those from semiroutine households (61%) and 12 pp higher among those from lower supervisory and technical households (66%) than managerial and professional households (54%). For scratchcards, significantly more respondents from semi-routine and routine households (24% compared with 17%). Likewise, playing bingo was over twice as prevalent among those from semi-routine and routine and lower supervisory households (10%) than managerial and professional households (4%).

However, for some activities, prevalence was higher among managerial and professional households. These included private betting (12% vs 9%) table games in a casino and online betting (both 5% managerial and professional; 3% semi-routine and routine).

Interestingly, although there were marked associations between participation in certain gambling activities and NS-SEC, there was no association between the number of activities that respondents participated in and NS-SEC status. 5% of those from both managerial and professional households and semi-routine and routine households participated in six or more activities in the past year.

Table 3.5 Participation in gambling activities in the past year, by NS-SEC of household reference person (HRP)

ΑII

	NS-SEC of HRP						
	Managerial & professional	Intermediate	Small employers & own account workers	Lower supervisory & technical	Semi-routine & routine	Total ^a	
	%	%	%	%	%	%	
Type of gambling activity							
National Lottery Draw	54	56	58	66	61	57	
Another lottery	13	14	11	13	9	12	
Scratchcards	17	20	18	18	24	20	
Football pools	3	4	4	5	3	3	
Bingo	4	8	6	10	10	7	
Slot machines	14	15	16	15	15	14	
Horse races ^b	19	17	18	17	15	17	
Dog races ^b	6	6	6	4	4	5	
Betting with a bookmaker (other than on horse or dog races) ^b	6	7	7	8	6	6	
Fixed odds betting terminals	2	2	4	3	3	3	
Online betting with a bookmaker	_	•	_	•	•		
on any event or sport	5	3	5	2	3	4	
Online gambling	3	2	4	2	2	3	
Table games in a casino	5	4	4	2	3	4	
Betting exchange	1	1	3	1	1	1	
Spread betting	1	1	1	0	1	1	
Private betting (e.g. with friends, colleagues)		9	11	9	9	10	
Another gambling activity	1 67	1 <i>67</i>	1 69	0 <i>7</i> 5	0 <i>70</i>	0 <i>6</i> 8	
Any gambling activity in past year	07	07	09	75	70	00	
Number of gambling activities	22	22	21	25	20	20	
None	33 25	33 26	31 28	25 32	30 27	32 26	
One Two	25 18	26 15	26 15	32 16	27 19	20 17	
Three	10	12	11	12	11	10	
Four	6	6	6	7	6	6	
Five	3	3	3	3	3	3	
Six or more	5	6	6	4	5	5	
Bases (weighted):	3389	766	920	981	2364	8972	
Bases (unweighted):	3421	769	930	1021	2322	8978	

^a The total column includes those for whom NS SEC was not known.

^b These activities do not include any bets made online.

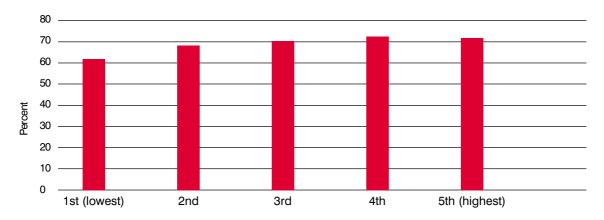
3.7 Past year gambling by equivalised household income

Equivalised household income is a measure of household income that takes account of the number of persons living in the household. Participation in any gambling activity in the past year increased with household income, rising from 61% for lowest income households to either 72% or 73% for higher income households.

This association was most marked for horse races, where past year prevalence increased from 12% for those in the lowest income households to 25% for those in the highest income households. The pattern was also true for the National Lottery Draw, other lotteries, slot machines, dog races, betting with a bookmaker, online betting with a bookmaker, table games at a casino and private betting. For bingo, the opposite pattern was true, and participation was significantly higher among lowest income households (9%) than highest income households (4%). For spread betting, betting exchanges, online gambling, FOBTs, scratchcards and football pools, prevalence varied with no clear pattern.

The number of different activities undertaken in the past year also varied with levels of household income. The proportion of people who had participated in six or more activities in the last year rose, from 3% of those from the lowest income households to 7% of those from the highest income households.

Figure 3DParticipation in gambling in past year by equivalised household income quintile Base: All



Equivalised household income quintile

Table 3.6 Participation in gambling activities in the past year, by equivalised household income quintile

ΑII

	Equivalised household income					
	1st (lowest)	2nd	3rd	4th	5th (highest)	Total
	%	%	%	%	%	%
Type of gambling activity						
National Lottery Draw	51	57	61	63	58	57
Another lottery	9	11	10	15	14	12
Scratchcards	19	19	21	23	19	20
Football pools	3	3	3	5	3	3
Bingo	9	9	8	6	4	7
Slot machines	12	13	16	19	17	14
Horse races ^b	12	14	18	21	25	17
Dog races ^ы	3	4	5	6	10	5
Betting with a bookmaker (other than		-	0	0	0	0
on horse or dog races) ^b	4	5	6	8	9	6
Fixed odds betting terminals	3	3	3	3	3	3
Online betting with a bookmaker on any event or sport	2	3	4	4	8	4
Online gambling	2	3	3	3	3	3
Table games in a casino	2	3	3	4	8	4
Betting exchange	1	1	2	1	1	1
Spread betting	0	1	1	1	1	1
Private betting (e.g. with friends, colle	eagues) 8	8	9	13	15	10
Another gambling activity	0	1	0	1	0	0
Any gambling activity in past year	61	68	70	73	72	68
Number of gambling activities						
None	39	32	30	27	28	32
One	26	30	28	25	23	26
Two	16	17	17	19	18	17
Three	9	9	11	11	11	10
Four	4	5	7	8	8	6
Five	3	2	2	4	4	3
Six or more	3	4	5	7	7	5
Bases (weighted):	1463	1405	1423	1368	1437	8972
Bases (unweighted):	1417	1431	1408	1390	1445	8978

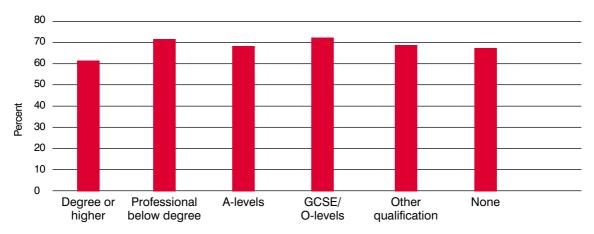
 $[\]ensuremath{^{\mathrm{a}}}$ The total column includes those for whom household income was not known.

^b These activities do not include any bets made online.

3.8 Past year gambling by highest educational qualification

As in 1999, a pattern was evident whereby those respondents with the highest level of educational qualifications were less likely to have gambled in the past year than respondents with lower educational qualifications. In 2007, 61% of those with a degree or higher had gambled in the last year, compared with 73% of those whose highest educational qualifications were GCSEs or O-levels.

Figure 3EParticipation in gambling in past year by highest educational qualification Base: All



Highest educational qualification

Table 3.7 suggests that the types of activities that respondents participated in also varied by the highest level of educational qualification. Those whose highest level of educational qualifications were GCSEs/O-levels tended to be more likely to participate in the National Lottery (63%), scratchcards (26%), bingo (8%), slot machines (21%), football pools (3%) and FOBTs (4%) than those with a degree (48% National Lottery Draw; 16% scratchcards; 3% bingo; 13% slot machines; 2% football pools; 2% FOBTs). However, the reverse was true for online betting, where significantly more people with a degree reported betting online (6%) than those whose highest educational qualification were GCSEs/O-levels (4%).

Respondents with a degree or higher qualifications gambled on fewer activities in the past year: 23% of those with a degree gambled on more than two different activities in the last year, compared with 31% for those whose highest educational qualification were GSCEs or O-levels. A similar pattern was noted in 1999.

Table 3.7 Participation in gambling activities in the past year, by highest education qualification AII

	lighest educational qualification						
_	Degree or higher	Professional below degree	A- levels	GCSEs/ O-levels	Other qualification	None	Total
	%	%	%	%	%	%	%
Type of gambling activity							
National Lottery Draw	48	62	55	63	61	59	57
Another lottery	12	16	12	12	13	9	12
Scratchcards	16	19	20	26	16	18	20
Football pools	2	4	4	3	4	4	3
Bingo	3	5	6	8	10	11	7
Slot machines	13	12	20	21	10	8	14
Horse races ^b	19	17	17	20	12	14	17
Dog races⁵	6	5	6	6	3	3	5
Betting with a bookmaker							
(other than on horse or dog races)		5	7	8	3	4	6
Fixed odds betting terminals	2	2	4	4	1	2	3
Online betting with a bookmaker	0	0	_	4	0		4
on any event or sport	6	3	5	4	2	1	4
Online gambling	3	2	4	4	1	1	3
Table games in a casino	6	3	6	4	2	1	4
Betting exchange	1	0	2	1	1	1	1
Spread betting	1		1	1	1	0	1
Private betting (e.g. with friends, colleagues)	12	8	13	14	9	5	10
Another gambling activity	1	0	1	1	0	0	0
Any gambling activity in past year 200		71	68	73	69	67	68
Any gambling activity in past year 199		73	72	76	7 <i>4</i>	71	72
Number of gambling activities	01	7.0	,,_	70	,,		
None	39	29	32	27	31	33	32
One	22	29	25	24	33	31	26
Two	16	18	16	18	17	18	17
Three	9	11	10	12	9	9	10
Four	5	6	7	8	4	4	6
Five	3	3	3	4	2	2	3
Six or more	6	3	7	7	4	2	5
5.X 5. 111010	5	3	•	,	т	_	0
Bases (weighted):							
2007	1943	603	1095	2405	347	2142	8972
1999	1224	870	703	1883	447	2200	7700
Bases (unweighted):							
2007	1893	639	1026	2373	362	2252	8978
1999	1212	882	683	1875	447	2207	7680

^a The total column includes those for whom highest qualification was not known.

b These activities do not include any bets made online.

3.9 Past year gambling by health and lifestyle characteristics

This section explores past year gambling in relation to a variety of health and lifestyle characteristics including the use of cigarettes and alcohol.

Respondents were asked to rate their general health on a five point scale ranging from very good to very bad. Table 3.8 shows the number of gambling activities participated in over the last 12 months by general health status. Those who rated their health as 'bad' or 'very bad' were less likely to report gambling in the past year than those who rated their health as 'very good', 'good' or 'fair' (62% of those whose health was bad/very bad compared with 72% of those who rated their health as fair).

However, (with two exceptions) there were no significant differences in the proportions who took part in each individual activity by general health status. The exceptions were the National Lottery Draw (57% with good/very good health, compared with 51% whose health was bad/very bad) and bingo, in which prevalence was highest among those who reported fair health (11%) and lowest among those who reported very good/good health (7%).

Likewise, no real differences were observed in the number of activities that respondents took part in.

Table 3.8 Participation in gambling activities in the past year, by general health A/I

	General health			
	Good/ Bad/			
	very good	Fair	very bad	Total
	%	%	%	%
Type of gambling activity				
National Lottery Draw	57	61	51	57
Another lottery	12	13	9	12
Scratchcards	20	20	16	20
Football pools	3	4	4	3
Bingo	7	11	8	7
Slot machines	15	14	11	14
Horse races ^b	17	18	16	17
Dog races⁵	5	4	5	5
Betting with a bookmaker (other than on horse or dog races)	^b 6	5	5	6
Fixed odds betting terminals	3	2	3	3
Online betting with a bookmaker on any event or sport	4	3	4	4
Online gambling	3	2	3	3
Table games in a casino	4	3	3	4
Betting exchange	1	1	1	1
Spread betting	1	1	0	1
Private betting (e.g. with friends, colleagues)	11	10	9	10
Another gambling activity	0	1	0	0
Any gambling activity in past year	67	72	62	68
Number of gambling activities				
None	33	28	38	32
One	26	29	26	26
Two	17	20	16	17
Three	11	10	8	10
Four	6	6	6	6
Five	3	3	2	3
Six or more	5	5	4	5
Bases (weighted):	7020	1454	378	8972
Bases (unweighted):	6963	1498	401	8978

^a The total column includes those for whom general health was not known.

Respondents were asked if they had any longstanding illnesses, disability or infirmity and, if so, whether this illness limited their activities in any way. Of those who had a longstanding illness, those whose illness was limiting showed lower rates of gambling over the past year (66%) than those whose illness was not limiting (72%).

^b These activities do not include any bets made online.

Respondents with no longstanding illness, or one which was not limiting, were more likely to have taken part in six or more different activities (5% and 6% respectively, compared with 3% of those with a limiting longstanding illness).

Looking at the different activities, respondents with no longstanding illnesses were more likely to gamble on scratchcards, slot machines, dog racing, betting with a bookmaker, online gambling, table games in a casino and private betting than those who had a limiting longstanding illness. This was most notable for slot machines where prevalence among those with either no longstanding illnesses, or with a non-limiting longstanding illnesses, was some six percentage points higher (15%) than among those with a limiting longstanding illness (9%).

The only activity more common among those with a limiting longstanding illness was bingo (10% of those with a limiting longstanding illness, 7% of those with no longstanding illness).

Table 3.9 Participation in gambling activities in the past year, by longstanding illness A/I

	Longstanding illness			
	None	Longstanding illness-not limiting	Longstanding illness- limiting	Total
	%	%	%	%
Type of gambling activity				
National Lottery Draw	57	60	57	57
Another lottery	11	13	12	12
Scratchcards	20	19	16	20
Football pools	3	3	4	3
Bingo	7	9	10	7
Slot machines	15	15	9	14
Horse races ^b	17	20	16	17
Dog races ^b	5	4	3	5
Betting with a bookmaker (other than on horse or dog races) ^b	7	6	4	6
Fixed odds betting terminals	3	3	2	3
Online betting with a bookmaker on any event or		2	3	4
Online gambling	3	1	2	3
Table games in a casino	4	3	2	4
Betting exchange	1	0	1	1
Spread betting	1	0	1	1
Private betting (e.g. with friends, colleagues)	11	11	8	10
Another gambling activity	1	0	0	0
Any gambling activity in past year	68	72	66	68
Number of gambling activities				
None	32	28	34	32
One	26	31	28	26
Two	17	17	18	17
Three	11	9	9	10
Four	6	6	5	6
Five	3	3	2	3
Six or more	5	6	3	5
Bases (weighted):	6830	674	1250	8972
Bases (unweighted):	6721	714	1324	8978

^a The total column includes those for whom longstanding illness was not known.

Respondents were asked whether they smoked cigarettes at all nowadays. Respondents who reported being a smoker at the time of the study were more likely to have taken part in a gambling activity during the last year (79%) than those who did not smoke (64%).

^b These activities do not include any bets made online.

This pattern was evident for most activities, e.g. 23% of current smokers had used slot machines in the last year, compared with 12% of non-smokers. The exception to this was other lotteries (with 12% of both current smokers and non-smokers participating in this activity in the past year), spreadbetting (1% for both current cigarette smokers and non-smokers) and football pools (4% of current smokers; 3% of non-smokers).

In addition, those who currently smoked had taken part in more activities in the past year than those who did not currently smoke. 8% of those who smoked cigarettes had participated in six or more activities compared with 4% of those who did not smoke.

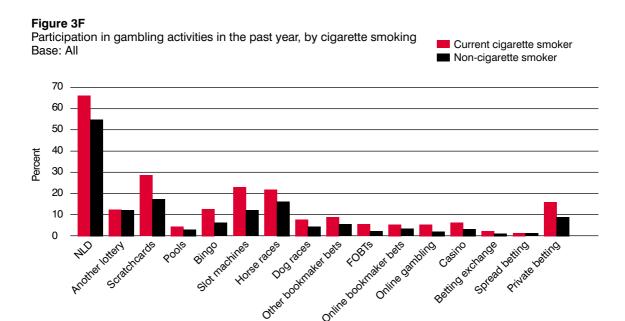


Table 3.10 Participation in gambling activities in the past year, by smoking status ΔU

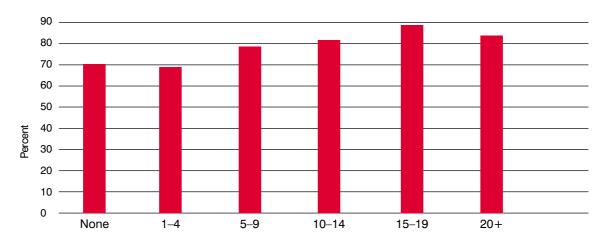
	Smoking status				
	Current smoker	Does not currently smoke	Total		
	%	%	%		
Type of gambling activity					
National Lottery Draw	67	54	57		
Another lottery	12	12	12		
Scratchcards	29	17	20		
Football pools	4	3	3		
Bingo	12	6	7		
Slot machines	23	12	14		
Horse races⁵	21	16	17		
Dog races⁵	7	4	5		
Betting with a bookmaker (other tha	an				
on horse or dog races) ^b	9	5	6		
Fixed odds betting terminals	5	2	3		
Online betting with a bookmaker					
on any event or sport	5	3	4		
Online gambling	5	2	3		
Table games in a casino	6	3	4		
Betting exchange	2	1	1		
Spread betting	1	1	1		
Private betting (e.g. with friends, co	lleagues)16	9	10		
Another gambling activity	1	0	0		
Any gambling activity in past year	79	64	68		
Number of gambling activities					
None	21	36	32		
One	25	27	26		
Гwo	18	17	17		
Three	14	9	10		
- our	9	5	6		
Five	5	3	3		
Six or more	8	4	5		
Bases (weighted):	2073	6659	8972		
Bases (unweighted):	2038	6706	8978		

^a The total column includes those for whom smoking status was not known.

^b These activities do not include any bets made online.

Respondents were asked about the highest amount of alcohol they had drunk on any one day in the past week. Those who reported they had drunk 15 units or more of alcohol were more likely to have gambled in the past 12 months. 84% of those who had consumed 20 or more units and 88% of those who had consumed 15-19 units on any one day in the past week had gambled in the past year, compared with 70% of those who had consumed no alcohol in the past week. A similar pattern was evident among last week gamblers, where 57% of those who had drunk 20 or more units on any one day in the past week had also gambled in the past week (compared with 41% of those who had not drunk in the last week - table not shown).

Figure 3GParticipation in gambling activities in the past year, by highest amount of alcohol drunk on any one day in past week
Base: All



Units of alcohol consumed on heaviest drinking day

Looking at the individual activities, those who had drunk 20 or more units on any one day were more likely to have participated in the majority of activities than those who had drunk four units or less. This pattern was especially clear for fixed odds betting terminals (14% compared with 2%), table games in a casino (16% compared with 3%), online gambling (12% compared with 1-3%) and private betting (32% compared with 8%). The only exceptions were other lotteries and bingo, where the prevalence rates were similar.

Those who consumed the most units of alcohol on the heaviest drinking day had also taken part in a higher number of different activities. 22% of those who had consumed 20 or more units had participated in at least six different activities in the past year, compared with 3-6% of people who had consumed no more than nine units on their heaviest drinking day in the last week.

Table 3.11 Participation in gambling activities in the past year, by highest amount of alcohol drunk on any one day in past week

ΑII

	Highes	Highest number of alcohol units drunk on one day				day	
	None	1-4	5-9	10-14	15-19	20+	Total
	%	%	%	%	%	%	%
Type of gambling activity							
National Lottery Draw	59	58	65	68	64	68	57
Another lottery	14	11	14	14	16	15	12
Scratchcards	22	17	25	26	33	36	20
Football pools	4	3	4	4	8	10	3
Bingo	8	7	8	8	8	7	7
Slot machines	16	11	20	26	38	38	14
Horse races ^b	16	16	23	30	37	36	17
Dog races ^b	4	4	8	10	13	16	5
Betting with a bookmaker (other than							
on horse or dog races) ^b	6	4	8	13	20	18	6
Fixed odds betting terminals	2	2	3	4	7	14	3
Online betting with a bookmaker			•	_	4.0	4.0	
on any event or sport	4	2	6	7	13	16	4
Online gambling	3	1	4	4	8	12	3
Table games in a casino	3	3	6	7	13	16	4
Betting exchange	1	1	1	2	2	4	1
Spread betting	1	0	1	1	2	4	1
Private betting (e.g. with friends, colleagues)	8	8	15	23	34	32	10
Another gambling activity	0	1	1	1	1	1	0
Any gambling activity in past year	70	68	77	82	88	84	68
Number of gambling activities							
None	30	32	23	18	12	16	32
One	28	30	23	22	19	19	26
Two	16	18	21	19	18	10	17
Three	13	10	14	15	14	16	10
Four	7	5	9	11	13	11	6
Five	2	3	5	4	6	7	3
Six or more	5	3	6	10	17	22	5
Bases (weighted):	694	3093	1290	693	245	300	8972
Bases (unweighted):	705	3202	1284	674	224	274	8978

^a The total column includes those for whom alcohol consumption was not known and also those who were not current drinkers.

^b These activities do not include any bets made online.

3.10 Comparison of past year and past week gamblers

Table 3.12 presents a comparison of the proportion of respondents reporting they had gambled in the past year and the past week, by a number of key socio-demographic variables. In general, there is a close correspondence between the two time frames (as might be expected). However, a few notable differences are apparent. The sex profile of past year and past week gamblers is similar, with more men than women participating in any gambling activity. However, as in 1999, it appears that past week gamblers are slightly older in profile than past year gamblers. Past year gambling prevalence was highest among those aged 35-44, whereas past week prevalence was highest among those aged 45-65.

Table 3.12 Comparison of past year and past week gamblers

All

Proportion within each category who gambled within the past year/week	Any gambling activity in past year	Any gambling activity in past week		
	%	%		
Sex				
Men	71	45		
Women	65	37		
Age				
16-24	58	27		
25-34	71	37		
35-44	73	41		
45-54	71	47		
55-64	70	47		
65-74	68	47		
75 and over	57	40		
Economic activity				
Paid work	71	41		
Unemployed	63	30		
Long-term disability	64	41		
Looking after family/home	64	36		
Retired	62	42		
Full-time education	51	16		
Other	62	46		
NS-SEC				
Managerial & professional	67	36		
Intermediate	67	39		
Small employers & own account workers	69	42		
Lower supervisory & technical	75	50		
Semi-routine & routine	70	46		
Household income quintile				
lst (lowest)	61	36		
2nd	68	44		
3rd	70	42		
4th	73	45		
5th (highest)	72	39		
Highest educational qualification				
Degree or higher	61	30		
Professional below degree	71	41		
A-level	68	37		
GCSE/ O-level	73	44		
Other	69	45		
None	67	48		
5	00			
Bases (weighted):	6085	3649		
Bases (unweighted):	6161	3749		

Endnotes:

- ¹ In 1999, economic activity information was collected from the highest income householder (HIH) the person in the household with the highest income. In 2007, the BGPS complied with the Office of National Statistics harmonised standards, and collected economic activity information from the household reference person (HRP). Classification of the HRP is slightly different from the HIH and, as such, comparisons between 1999 and 2007 cannot be made.
- ² As part of the household questionnaire, respondents were asked to report their total household income (including money from wages, savings, investments and pensions) by choosing a banded figure, on a showcard, that most closely represented their total income. This figure was then adjusted to take into account the number of people in the household, using the widely utilised McClements scoring system.

4 THE PREVALENCE OF PROBLEM GAMBLING

4.1 Introduction

'Problem gambling' is gambling to a degree that compromises, disrupts or damages family, personal or recreational pursuits¹. Measuring the prevalence of problem gambling among British adults was one of the main aims of this survey. A number of screens exist for measuring problem gambling, but (as yet) there is no single 'gold standard'. The 1999 survey used two measures of current problem gambling: the South Oaks Gambling Screen (SOGS)² and a screen based on the DSM IV criteria³. The rationale behind this choice, and the development of the screen, is outlined in the 1999 survey report⁴⁵. The problem gambling prevalence rates obtained from these two instruments in 1999 were: 0.8% (SOGS) and 0.6% (DSM IV).

In the intervening years, use of the SOGS has diminished, due to a number of criticisms, including that it over-estimates false positives⁶⁷. These criticisms are described in the Abbott report⁸. Therefore, we decided (in discussion with the Steering Group) against including the SOGS in the 2007 survey. In the meantime, a new instrument has been developed: the Canadian Problem Gambling Severity Index (PGSI)^{9 10 11}. The PGSI focuses more on the harms and consequences associated with problem gambling, whereas the DSM IV concentrates more on the psychological motivations underpinning problem gambling.

Though the development and testing work on the PGSI is not yet complete, indications suggest that it is likely to become widely used^{11 12} and we decided to include this in the 2007 survey in preference to the SOGS. In order to allow comparison with prevalence rates in 1999, we kept the DSM IV as well. So, as in 1999, we have two separate prevalence rates of problem gambling, allowing us to capitalise on the advantages of each, and to correlate and compare the results of the two screens. Both screens are described in more detail below.

Measurement of problem gambling can be based on 'lifetime' or 'current' prevalence rates. Since the latter was of more interest for policy purposes (and for comparability with 1999) all questions referred to the last 12 months; it is therefore current prevalence that is being reported (not lifetime prevalence). Prevalence rates are reported for the whole sample, as well as for those who have gambled in the past year, and those who have gambled in the past year excluding those who only gambled on the National Lottery Draw.

Results from each screening instrument are analysed by sex and age, the DSM IV prevalence is compared with 1999, and a comparison between the prevalence estimates obtained from the two screening scores is reported.

4.2 The DSM IV

The DSM IV screening instrument is taken from the fourth edition of the manual used by the American Psychiatric Association³. The DSM IV consists of ten diagnostic criteria, and a diagnosis of pathological gambling is made if a person fulfils at least five of the criteria. In addition, a number of surveys have included a further category of 'problem gambler' for those who fulfil at least three of the DSM IV criteria^{13 14 15 16}.

The DSM IV was created as a tool for diagnosis, and not as a screening instrument for use in the general population. Since there is no single gold standard *questionnaire version* of the DSM IV criteria, as part of the development work for the 1999 survey we adapted the criteria and developed and pre-tested a DSM IV based screen. This screen comprises questions C1 to C10 of the self-completion questionnaire – Appendix 3. We used exactly the same instrument in 2007. The scoring for each of the DSM IV items is described in Appendix 2.

The threshold used to identify 'problem gamblers' in the current survey is the same as that used in the 1999 survey: that is three or more represents a 'problem gambler'. However, the classification used here does not incorporate the additional threshold of five or more, used in some surveys to identify 'probable pathological gamblers' or 'severe problem gamblers'. This decision was made for the sake of clarity and simplicity, because the additional distinction was not seen as necessary for the purposes of this study, and because the number of respondents falling into the two categories was too small to analyse separately. Furthermore, as Allcock's states, the term 'problem gambler' avoids many of the negative judgments and conceptual issues associated with the notion of pathological gambling.

4.3 The Canadian Problem Gambling Severity Index (PGSI)

The PGSI was developed by Wynne et al, over a three year period (1997-2000)¹⁰. This period included a development phase which was followed by a testing phase in order to validate the screen in a general population survey in Canada (among a sample of over 3,000). The PGSI was launched in 2001⁹ and refined in 2003¹⁰. The PGSI constitutes nine items of a larger screen (more than 30 items) - the Canadian Problem Gambling Inventory (CPGI). The full screen assesses gambling involvement, gambling problems, correlates and demographics.

The PGSI items include chasing losses, escalating gambling to maintain excitement, and whether gambling has caused health problems. The full CPGI has been used in general population surveys in seven Canadian provinces, as well as in Denmark and Iceland. The subset of problem gambling items has been used in a national survey in Canada, smaller-scale surveys in the Canadian provinces²¹ ²² ²³ ²⁴ ²⁵ and in general population surveys in Queensland²⁶, Victoria²⁷, Tasmania²⁸, and the Northern Territory²⁹, Australia. The PGSI items constitute questions C11 to C19 of the self-completion questionnaire (Appendix 3).

A validation study, comparing the performance of the SOGS, the PGSI and the recently developed Victorian Gambling Screen (VGS) found that the PGSI outperformed the other two screens¹².

The PGSI items each have four response options. For each item, 'sometimes' is given a score of one, 'most of the time' scores two, 'almost always' scores three. A score of between zero and 27 is therefore possible. The threshold used to identify problem gamblers according to the PGSI is that advocated by the screen's developers, that is: a score of eight or more represents a problem gambler. The PGSI also includes two other categories: 'low risk' gambling and 'moderate risk' problem gambling. However, again for the purposes of simplicity, we concentrate in this report on the category of problem gambler.

4.4 Caveats

There are a number of caveats which should be borne in mind when interpreting the results of this, or similar, gambling prevalence surveys:

- This is a cross-sectional survey. Therefore, while analysis might highlight associations between variables it cannot say anything about the direction of causality. For example, an association may be found between being divorced and being a problem gambler (as in 1999). However, this does not tell us whether divorce leads to problem gambling, or whether problem gambling leads to divorce.
- A survey of people living in private households, by definition, excludes a number of sub-groups of the population, such as homeless people, those living in institutions, and prisoners. There is some evidence that such sub-groups are likely to include a disproportionate number of problem gamblers^{30 31}. Moreover, it could be argued that frequent gamblers are less likely to be at home and available for interview than other sub-groups of the population, and are therefore less likely to be included in a survey. Such sampling and response biases suggest that a general population survey is likely to *underestimate* the prevalence of problem gambling^{15 32}.
- No screen to measure problem gambling is perfect. A best estimate of any population sub-group endeavours to minimise both 'false positives' and 'false negatives'. In the case of problem gambling a false positive is where a person without a gambling problem is classified as a problem gambler, while a false negative is where a person with a gambling problem is classified as someone without a problem.
- Clearly, the number of false positives and false negatives is directly related to the position of the threshold level used to classify a problem gambler. The threshold used for the DSM IV followed other studies^{13 14 15 16} and that of the 1999 survey. The threshold used for the PGSI follows the recommendations of the screen's developers¹⁰.
- While the PGSI has been validated on a Canadian population, it has not previously been used in a British context.
- The DSM IV was developed as a diagnostic tool, and has not been validated for general population use.

- People may be motivated to give 'socially acceptable', albeit dishonest, answers to a questionnaire and therefore underestimate the extent of their gambling behaviour.
- Finally, a survey estimate is subject to sampling error, and should therefore be considered with reference to confidence intervals (which are presented in this chapter along with the prevalence results)³³.

The survey methodology attempted to overcome these potential criticisms in a number of ways (see Appendix 2), for example by using a self-completion questionnaire to encourage honest reporting³⁴, by weighting the results to minimise non-response bias, and by establishing, *a priori*, carefully considered problem gambling thresholds (based on previous research). In short, it should be noted that the survey findings presented here represent a 'best estimate' of current problem gambling prevalence in Britain.

4.5 Problem gambling prevalence according to the DSM IV

Table 4.1 presents the range of scores on the DSM IV, from zero through to a maximum of ten, separately for men and women. The table shows responses for the entire population, with those who did not gamble in the past year (and therefore were not asked the problem gambling screens) set at zero. The majority of people (94.8%) scored zero on the DSM IV. 4.5% of people scored positively on the DSM IV, but below the established problem gambling threshold of three or more.

Table 4.1 DSM IV scores, by sex

Αl

DSM IV score	Sex		
	Men %	Women %	Total ^a %
0	93.0	96.5	94.8
1	5.2	3.2	4.1
2	0.8	0.1	0.4
3	0.4	0.1	0.2
4	0.1	*	0.1
5	0.2	*	0.1
6	0.1	0.1	0.1
7	*	-	*
8	0.2	-	0.1
9	-	*	*
10	*	-	*
Bases (weighted):	4090	4351	8445
Bases(unweighted):	4016	4442	8462

^a The total column includes those for whom sex was not known.

The prevalence of problem gambling in the population, based on the DSM IV was 1.0% for men and 0.2% for women (**0.6%** overall). The confidence interval around this estimate is 0.5% to 0.8% (meaning that we can be 95% confident that the true value lies between these two figures).

This is the same overall prevalence as in 1999 (when 0.9% of men and 0.3% of women were classified as problem gamblers according to the DSM IV).

In 1999 the prevalence of problem gambling was associated with age (ranging from 1.7% of those aged 16-24, through 0.6% of those aged 35-44, to 0.1% of those aged 65+). In 2007 this pattern was no longer apparent. The prevalence was the same (0.8-9%) for those aged up to 54, dropping only in those aged 55 and over. Prevalence was highest among young men aged 16-24, and 25-34 (1.5% and 1.7% respectively).

Table 4.2 DSM IV problem gambling prevalence rates among the population, by age and sex AII

Age	Sex		
	Men %	Women %	Total ^a %
16-24	1.5	0.4	0.9
25-34	1.7	0.1	0.9
35-44	1.4	0.3	0.9
45-54	1.1	0.5	8.0
55-64	0.1	-	0.1
65-74	0.4	0.2	0.3
75+	-	-	-
TOTAL	1.0	0.2	0.6
Bases (weighted):			
16-24	582	596	1179
25-34	695	700	1395
35-44	802	824	1628
45-54	677	683	1361
55-64	619	653	1272
65-74	411	441	851
75+	302	438	740
All ^b	4090	4351	8445
Bases (unweighted):			
16-24	456	491	948
25-34	577	682	1259
35-44	770	850	1622
45-54	708	736	1445
55-64	711	777	1488
65-74	472	480	952
75+	319	410	729
All ^b	4016	4442	8462

^a The total column includes those for whom sex was not known.

^b Information for all includes those for whom age was not known

As would be expected, the prevalence of problem gambling is higher among those who have gambled in the past year: **0.9%** (1.5% men, 0.4% women). The confidence interval around this estimate is 0.7% to 1.3%. Again, this figure is similar to the 1999 result (0.8% all; 1.2% men, 0.4% women).

The DSM IV problem gambling prevalence among last year gamblers, but excluding those who have only gambled on the National Lottery Draw, was **1.3%** (confidence interval 0.9% to 1.7%). Table not shown

Table 4.3 DSM IV problem gambling prevalence rates among past year gamblers, by age and sex Past year gamblers

Age	Sex		
	Men %	Women %	Total ^a %
16-24	2.6	0.7	1.7
25-34	2.3	0.2	1.3
35-44	1.9	0.5	1.2
45-54	1.5	0.8	1.1
55-64	0.2	-	0.1
65-74	0.6	0.3	0.5
75+	-	-	-
TOTAL	1.5	0.4	0.9
Bases (weighted):			
16-24	330	307	637
25-34	495	468	963
35-44	592	570	1163
45-54	489	451	941
55-64	428	440	868
65-74	287	267	554
75+	179	218	397
AII [⊳]	2802	2727	5529
Bases (unweighted):			
16-24	262	260	522
25-34	418	467	885
35-44	569	595	1164
45-54	516	494	1010
55-64	493	525	1018
65-74	331	291	622
75+	189	204	393
AII ^b	2781	2841	5622

^a The total column includes those for whom sex was not known.

^b Information for all includes those for whom age was not known

The responses to each of the individual items which comprise the DSM IV are shown in Table 4.4. The percentage of people answering affirmatively ranged from 0.1% for having committed a crime to finance gambling, through to 3.8% for chasing losses. Men were more likely to respond affirmatively to all of the items, for example 'a preoccupation with gambling' (2.2% vs 0.4%), and 'having tried but failed to cut back on gambling' (0.7% vs 0.1%).

Table 4.4 Responses to individual DSM IV items, by sex

ΑII

DSM IV item	Sex		
	Men	Women	Totala
	%	%	%
In the last 12 months			
Chasing losses	4.8	2.8	3.8
A preoccupation with gambling	2.2	0.4	1.3
A need to gamble with increasing amounts of money	0.7	0.2	0.4
Being restless or irritable when trying to stop gambling	8.0	0.1	0.5
Gambling as escapism	0.8	0.3	0.5
Having tried but failed to cut back or stop gambling	0.7	0.1	0.4
Lying to people to conceal the extent of gambling	0.6	0.2	0.4
Having committed a crime to finance gambling	0.1	*	0.1
Having risked or lost a relationship/job/educational			
opportunity because of gambling	0.5	0.1	0.3
Reliance on others to help a financial crisis caused by gambling	0.8	0.2	0.5
Bases (weighted):	4078	4333	8414
Bases (unweighted):	4002	4429	8430

^a The total column includes those for whom sex was not known.

The bases vary for each item because missing cases have been excluded from the base. The bases shown are for the first item 'chasing losses'.

4.6 Problem gambling prevalence according to the PGSI

Table 4.5 presents the range of scores on the PGSI, from zero through to a maximum of 27, separately for men and women. The table shows responses for the entire population, with those who did not gamble in the past year (and therefore were not asked the problem gambling screens) set at zero. The majority of people (93.0%) scored zero on the PGSI; 6.5% of people scored positively on the PGSI, but below the established problem gambling threshold of eight or more.

Table 4.5 PGSI scores, by sex

ΑII

PGSI score	Sex		
	Men	Women	Total
	%	%	%
0	90.1	95.7	93.0
1	4.8	2.7	3.7
2	2.0	0.8	1.4
3	1.0	0.4	0.7
4	0.4	0.1	0.3
5	0.3	0.1	0.2
6	0.2	-	0.1
7	0.2	*	0.1
8	0.1	*	0.1
9	0.3	0.1	0.2
10	0.1	-	*
11	0.1	-	*
12	0.1	-	*
13	*	-	*
14	*	-	*
15	*	-	*
16	0.1	*	*
17	*	-	*
18	-	-	-
19	0.1	-	*
20	*	-	*
21	*	-	*
22	-	-	-
23	*	-	*
24	-	-	-
25	-	-	-
26	-	-	-
27	0.1	-	0.1
Bases (weighted):	4090	4347	8440
Bases (unweighted):	4013	4438	8455

^a The total column includes those for whom sex was not known.

The prevalence of problem gambling in the population, based on the PGSI was 1.0% for men and 0.1% for women (0.5% overall). The confidence interval around this estimate is 0.4% to 0.8% (meaning that we can be 95% confident that the true value lies between these two figures).

Prevalence was somewhat higher among younger age groups. It was 1.0% among those aged 16-24, decreasing to 0.1% among those aged 55 to 74 (and no cases were found in the sample among respondents aged 75 and over).

Prevalence was highest among young men aged 16 to 24, 25 to 34 and 35 to 44 (1.9%, 1.3% and 1.6% respectively).

Table 4.6 PGSI problem gambling prevalence rates among the population, by age and sex A/I

All			
Age	Sex		
	Men	Women	Total
	%	%	%
16-24	1.9	0.2	1.0
25-34	1.3	-	0.6
35-44	1.6	0.1	8.0
45-54	0.9	0.4	0.7
55-64	0.1	0.1	0.1
65-74	0.2	-	0.1
75+	-	-	-
TOTAL	1.0	0.1	0.5
Bases (weighted):			
16-24	585	595	1181
25-34	695	699	1394
35-44	802	823	1627
45-54	678	683	1362
55-64	617	649	1266
65-74	409	442	851
75+	301	439	740
AII ^b	4090	4347	8440
Bases (unweighted):			
16-24	459	490	950
25-34	577	681	1258
35-44	769	849	1620
45-54	709	736	1446
55-64	708	773	1481
65-74	470	482	952
75+	318	411	729
AII ^b	4013	4438	8455

^a The total column includes those for whom sex was not known.

As would be expected, the prevalence is higher among those who have gambled in the past year at **0.8%** (1.5% men, 0.2% women). The confidence interval around this estimate is 0.6% to 1.2%.

The PGSI problem gambling prevalence among last year gamblers, but excluding those who have only gambled on the National Lottery Draw, was **1.2%** (confidence interval 0.8% to 1.7%). Table not shown.

^b Information for all includes those for whom age was not known

Table 4.7 PGSI problem gambling prevalence among past year gamblers, by age and sex *Past year gamblers*

Age	Sex		
	Men	Women	Total
	%	%	%
16-24	3.3	0.4	1.9
25-34	1.8	-	0.9
35-44	2.1	0.2	1.2
45-54	1.3	0.6	1.0
55-64	0.2	0.2	0.2
65-74	0.3	-	0.2
75+	-	-	-
TOTAL	1.5	0.2	8.0
Bases (weighted):			
16-24	333	306	639
25-34	495	467	962
35-44	592	569	1162
45-54	491	452	942
55-64	426	437	863
65-74	285	268	554
75+	178	219	396
AII ^b	2801	2722	5523
Bases (unweighted):			
16-24	265	259	524
25-34	418	466	884
35-44	568	594	1162
45-54	517	494	1011
55-64	490	521	1011
65-74	329	293	622
75+	188	205	393
AII⁵	2777	2836	5613

^a The total column includes those for whom sex was not known.

Table 4.8 shows the individual PGSI items, separately by gender. The most common item was 'chasing losses', which 6.8% of men and 2.9% of women reported doing in the last 12 months. As with the DSM IV, a higher proportion of men than women responded in the affirmative to each of the items.

^b Information for all includes those for whom age was not known

Table 4.8 Responses to individual PGSI items, by sex

All

PGSI item							
		Almost always	Most of the time	Sometimes	Never	Bases (weighted):	Bases (unweighted)
Men							
Bet more than could afford to lose	%	0.3	0.3	3.6	95.7	4095	4019
Needed to gamble with increasing							
amounts of money	%	0.1	0.3	1.9	97.7	4091	4015
Chasing losses	%	0.4	0.6	5.8	93.2	4089	4013
Borrowed money/sold items to finance gambling	%	0.1	0.1	0.9	98.8	4087	4011
Felt that might have gambling problem		0.4	0.1	1.2	98.2	4085	4008
Gambling caused health problems	/0	0.4	0.2	1.2	30.2	7000	4000
(including stress)	%	0.2	0.1	0.9	98.8	4087	4011
People criticised gambling	%	0.3	0.3	2.3	97.1	4089	4012
Gambling caused financial problems	%	0.3	0.2	1.0	98.5	4090	4013
Felt guilty about gambling	%	0.4	0.2	1.9	97.5	4088	4011
Women							
Bet more than could afford to lose	%	*	0.1	1.6	98.3	4349	4440
Needed to gamble with increasing							
amounts of money	%	-	*	0.4	99.6	4346	4437
Chasing losses	%	0.1	0.2	2.5	97.1	4344	4435
Borrowed money/sold items to	%	*		0.0	00.0	40.4E	4406
finance gambling	, -		- *	0.2	99.8	4345	4436
Felt that might have gambling problem Gambling caused health problems	%	-		0.2	99.8	4346	4437
(including stress)	%	-	*	0.1	99.8	4347	4438
People criticised gambling	%	*	0.1	0.4	99.5	4345	4437
Gambling caused financial problems	%	-	*	0.2	99.8	4347	4438
Felt guilty about gambling	%	*	0.1	0.7	99.2	4345	4437
All							
Bet more than could afford to lose	%	0.2	0.2	2.6	97.1	8448	8463
Needed to gamble with increasing							
amounts of money	%	0.1	0.1	1.1	98.6	8441	8456
Chasing losses	%	0.3	0.4	4.1	95.2	8437	8452
Borrowed money/sold items to							
finance gambling	%	0.1	-	0.6	99.3	8436	8451
Felt that might have gambling problem	%	0.2	0.1	0.7	99.0	8434	8449
Gambling caused health problems (including stress)	%	0.1	0.1	0.5	99.3	8438	8453
People criticised gambling	% %	0.1	0.1	1.3	98.4	8438	8453
	%	0.1	0.2	0.6	99.2	8441	8455
Felt guilty about gambling	%	0.2	0.1	1.3	98.4	8437	8452

4.7 A comparison of DSM IV and PGSI

The tables presented so far show that the prevalence of problem gambling as measured by the DSM IV is fractionally higher than that measured by the PGSI (0.6% and 0.5% respectively). The distribution of problem gamblers in terms of sex and age show a similar pattern with both screens, suggesting that they are both measuring the same phenomenon (albeit with slightly different sensitivity). This section examines the extent to which this is the case.

0.8% of the sample were classified as problem gamblers according to one or other screen; 0.4% were classified as problem gamblers according to *both*. The vast majority of people (99.2%) were classified as 'non-problem gamblers' on *both* screening instruments. These people have been excluded from the following analysis. A cross-tabulation of the two measures is presented in Table 4.9. The table presents results only for the sub-group of respondents who were classified as problem gamblers according to *either* of the screens. The table shows both row and column percentages (column percentages are presented, in bold, below the row percentages).

Table 4.9 shows that 64% of people who were classified as problem gamblers by the DSM IV, were also problem gamblers according to the PGSI. 74% of those who were classified as problem gamblers according to the PGSI were also classified as problem gamblers by the DSM IV.

Conversely, 36% of those who were classified as non-problem gamblers according to PGSI were problem gamblers according to DSM IV; and 26% of DSM IV non-problem gamblers were classified as problem gamblers according to the PGSI. This suggests that it is not simply the case that the DSM IV has a lower sensitivity for measuring problem gambling than the PGSI. Rather, it seems that the two screens are capturing slightly different groups of people, and therefore different types of problems.

Table 4.9 A cross-tabulation of the PGSI and the DSM IV

Respondents identified as problem gamblers by either PGSI or DSM IV

,	,	
	DSM IV non-problem	DSM IV problem
PGSI non-problem	NA	100% 36%
PGSI problem	[26%] 100%	74% 64%
Bases (weighted):	12	51
Bases (unweighted):	11	47

The table shows both row and column percentages.

Column percentages are shown, in bold, below the row percentages.

NA = Not applicable.

There will never be 100% correspondence between any two measures; even with 'objective' variables such as weight there is likely to be measurement error between a value measured on two separate occasions, or even on the same occasion using two sets of scales. Therefore, it is to be expected that there will be a certain amount of discrepancy between two measures of a less tangible phenomenon, such as problem gambling. A weighted kappa³⁵ statistic showed that the agreement between the two problem gambling screens is moderate (0.68; confidence interval 0.57-0.79). (No agreement would be expressed as a value of 0 and perfect agreement as a value of 1.)

A number of conclusions can be drawn from the comparison of the two screening instruments:

- Estimates of the prevalence of problem gambling will vary according to the screening instrument used.
- The two screens are likely to suffer both false positives and false negatives. In particular, the fact that some non-problem gamblers on the DSM IV (which has a slightly higher prevalence rate than the PGSI) are classified as problem gamblers according to the PGSI, suggests that the DSM IV may well be missing some problem gamblers.
- Until a comprehensive validation exercise is carried out on both screens (using clinicians, and involving follow-up of a large number of people scoring both high and low on each scale) it is not possible to conclude which of the screening instruments provides more reliable results among a general population sample.
- Taking into account the 95% confidence intervals around the prevalence estimates, one can conclude that the number of adult problem gamblers in Britain is somewhere between 236,500 and 378,000 according to the DSM IV, and 189,000 and 378,000 according to the PGSI.

4.8 Comparisons with other national prevalence surveys

The table below presents problem gambling prevalence rates from national surveys that have been carried out since the previous (1999) BGPS. It should be noted when comparing results that different methodologies have been used in different countries (e.g. face to face versus telephone), with varying sample designs and sample sizes. Moreover, a variety of screens have been used: SOGS, DSM IV, PGSI, etc and, as previously stated, different screens are known to have different levels of sensitivity.

The problem gambling rate ranges from 0.2% of the population in Norway, through to 5.3% of the population of Hong Kong. The problem gambling prevalence rate in Britain is similar to that of Canada, New Zealand, Sweden and Switzerland. The rate is higher than Norway and lower than South Africa, the US, Singapore, Macao and Hong Kong. There has not been a national survey in Australia since 1999, when the (SOGS 5+) prevalence rate was 2.1%³⁶. More recent regional studies (all using the PGSI) have found prevalence rates of Queensland: 0.83% (2005); Victoria: 0.97% (2003); Tasmania: 0.73% (2005) and Northern Territory: 0.64% (2005).

Table 4.10 Summary of international current problem gambling prevalence estimates

Country	Year	Screen	Timeframe	%	Confidence interval
Norway ³⁷	2003	SOGS	Last 12 months	0.2	0.0-0.4
Canada ¹⁹	2003	PGSI	Last 12 months	0.5	Not given
New Zealand38	1999	SOGS	Last 6 months	0.5	0.3-0.7
Great Britain	2007	PGSI/DSM IV	Last 12 months	0.5/0.6	0.4-0.8
Sweden ⁴²	2000	SOGS	Last 12 months	0.6	0.3-0.9
Switzerland39	2000	SOGS	Last 12 months	8.0	Not given
Iceland40	2005	PGSI	Last 12 months	1.1	0.7-1.5
South Africa41	2005	GA	Last 12 months	1.4	Not given
USA ¹⁷	2000	DIS	Last 12 months	3.5	Not given
Singapore ⁴³	2004/05	Chinese DSM IV	Last 12 months	4.1	Not given
Macao ⁴⁴	2003	Chinese DSM IV	Last 12 months	4.3	Not given
Hong Kong ⁴⁵	2005	Chinese DSM IV	Last 12 months	5.3	Not given

Endnotes:

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5 PROFILE OF PROBLEM GAMBLERS

5.1 Introduction

In addition to estimating problem gambling prevalence, a further aim of this study was to examine the profile of problem gamblers, to gain insight into who problem gamblers are and what types of activities they participate in. This chapter examines the profile of problem gamblers by a range of socio-demographic factors, health and lifestyle characteristics, self-reported problems with gambling (including problems among close relatives and parents), and type of gambling activity.

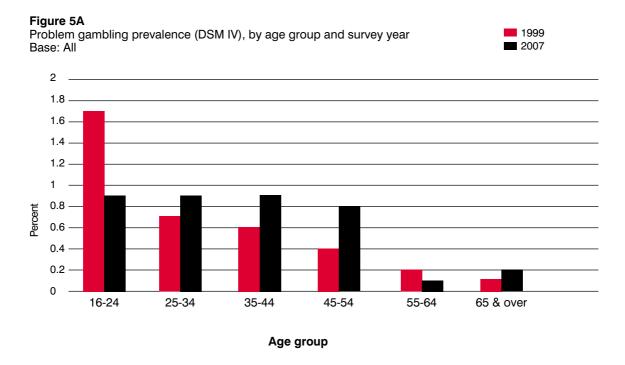
Unlike chapter 4, which presented analysis of problem gamblers defined by both the DSM IV and the PGSI, this chapter focuses mainly on problem gamblers as defined by the DSM IV. The DSM IV was one of the problem gambling screens used in the first British Gambling Prevalence Study in 1999. By presenting similar analyses using the DSM here, it is possible to highlight any changes in the profile of problem gamblers between the 1999 and the 2007 results.

Section 5.6 presents the findings of multivariate analysis showing which factors are significantly associated with problem gambling. This analysis has been undertaken for both the PGSI and DSM IV, and results are presented separately for each measure.

5.2 Problem gambling by socio-demographic characteristics

This section examines the prevalence of problem gambling by a number of socio-demographic characteristics. As seen in chapter 4, men were more likely than women to be problem gamblers. However, unlike 1999 where there was a marked association between problem gambling prevalence and age, in 2007 age was not significantly associated with problem gambling. That said, prevalence of problem gambling (DSM IV) was highest among younger adults aged 16-44 (0.9%) and lowest among older adults, 0.1% of those aged 55-64 and 0.2% of those aged 65 and over. (None of the changes between 1999 and 2007 in problem gambling prevalence, within the age groups, were statistically significant.)

As in 1999, respondents who were single were somewhat less likely to gamble than their married counterparts (64% of single people had gambled in the last year, compared with 70% of those who were married). However, among those who did gamble, single respondents were more likely to be problem gamblers (1.3%) than those who were married (0.2%).



As in 1999, there was an association with educational achievement, in that respondents with 'A' levels or below were more likely to be problem gamblers than those who had professional or degree level qualifications: 0.9% and 0.2% respectively.

Problem gambling prevalence varied by ethnic group and was significantly higher among those of Asian or Asian British origin (1.4%), and Black or Black British origin (2.0%), than those whose ethnic group was White (0.5%). Due to small numbers, respondents who reported they were Chinese, from any mixed background or other ethnic group were categorised as 'other' ethnic group. Although this category represents a diverse group from a range of backgrounds, problem gambling was significantly higher (2.2%) among this group than those whose ethnic group was White.

An association was also found between NS-SEC and problem gambling prevalence. Problem gambling was least prevalent within managerial and professional households (0.2%) and most prevalent within the small employers and own account workers category (1.2%).

Notably, there were no significant differences in problem gambling prevalence by levels of household income.

Table 5.1 Problem gambling prevalence (DSM IV), by socio-demographic characteristics All

Socio-demographic characteristics			
	DSM IV problem gamblers %	Bases (weighted): n	Bases (unweighted): n
Sex			
Male	1.0	4090	4016
Female	0.2	4351	4442
Age group			
16-24	0.9	1179	948
25-34	0.9	1395	1259
25-44	0.9	1628	1622
45-54	0.8	1361	1445
55-64	0.1	1272	1488
65 and over	0.2	1592	1681
Marital status			
Married/living as married	0.2	4521	4717
Separated/divorced	1.0	649	692
Single, never married	1.3	2403	2164
Widowed	0.5	618	634
Ethnic group			
White	0.5	7599	7724
Asian or Asian British	1.4	307	263
Black or Black British	2.0	197	171
Other	2.2	217	192
NS-SEC of household reference person			
Managerial and professional occupations	0.2	3227	3256
Intermediate occupations	0.6	709	712
Small employers and own account workers	1.2	851	867
Lower supervisory/technical occupations	0.6	923	961
Semi-routine and routine occupations	1.0	2213	2178
Household income tertile			
1st (lowest)	0.9	2218	2206
2nd	0.8	2224	2230
3rd (highest)	0.4	2244	2254
Highest educational qualification			
Professional qualification or above	0.2	2430	2420
GCSEs/O-levels or A-levels	0.9	3306	3218
Other	0.7	2322	2443

5.3 Problem gambling by health and lifestyle characteristics

Analysis of a number of health and lifestyle factors suggested that problem gambling was more prevalent among those who report they have bad/very bad health, current cigarette smokers and those who reported drinking the highest amount of alcohol.

Respondents were asked to rate their general health on a five-point scale ranging from very good to very bad. Those who reported that their health was good or very good were less likely to have gambling problems (0.4%) than those who reported having bad or very bad health (1.5%). Respondents were also asked if they had a longstanding illness, disability or infirmity and, if so, whether this illness limited their activities in any way. Problem gambling prevalence varied by presence of a longstanding illness with no significant differences observed.

Respondents were also asked whether they smoked cigarettes at all nowadays. Problem gambling prevalence was significantly higher among current smokers (1.4%) than those who did not currently smoke cigarettes (0.4%). Similar patterns have been observed in other gambling studies, as have associations between problem gambling prevalence and heavy alcohol consumption¹². In our study, respondents were asked whether they drank alcohol nowadays and, if so, what was the highest number of units consumed (if any) on the heaviest drinking day within the last week. Results showed that respondents who drank the highest amount of alcohol were more likely to be problem gamblers than those who reported drinking more moderately. Problem gambling prevalence increased as the number of units consumed increased, rising from 0.1% of those who drank one-four units of alcohol, to 3.4% for those who consumed over 20 units of alcohol (on their heaviest drinking day).

Table 5.2 Problem gambling prevalence (DSM IV), by health and lifestyle characteristics All

	Health and lifestyle characteristics				
	DSM IV problem gamblers %	Bases (weighted): n	Bases (unweighted): n		
Self reported general health status					
Very good/good	0.4	6621	6577		
Fair	1.4	1367	1414		
Bad/very bad	1.5	353	375		
Presence of a longstanding illness					
Limiting longstanding illness	0.9	1185	1256		
Non-limiting longstanding illness	0.3	636	674		
No longstanding illness	0.5	6432	6342		
Cigarette smoking status					
Current cigarette smoker	1.4	1935	1904		
Not current cigarette smoker	0.4	6303	6357		
Units of alcohol consumed by currer on heaviest drinking day in last weel					
Did not drink in last week	-	655	667		
1-4 units	0.1	2912	3018		
5-9 units	0.5	1233	1228		
10-14 units	0.8	652	635		
15-19 units	1.1	222	203		
20 units or more	3.4	283	259		

5.4 Problem gambling by self-reported parental and familial gambling behaviour

Two questions were asked to look at the relationship between parental gambling behaviour and the respondent's gambling behaviour. The first asked whether the respondent's parents/guardians had ever regularly gambled. If so, the respondent was asked to report whether they felt that either of their parents/guardians had ever had a problem with their gambling. Problem gambling prevalence was significantly higher among those whose parents regularly gambled (1.4%) than those who parents did not (0.4%).

The 1999 prevalence study highlighted that respondents who reported that either of their parents had a gambling problem were themselves more likely to be problem gamblers. This finding was replicated in the current study. 3.3% of those who reported that either parent had (or had had) a gambling problem were problem gamblers, compared with 1.0% of those who reported that, although their parents regularly gambled, they did not have a problem with their gambling.

An additional question was asked of all respondents in 2007 to examine the relationship between problem gambling and the possible presence of gambling problems among close relatives, including spouses/partners, in the last twelve months. Previous studies have identified the presence of problem gambling among extended family members as a risk factor for problem gambling³. A similar association was evident in the 2007 study results. Problem gambling prevalence was significantly higher among respondents who reported that a close relative had a gambling problem within the last 12 months (2.7%) than those who did not (0.5%).

All respondents were asked to report how old they were the first time they ever gambled. Problem gambling was significantly higher among those who reported that they were 15 or under the first time they ever gambled (1.6%) than those who were aged 18 or over (0.5%).

Table 5.3 Problem gambling prevalence (DSM IV), by self-reported problem gambling status, parental and close relatives' problem gambling status and age first gambled

ΑII

	DSM IV problem gamblers	Bases (weighted):	Bases (unweighted):
	%	n	n
Respondent considered themselves to ever have had a gambling problem			
Yes	18.8	122	114
No	0.3	8162	8196
Parents gambled regularly			
Yes	1.4	1681	1723
No	0.4	6260	6252
Whether either parent who regularly gambled had problems with their gambl	ing		
Yes	3.3	228	230
No	1.0	1434	1474
Any close relative had a problem with gambling in last 12 months			
Yes	2.7	205	202
No	0.5	8063	8092
Age respondent first started gambling			
15 or younger	1.6	1023	1003
16-17	1.2	1187	1149
18-21	0.4	1967	2021
22 or over	0.7	1307	1382
All aged 18 and over	0.5	3274	3403

5.5 Problem gambling by gambling activity

5.5.1 Introduction

Chapter 2 examined participation in all gambling activities in both the last year and last week. This section presents the prevalence of problem gambling, firstly for each individual activity undertaken in the last year, then for each activity undertaken in the last week, and finally by frequency of participation in any form of gambling in the last year. Where appropriate, comparisons are made with the 1999 study.

5.5.2 Past year gambling

Respondents were asked which activities they had gambled on in the last 12 months, and how often they typically did each activity. Among those who had gambled in the past year, problem gambling prevalence ranged from 1.0% for the National Lottery Draw to 14.7% for spread betting. The next highest prevalence was 11.2% for fixed odds betting terminals, followed by betting exchanges (9.8%), online gambling (7.4%) and online betting (6.0%). Interestingly, those activities with the highest prevalences are 'newer' forms of gambling activities that have emerged since 1999.

Figure 5BProblem gambling prevalence (DSM IV), by type of gambling activity undertaken in past year Base: Past year gamblers

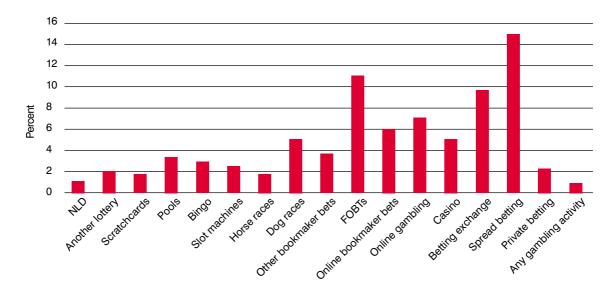


Table 5.4a Problem gambling prevalence (DSM IV), by gambling activity in the last year Past year gamblers

Gambling activity			
	DSM IV problem gamblers %	Bases (weighted): n	Bases (unweighted): n
National Lottery Draw	1.0	4799	4914
Another lottery	2.1	961	980
Scratchcards	1.9	1637	1618
Football pools	3.5	273	270
Bingo	3.1	609	635
Slot machines	2.6	1193	1139
Horse races ^a	1.7	1456	1470
Dog races ^a	5.2	423	404
Betting with a bookmaker (other than on horse or dog races) ^a	3.9	530	503
Fixed odds betting terminals	11.2	213	186
Online betting with a bookmaker on any event or sport	6.0	323	303
Online gambling	7.4	215	191
Table games in a casino	5.2	327	298
Betting exchange	9.8	82	74
Spread betting	14.7	57	53
Private betting (e.g. with friends, colleagues) 2.3	854	796
Another gambling activity	[6.1]	39	38
Any gambling activity in past year	0.9	5527	5620

^a These activities do not include any bets made online

Comparisons of problem gambling prevalence by activity type between the 1999 study and the 2007 are limited to those activities that were included in the first British Gambling Prevalence Study. These comparisons are shown in table 5.4b. For all activities (with one exception) there were no significant differences in the proportion of problem gamblers reporting that they had undertaken each activity within the last 12 months. The only exception observed was for football pools, where the prevalence of problem gambling had increased significantly: from 1.0% in 1999 to 3.5% in 2007. This finding is notable, as overall (as described in chapter 2) participation in football pools was a much less popular gambling activity in 2007 than in 1999, with those who reported doing this activity in the last year falling from 9% to 3%.

Table 5.4b Problem gambling prevalence (DSM IV), by gambling activity in the last year and survey year

Past year gamblers

Gambling activity	DSM IV problem gamblers	
	1999	2007
	%	%
National Lottery Draw	0.7	1.0
Another lottery	2.0	2.1
Scratchcards	1.5	1.9
Football pools	1.0	3.5
Bingo	2.0	3.1
Slot machines	2.6	2.6
Horse races ^a	1.8	1.7
Dog races ^a	3.7	5.2
Betting with a bookmaker (other than on horse or dog races) ^a	5.8	3.9
Table games in a casino	5.6	5.2
Private betting (e.g. with friends, colleagues)	2.1	2.3
Any gambling activity in past year	0.8	0.9
Bases (weighted):		
National Lottery Draw	4860	4799
Another lottery	606	961
Scratchcards	1646	1637
Football pools	671	273
Bingo	557	609
Slot machines	1057	1193
Horse races ^a	1005	1456
Dog races ^a	301	423
Betting with a bookmaker (other than on horse or dog races) ^a	226	530
Table games in a casino	198	327
Private betting (e.g. with friends, colleagues)	870	854
Bases (unweighted):		
National Lottery Draw	4886	4914
Another lottery	598	980
Scratchcards	1621	1618
Football pools	669	270
Bingo	552	635
Slot machines	993	1139
Horse races ^a	980	1470
Dog races ^a	282	404
Betting with a bookmaker (other than on horse or dog races) ^a	210	503
Table games in a casino	188	298
Private betting (e.g. with friends, colleagues)	827	796

^a These activities do not include any bets made online.

5.5.3 Past week gambling

In 1999, problem gambling prevalence (among past week gamblers) was highest for table games in a casino (25.8%) and dog races (10.8%). In 2007 these activities also had high rates of problem gambling: table games in a casino (14.1%), and dog races (16.3%). In addition to these (as with rates by activity within the last year) the newer forms of gambling also had high rates of problem gambling in 2007: 15.1% for fixed odds betting terminals, 7.7% for online betting and 7.3% for online gambling.

For the majority of activities, problem gambling prevalence was higher among past week gamblers than past year gamblers (see figure 5C). Among those who had played slot machines, problem gambling prevalence was more than double the estimate observed among last year gamblers, rising from 2.6% among past year gamblers to 6.4% among past week gamblers. A similar pattern was observed among those who had played tables games in a casino, with problem gambling prevalence rising from 5.2% among past year gamblers to 14.1% among last week gamblers. Likewise, the problem gambling rate among those betting on horse races in the last week was more than double (5.0%) the estimate for last year gamblers (1.7%). This pattern was most pronounced for those who bet on dog races, where problem gambling among last week gamblers (16.3%) was more than triple that observed among last year gamblers (5.2%). Use of fixed odds betting terminals had the second highest rates of problem gambling prevalence among both past year (11.2%) and past week gamblers (15.1%).

Interestingly, for the National Lottery Draw, other lotteries, scratchcards, football pools, bingo and online gambling, problem gambling estimates for last year and last week gamblers were similar.

Due to the small number of people who did spread betting or used a betting exchange in the past week, it is not possible to compare last week and last year prevalence rates for these activities.

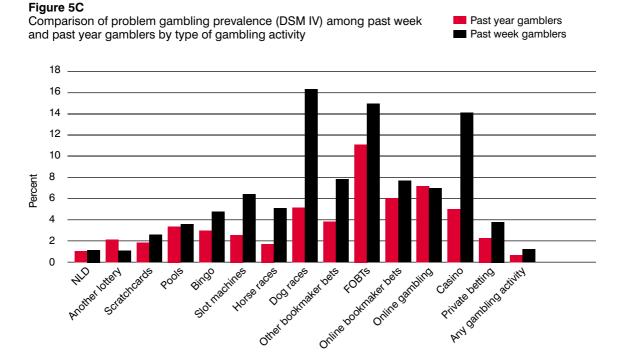


Table 5.4c Problem gambling prevalence (DSM IV), by gambling activity in the last week Past week gamblers

Gambling activity			
	DSM IV problem gamblers %	Bases (weighted): n	Bases (unweighted): n
National Lottery Draw	1.0	2905	3030
Another lottery	1.0	280	288
Scratchcards	2.6	515	517
Football pools	3.8	163	168
Bingo	5.0	250	268
Slot machines	6.4	314	298
Horse races ^a	5.0	221	229
Dog races ^a	16.3	61	56
Betting with a bookmaker (other than on horse or dog races) ^a	7.7	102	101
Fixed odds betting terminals	15.1	70	57
Online betting with a bookmaker			
on any event or sport	7.7	76	71
Online gambling	7.3	80	69
Table games in a casino	[14.1]	48	38
Betting exchange	b	23	21
Spread betting	b	7	6
Private betting (e.g. with friends, colleagues)	3.9	233	216
Another gambling activity	b	4	4
Any gambling activity in past week	1.3	3544	3644

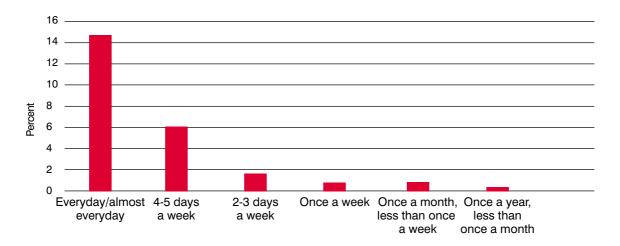
^a These activities do not include any bets made online.

5.5.4 Frequency of gambling in the last year

Respondents were asked to report how often, in the last year, they typically gambled on each activity. Frequency of gambling on any gambling activity in the last year was collated by looking at which activity a respondent reported doing most often, and assigning them to that category of gambling frequency. For example, if a respondent stated that they bought scratchcards once a week, but did not do any other activities in the last year, they are categorised as participating in gambling once a week. Likewise, if a respondent reported playing bingo two-three days a week, betting on horse races once a week and not participating in any other activities in the last year, they would be categorised as participating in some form of gambling activity at least once every two-three days⁴.

^b Figures not shown as unweighted base size is less than 30.

Figure 5DProblem gambling prevalence (DSM IV), by frequency of participating in any gambling activity in last year Base: Past year gamblers



Frequency of gambling

As might be expected, problem gambling prevalence was highest among those who reported gambling the most often, and decreased as frequency of participation decreased. Estimates ranged from 14.7% for those who gambled almost everyday, to 0.1% for those who gambled less often than once a month. The threshold of gambling more than three times a week on any activity was significantly associated with increased problem gambling prevalence. 10.6% of those who gambled on more than three days a week were problem gamblers, compared with 1.7% who gambled two-three days a week only.

Table 5.5 Problem gambling prevalence (DSM IV), by frequency of gambling on any activity in the last year

Past year gamblers

Past year gambling frequency			
	DSM IV problem gamblers %	Bases (weighted): n	Bases (unweighted):ª n
Everyday/almost everyday	14.7	81	79
4-5 days a week	6.0	71	67
More than 3 days a week	10.6	152	146
2-3 days a week	1.7	1021	1082
Once a week	0.6	1923	2001
Once a month, less than once a week	0.6	927	908
Once a year, less than once a month	0.1	1484	1463

^a This table excludes 20 respondents who were known to have participated in gambling in the last year, but frequency information was not known.

5.6 Factors associated with problem gambling

5.6.1 Introduction

Multi-variable logistic regression was used to examine the factors associated with DSM IV and PGSI scores. Four separate models are presented. The first examines the factors associated with being classified a problem gambler according to the DSM IV, whilst the second model looks at which factors are associated with being classified a problem gambler according to the PGSI. Where possible, results from these two models are compared. The third and fourth models examine those who score just below the problem gambling threshold for both the DSM IV and the PGSI. Those who score one or two on the DSM IV are categorised as "at risk" gamblers. Respondents whose PGSI scores are between three and seven are categorised as "moderate risk" gamblers.

The regression technique adjusts for several explanatory variables simultaneously. For each model, key variables of interest were entered, including a number of sociodemographic factors such as age, sex, general health status, presence of a longstanding illness, parental gambling behaviour, educational qualifications, equivalised household income and NS-SEC of the household reference person. The variables entered into the models were chosen specifically as they were identified as key risk factors shown to be associated with problem gambling from other studies (including the 1999 study)²⁵⁶. Consideration of possible co-linearity and interactions between variables were tested to identify a set of variables that would perform well within each model without confounding the analysis. Variables excluded from the models for reason of co-linearity were smoking and drinking status, which were associated with general health status and presence of a longstanding illness. Once identified, the same set of variables was entered into each model, and the models presented in this section show only those variables that were significantly associated with the outcome measure.

For all models, the independent variable is significantly associated with the outcome variable if p<0.05. The odds associated with the outcome variable are presented for each category of the independent variable. For example, table 5.6 shows the odds of being a DSM IV problem gambler for each category of the independent variables. Odds are expressed relative to a reference category, which is given a value of 1. An odds ratio greater than 1 indicates higher odds of DSM IV problem gambling prevalence, and odds ratios less than 1 indicate lower odds. 95% confidence intervals are also shown for each odds ratio. If the interval does not include 1, there is a significant difference between the odds ratio for that category and reference category.

In section 5.6.2, regression has been performed using problem gambling prevalence (presented separately for DSM IV and PGSI) as the dependent variable. As there are only a small number of cases within each dependent variable to analyse, the confidence intervals surrounding the odds ratios presented for some sub-groups and categories are large.

5.6.2 Factors associated with problem gambling

DSM IV problem gambling

Table 5.6 shows the odds of being classified as a DSM IV problem gambler. Only variables that were significant in the final model are presented in the table. These are: age, sex, marital status, ethnic group, parental gambling behaviour, general health status, highest educational qualification and presence of a longstanding illness.

The odds of being a DSM IV problem gambler were 4.90 times higher among men than women. This association was also observed in 1999.

As highlighted in other studies, and in 1999, the odds of being a DSM IV problem gambler were highest for those who reported that either of their parents/guardians had experienced problems with their gambling (6.57). Odds were also higher (2.54 times) for those whose parents regularly gambled (even if they did not have gambling problems) than those whose parents did not regularly gamble.

The odds of being a problem gambler were 3.55 times higher among those from Asian or Asian British backgrounds than those who were White. This association is particularly interesting, as chapter 6 shows that respondents from Asian or Asian British groups have the most negative attitudes, overall, to gambling, and chapter 3 showed that prevalence of gambling within the last year was significantly lower among this group than those from the White group. Odds were also higher among those from Black or Black British backgrounds (3.80).

Marital status was associated with being a DSM IV problem gambler, with odds 4.32 times higher among those who were single, and 3.28 times higher for those who were separated/divorced, than those who were married or living as married.

Having fewer educational qualifications was also associated with being a problem gambler. Odds were 3.24 times higher among those whose highest educational qualification was GCSEs/O-levels or A-levels and 3.37 times higher among those who had an 'other' qualification, than those who had a professional qualification or above.

Age, and presence of longstanding illness, were both significant in the final model predicting DSM IV problem gambling. However, there was no systematic pattern for these two variables, and no significant differences were observed for individual categories (relative to the reference category).

For general health status, those who reported that their general health was fair had odds 4.15 times higher of being a problem gambler than those who stated their health was good/very good. Odds were 3.53 times higher for those whose health was bad/very bad, but this was not significantly different from the reference category of good/very good⁷.

Table 5.6 Odds of being classified a DSM IV problem gambler

ΑII

Socio-demographic characteristics		
	Odds ratio	95% Clª
Sex (p<0.01)		
Female	1	
Male	4.90	(2.21, 10.86)
Age group (p<0.05)		
16-24	1	
25-34	1.80	(0.67, 4.84)
35-44	1.46	(0.55, 3.89)
45-54	1.55	(0.59, 4.07)
55-64	0.14	(0.01, 1.29)
65 and over	0.22	(0.03, 1.48)
Marital status (p<0.01)		
Married/living as married	1	
Separated/divorced	3.28	(1.07, 10.10)
Single, never married	4.32	(1.85, 10.08)
Widowed	5.04	(0.92, 27.71)
Ethnic group (p<0.01)		
White	1	
Asian or Asian British	3.55	(1.20, 10.52)
Black or Black British	3.80	(1.05, 13.78)
Other	2.86	(0.83, 9.89)
Parental gambling behaviour (p<0.01)		
Parents did not regularly gamble	1	
Parents regularly gambled, but did not have a problem with their gambling	2.54	(1.11, 5.81)
Parents regularly gambled and did have problems	2.04	(1.11, 0.01)
with their gambling	6.57	(2.52, 17.17)
Parents regularly gambled, not known whether had proble	m	
with their gambling	1.66	(0.45, 6.03)
General health status (p<0.02)		
Very good/good	1	
Fair	4.12	(1.66, 10.23)
Bad/very bad	3.56	(0.73, 17.37)
Presence of longstanding illnesses (p<0.05)		
No longstanding illnesses	1	
Non-limiting longstanding illness	0.61	(0.11, 3.22)
Limiting longstanding illness	1.08	(0.34, 3.44)
Highest educational qualification (p<0.05)		
Professional qualification or above	1	
GCSEs/'O' levels or 'A' levels	3.24	(1.23, 8.54)
Other	3.37	(1.24, 9.15)

^aConfidence Interval

PGSI problem gambling

Some of the factors associated with PGSI problem gambling are the same as those associated with the DSM IV category. Age, sex, parental gambling behaviour, marital status and general health status were all significant in the final model. Notably, however, ethnic group and presence of a longstanding illness were not.

The association between PGSI problem gambling and age was more marked than observed for DSM IV problem gamblers. Odds of being a PGSI problem gambler were significantly lower for those aged 55-64 (0.16) or aged 65 and over (0.06) than those aged 16-24.

Odds of being a PGSI problem gambler were 8.03 times higher for men than women, and respondents who reported that they had fair health had odds 3.04 times higher than those whose health was good/very good.

Those respondents who were single had odds 3.15 times higher than those who were married or living as married.

Aside from sex, the strongest association was between parental gambling behaviour and PGSI problem gambling. Compared with those whose parents did not regularly gamble, the odds of being a PGSI problem gambler were higher among those whose parents regularly gambled, but did not have gambling problems (3.23) and those whose parents had problems with their gambling (10.13).

Taking the results from the two logistic regression models suggests that problem gambling (as measured by the screening instruments) is significantly associated with being male, having parents who regularly gambled (particularly if they had a problem with gambling), being single and perceiving your health state to be less than good or very good. Furthermore, based on the DSM IV screen, there is a significant association with being separated or divorced, being of Asian/Asian British or Black/Black British background, having fewer educational qualifications, and (according to PGSI), being aged 54 years or younger.

Table 5.7 Odds of being classified a PGSI problem gambler

ΔΙΙ

Socio-demographic characteristics		
	Odds ratio	95% Cl ^a
Sex (p<0.01)		
Female	1	
Male	8.03	(2.82, 22.83)
Age group (p<0.05)		
16-24	1	
25-34	0.97	(0.33, 2.88)
35-44	1.10	(0.35, 3.47)
45-54	0.87	(0.24, 3.08)
55-64	0.16	(0.02, 0.98)
65 and over	0.06	(0.01, 0.54)
Parental gambling behaviour (p<0.01)		
Parents did not regularly gamble	1	
Parents regularly gambled, but did not have a problem with their gambling	3.23	(1.49, 6.96)
Parents regularly gambled and did have problems with their gambling	10.13	(3.85, 26.65)
Parents regularly gambled, not known whether had problem with their gambling	1.17	(0.30, 4.54)
General health status (p<0.05)		
Very good/good	1	
Fair	3.04	(1.26, 7.33)
Bad/very bad	4.19	(0.89, 19.72)
Marital status (p<0.05)		
Married/living as married	1	
Separated/divorced	1.53	(0.43, 5.52)
Single, never married	3.15	(1.36, 7.30)
Widowed	2.89	(0.47, 17.75)
Base (unweighted):	8455	

^aConfidence Interval

5.6.3 Factors associated with being 'at risk' for problem gambling

Both the DSM IV and PGSI have cut-off categories to identify respondents who score below the problem gambling threshold. Those who score one or two on the DSM IV are sometimes categorised as "at risk" gamblers, whereas those who score between three and seven on the PGSI are categorised as "moderate risk" gamblers⁸⁹. Tables 5.8 and 5.9, respectively, show which factors are significantly associated with being classified in each group. The same socio-demographic variables were entered into each model, and only variables that were significant in the final models have been presented in the tables.

Sex and parental gambling behaviour were significantly associated with being "at risk", as defined by the DSM IV. Odds were 1.88 times higher for men than women, and 1.72 times higher for those who parents regularly gambled (but did not have a gambling problem) than those whose parents did not regularly gamble. Odds among those whose parents had ever had a gambling problem were not significantly different from those whose parents never gambled, although this observed lack of significance may be the result of the small number of "at risk" respondents within this category.

Table 5.8 Odds of being classified a DSM IV "at risk" gambler (DSM IV score 1-2) A/I

Socio-demographic characteristics		
	Odds ratio	95% Cl ^a
Sex (p<0.01)		
Female	1	
Male	1.88	(1.53, 2.32)
Parental gambling behaviour (p<0.01)		
Parents did not regularly gamble	1	
Parents regularly gambled, but did not have a problem with their gambling	1.72	(1.34, 2.22)
Parents regularly gambled and did have problems with their gambling	1.70	(0.98, 2.98)
Parents regularly gambled, not known whether had problem with their gambling	1.42	(0.96, 2.09)
Base (unweighted):	8415	

^a Confidence Interval

The PGSI was specifically designed to provide greater distinction among gambling sub-types, and to give better understanding of the distribution of these sub-types along the continuum of gambling behaviour¹⁰. The development of these sub-types has been viewed as an improvement on other instruments such as the South Oaks Gambling Screen (SOGS) and the original DSM IV^{11 12}. It is perhaps, therefore, unsurprising that more variables were significantly associated with being a "moderate risk" PGSI gambler than a DSM IV "at risk" gambler, given the greater sensitivity of the PGSI instrument to classify these comparative sub-types.

The variables that were significant were sex, age, NS-SEC of household reference person, parental gambling behaviour and general health status.

As observed with DSM IV "at risk" gamblers, odds of being a PGSI moderate risk gambler were significantly higher for men (3.57) than for women. There was also a marked association with age, with odds being 0.31 times lower among those aged 45-54 than those aged 16-24, and decreasing with advancing age thereafter.

Those respondents from routine or semi-routine households had odds 2.88 times higher of being a moderate risk gambler than those in managerial and professional households. Likewise, those with fair health had higher odds (2.20) than those in good or very good health.

Those whose parents gambled regularly but who did not have gambling problems had higher odds of being a moderate risk gambler (1.92) than those who parents did not regularly gamble. Interestingly, those whose parents gambled regularly and had ever had gambling problems did not have significantly higher odds of being a moderate risk gambler than those who parents did not regularly gamble. The same pattern was observed for DSM IV "at risk" gamblers, and likewise the observed lack of significance may be due the small number of "moderate risk" respondents within this category.

Table 5.9 Odds of being classified a PGSI "moderate risk" gambler (PGSI score 3-7) AII

Socio-demographic characteristics		
	Odds ratio	95% Cl ^a
Sex (p<0.01)		
Female	1	
Male	3.57	(2.35, 5.42)
Age group (p<0.01)		
16-24	1	
25-34	1.18	(0.67, 2.08)
35-44	0.64	(0.31, 1.33)
45-54	0.31	(0.14, 0.67)
55-64	0.19	(0.06, 0.59)
65 and over	0.09	(0.03, 0.31)
NS-SEC of household reference person (p<0.05)		
Managerial and professional occupations	1	
Intermediate occupations	1.53	(0.71, 3.28)
Small employers and own account workers	1.17	(0.48, 2.88)
Lower supervisory and technical occupations	1.86	(0.81, 4.23)
Semi-routine and routine occupations	2.88	(1.37, 6.06)
Not answered	0.58	(0.17, 1.94)
Parental gambling behaviour (p<0.05)		
Parents did not regularly gamble	1	
Parents regularly gambled, but did not have a problem		
with their gambling	1.92	(1.23, 2.99)
Parents regularly gambled and did have problems	1.60	(0.61, 4.40)
with their gambling Parents regularly gambled, not known whether had	1.63	(0.61, 4.40)
problem with their gambling	1.73	(0.78, 3.83)
General health status (p<0.02)		, , ,
Very good/good	1	
Fair	2.20	(1.25, 3.88)
Bad/very bad	2.16	(0.72, 6.47)
Base (unweighted):	8413	

^a Confidence Interval

Endnotes:

- ¹ See G Reith, (2006) Research on the social impacts of gambling http://www.scotland.gov.uk/Resource/Doc/143788/0036515.pdf
- ² J Welte, W F Wieczorek, G M Barnes, M O Tidwell (2006). *Multiple Risk Factors for Frequent and Problem Gambling: Individual, Social, and Ecological*. Journal of Applied Social Psychology **36** (6), 1548–1568.
- ³ Previous studies have examined the associations between extended familial problem gambling and pathological gambling, and demonstrated links between them. See B Gambino, R Fitzgerald, H Shaffer, J Renner and P Courtnage (1993). *Perceived family history of problem gambling and scores on SOGS*. Journal of Gambling Studies **9** (2),169-184
- ⁴ For some respondents, frequency of gambling may be underestimated if they report doing many different activities reasonably regularly. It is unknown whether respondents did each activity on the same day or not and, as such, their frequencies of participation can not simply be summed across activities. Instead, respondents are allocated to the category which represents the activity they report doing most often
- ⁵ Welte JW, Barnes GM, Wieczorek WF, Tidwell MC, Parker JC (2004). *Risk factors for pathological gambling*. Addictive Behaviour **29** (2), 323-35
- ⁶ D Clarke, M Abbott, S Tse, S Townsend (2006). *Gender, Age, Ethnic and Occupational Associations with Pathological Gambling in a New Zealand Urban Sample*. New Zealand Journal of Psychology
- ⁷ Findings of this nature are to be expected due to limitations of using logistic regression with small numbers of interest in the outcome variable.
- ⁸ HJ Shaffer, MN Hall, J Vander bilt (1997). *Estimating the prevalence of disorded gambling behaviour in the United States and Canada: A Metaanalysis*. Boston, MA Harvard Medical School on Addictions.
- ⁹ H Wynne (2003). *Introducing the Canadian Problem Gambling Index*. Canada http://www.gamblingresearch.org/download.sz/The%20CPGI%20V5%20-%20from%20Hal.pdf?docid=6446, p. 18.
- ¹⁰ J McCready, E Adlaf (2006). *Performance and Enhancements of the Canadian Problem Gambling Index:* Report and Recommendations, p1.
- http://www.gamblingresearch.org/download.sz/CPGI%20Review%20%20Final%20Report%20English%20 Web%20Version.pdf?docid=7974
- ¹¹ Lesieur, HR & Blume, SB. *The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers*. Am J Psychiatry 1987; **144**: 1184-1188.
- ¹² In a comparative review, the PGSI was judged to be a better instrument than the South Oaks Problem Gambling Screen and the Victoria Gambling Screen. J McCready, E Adlaf (2006) *Performance and Enhancements of the Canadian Problem Gambling Index: Report and Recommendations*, p11. http://www.gamblingresearch.org/download.sz/CPGI%20Review%20%20Final%20Report%20English%20 Web%20Version.pdf?docid=7974

6 ATTITUDES TOWARDS GAMBLING

6.1 Development of a scale of gambling attitudes

Attitudes to gambling have always ranged from the very positive to the very negative, and gambling has become a higher profile political issue, often fuelled by the availability of remote gambling and more opportunities to advertise. It was therefore considered important that the survey should include a reliable and valid scale for the measurement of attitudes towards gambling. Such a scale should satisfy the following criteria:

- It should measure attitudes towards gambling in the population and not (as in the 1999 survey) attitudes towards the individual respondent's own gambling. The latter is well covered by the problem gambling screens.
- It should measure attitudes towards gambling in general, rather than attitudes towards individual forms of gambling. Although the latter would also be of interest, it would be impossible to assess attitudes toward specific forms of gambling given the space and time constraints of a questionnaire designed for self-completion by members of the general population.
- The items that constituted the scale should be sufficiently general that they could be used in identical form at other times, and in other English-speaking countries, thus enabling comparisons to be made. Possible items which asked about attitudes towards gambling policy issues of importance in Britain currently would, therefore, not be candidates for inclusion.

We knew of no existing attitude scale that fulfilled our criteria. However, it should be noted that there have been other previous attempts to assess general population attitudes towards gambling¹², but these were largely specific to certain forms of gambling such as horse race and casino gambling. There have also been a number of studies that have examined attitudes towards gambling in specific sub-groups (e.g. adolescents)³ and studies that have used alternative methodologies to study attitudes such as Q-methodology⁴ or focus groups⁵.

6.2 Design of the Attitudes Towards Gambling Scale (ATGS)

The ATGS was developed in the following stages:

- 1. It was decided to use a conventional attitude scale format consisting of a series of statements, each expressing an attitude towards gambling to which the respondent would be invited to state strength of agreement or disagreement by choosing from one of five provided options: strongly agree; agree; neither agree or disagree; disagree; strongly disagree (known as a Likert scale). Such a design is a popular one for attitude scaling. One issue was whether to include a sixth, 'don't know', option, but it was considered that to do so would be to complicate the questionnaire page layout and possibly risk respondent confusion.
- 2. The questionnaire design allowed room for 14 attitude statements. In accordance with normal attitude scaling practice, the process began with a much larger pool of items taken from a number of sources. A number of items were based on statements made in the press or by spokespeople for the Government or the gambling industry. Some of those were noted in the book *Gambling and Problem Gambling in Britain*⁶ which was based on the findings of the 1999 survey. Other such statements were collected from similar sources since then. A second source of items was a qualitative study of general public attitudes towards gambling carried out prior to the 2007 survey with a specific purpose of contributing to the measurement of attitudes in the survey⁷. Some items were specifically suggested at the end of the report of that study. Others were taken from direct quotations from study participants that were cited in the report. From those various sources, a total of 90 possible items was generated.
- 3. That number was reduced to 25 for inclusion in the survey pilot study. The shortlist of 25 items was chosen on the following basis. Possible items were excluded if they were thought to be specific to particular forms of gambling, particular age groups, or particular policy issues that might be of current importance but which might be of lesser importance at a later date or in another jurisdiction. Items were only retained for the pilot study if they were short and were considered by all members of the project committee to be unambiguous in their meaning.

It was noted that the pool of potential items included some that explicitly referred to the benefits or harms of gambling for society (e.g. 'Gambling is good for communities'), whilst others were more general or concerned the benefits or harms of gambling for individual people (e.g. 'Gambling livens up life'). Items were therefore chosen to provide equal coverage of those two types of item. Finally, some items were dropped to ensure that half of the items were worded in a way that implied a positive attitude towards gambling (e.g. 'Gambling is a harmless form of entertainment') and half which implied a negative attitude towards gambling (e.g. 'Gambling is a fool's game').

- 4. The 25 shortlisted items were given to the 55 people who took part in the pilot study, and their responses were used to select the final set of 14 items that was included in the main survey. The following four principles were used for selecting the final set of items:
 - (i) An item was only retained if it had a good correlation (around 0.5 or higher) with the sum of scores on all the other items added together. This item-total correlation is a good measure of whether the item contributes well to the scale as a whole. First, an item's correlation was examined when all 25 items were included in the analysis. Later, when a provisional selection of 14 best items had been made, a check was carried out to make sure that an item retained a good item-total correlation when the analysis was limited to those 14 items.
 - (ii) If two items correlated very highly together (around 0.7 or higher), indicating that there was a high degree of overlap in their meanings, then only one of the pair was retained.
 - (iii) The equal balances of society-oriented and more general items, and of positively worded and negatively worded items, were maintained in the final set of 14 items.
 - (iv) The survey Advisory Group raised the question of whether there was a bias in the selection of items towards an over-inclusion of items that would encourage the expression of negative attitudes towards gambling. As such, a small number of items were dropped which in the pilot study elicited on average the most negative attitudes towards gambling (for example the item, 'Nearly everyone loses at gambling in the end', was one that showed a strong bias towards agreement). One item was eliminated at the specific request of the Advisory Group on the grounds that the wording was extreme and would invite sensational reporting: 'Gambling is a curse on society'.

6.3 Deriving the ATGS score

Each item was scored from one (strongly agree) to five (strongly disagree). For the analysis, the scoring of positively worded items was reversed so that higher scores were indicative of more favourable attitudes towards gambling for all items. The midpoint of three on any item therefore indicated neither agreement nor disagreement; scores above three indicated an attitude favourable to gambling; scores below three indicated an attitude unfavourable to gambling.

The 14 individual item scores (seven of them now reversed) were added together to make a single summed score. To check that the 14 items constituted an internally reliable (i.e. reasonably homogenous) scale, Cronbach's alpha coefficient was calculated for the complete survey sample, excluding those with seven or more missing items (weighted n=8872). The result was satisfactory: the alpha value was 0.89; item-total correlations ranged from 0.43 to 0.63 (only two falling below 0.5); and all items contributed to the high alpha value.

The sum of the 14 attitude items was therefore considered to constitute a satisfactory attitude scale and was used in subsequent analyses. It is subsequently referred to as the 'attitude score'. A score of 42 indicates an overall neutral attitude; higher scores indicate an overall favourable attitude towards gambling; those below 42 an overall unfavourable attitude. Attitude scores were normally distributed with a small and acceptable degree of skewness to the distribution.

6.4 Attitudes towards gambling in the population

6.4.1 Overall

Table 6.1 shows results for the total sample. The overall weighted sample mean attitude score is 35.4, indicating that the central tendency lies to the negative side of the neutral midpoint of 42.0. The standard deviation of 8.56 indicates that there is substantial individual variation around the mean, with 68% of the sample having an attitude score lying between 26.7 and 43.8 (the mean +/- 1 st.dev). 18% obtained attitude scores above 42 and 75% below 42 (7% obtained scores of exactly 42).

Table 6.1 Attitude scale items and total score, means and standard deviations

Item		Mean	Standard deviation
1.	There are too many opportunities for gambling nowadays	2.08	0.94
2.	People should have the right to gamble whenever they want*	3.38	0.95
3.	Gambling should be discouraged	2.55	1.00
4.	Most people who gamble do so sensibly*	2.82	0.97
5.	Gambling is a fool's game	2.20	1.01
6.	Gambling is dangerous for family life	2.18	0.96
7.	Gambling is an important part of cultural life*	2.37	0.98
8.	Gambling is a harmless form of entertainment*	2.54	0.96
9.	Gambling is a waste of time	2.49	1.03
10.	On balance gambling is good for society*	2.38	0.88
11.	Gambling livens up life*	2.61	0.98
12.	It would be better if gambling was banned altogether	3.20	1.05
13.	Gambling is like a drug	2.25	0.94
14.	Gambling is good for communities*	2.33	0.87
	Total score (sum of 14 items)	35.39	8.56
Bas	e (weighted):	8872	
Bas	e (unweighted):	8880	

^{*}These items have been reverse scored so that for all item means above 3.0 indicate an average attitude favourable to gambling, and those below 3.0 unfavourable

As Table 6.1 also shows, all but two of the 14 constituent items, taken individually, produced a mean score that suggested an average attitude that was unfavourable to gambling. The two exceptions, which indicated an average attitude favourable towards gambling were: 'People should have the right to gamble whenever they want' (item 2), and 'It would be better if gambling was banned altogether' (item 12). In both instances, however, the mean was closer to the midpoint of 3.0 than to 4.0. Of the 12 items which produced an unfavourable average view, eight items produced a mean closer to 2.00 than to the midpoint of 3.00. The item that produced the clearest expression of attitude unfavourable to gambling was: 'There are too many opportunities for gambling nowadays' (item one), which produced a mean very close to 2.00.

6.4.2 How attitudes towards gambling vary by socio-demographic groups Statistically significant associations were found between attitude score and each of seven socio-demographic variables that were tested (t tests for independent sample means, and one-way analyses of variance were used as appropriate). The mean score for men was higher than that for women (Table 6.2). Associations between attitude score and age group, educational qualifications, household NS-SEC and household income are also shown in Table 6.2. Higher mean scores, indicating more favourable attitudes, were associated with lower age, fewer educational qualifications, lower household NS-SEC, and higher household income. Among marital status groups, the single, never married group produced the highest mean scores and the widowed the lowest, followed by the married/living as married. Among ethnic groups, the Asian or Asian British group reported the lowest mean score, with White followed by Black or Black British the highest.

Table 6.2 Attitude score by socio-demographic characteristics A//

Socio-demographic characteristics	Attitude score							
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted):				
Sex								
Male	36.78	8.80	4278	4190				
Female	34.09	8.13	4590	4686				
Age group								
16-24	37.03	8.70	1267	1017				
25-34	37.16	8.29	1453	1315				
35-44	35.59	8.54	1716	1706				
45-54	35.12	8.74	1414	1501				
55-64	33.72	8.50	1326	1552				
65-74	34.37	8.27	900	1005				
75 and over	33.50	7.88	777	765				

continued

Table 6.2 continued

ΑII

Socio-demographic characteristics	Attitude score						
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted)			
Marital status							
Married/living as married	34.84	8.47	4728	4930			
Separated/divorced	35.68	8.69	684	728			
Single, never married	36.88	8.52	2552	2296			
Widowed	33.84	8.04	641	658			
Ethnic group							
White	35.60	8.46	8005	8123			
Asian or Asian British	31.54	9.45	321	275			
Black or Black British	35.21	8.95	206	178			
Other	33.65	9.45	235	207			
NS-SEC of household reference person							
Managerial and professional occupations	34.98	8.67	3364	3395			
Intermediate occupations	34.98	8.95	764	767			
Small employers and own account workers	35.99	8.56	906	916			
Lower supervisory and technical occupations	35.27	8.28	968	1008			
Semi-routine and routine occupations	35.98	8.17	2327	2288			
Household income tertile							
1st (lowest)	34.70	8.67	2334	2337			
2nd	35.24	8.42	2336	2339			
3rd (highest)	36.31	8.72	2358	2347			
Highest educational qualification							
Professional qualification or above	34.93	8.89	2536	2523			
GCSEs/O-levels or A-levels	36.15	8.50	3487	3386			
Other	34.88	8.34	2459	2584			

6.5 How attitudes towards gambling vary by gambling behaviour and other factors

Statistically significant associations were also found between attitude score and each of the gambling behaviour and other health-related and risk factor variables that were examined (again using t tests and ANOVAs as appropriate). Table 6.3 displays a regular and strong positive relationship between the number of separate types of gambling activity participated in during the last 12 months and attitude score. There is also a strong relationship with number of gambling activities in the last seven days.

Table 6.3 Attitude score, by participation in gambling activities

ΑII

Participation in gambling activities	Attitude score						
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted):			
Number of gambling activities participated in within last 12 months							
0	32.13	8.59	2839	2772			
1	34.57	7.77	2341	2433			
2	36.42	7.65	1529	1562			
3	38.31	7.24	924	922			
4	39.43	8.17	530	523			
5	40.82	7.57	267	261			
6 or more	43.12	7.93	434	399			
Number of gambling activities participated in within last seven days							
0	33.82	8.49	5246	5155			
1	36.64	7.88	2502	2582			
2	38.78	7.87	710	737			
3	41.33	8.29	241	245			
4	41.77	8.39	101	93			
5 or more	44.82	9.58	66	61			

Those who qualified as problem gamblers according to the DSM IV-based scale had a higher mean attitude score than all others (Table 6.4). Inspection of Table 6.4 shows that it was PGSI moderate risk gamblers who had the highest mean attitude score, with problem gamblers having somewhat lower means.

Table 6.4 Attitude score, by problem gambling scores

ΑII

Problem gambling	Attitude score							
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted):				
DSM IV problem gambler								
Yes	[40.65]	[11.40]	51	47				
No	35.37	8.59	8297	8325				
PGSI score								
Non problem gambler	34.99	8.50	7756	7824				
Low risk gambler	40.94	7.56	427	397				
Moderate risk gambler	41.77	9.15	119	108				
Problem gambler	[37.35]	[12.21]	46	42				

Significant associations were also found between attitude score and having parents who gamble/gambled regularly (Table 6.5). Lower mean attitude scores, indicating less favourable attitudes towards gambling, were found among those who thought that a parent had (or had had) a gambling problem, and those who reported a close relative having a gambling problem in the last 12 months.

Table 6.5 Attitude score, by self-reported family gambling behaviour

ΑII

Family gambling behaviour	Attitude score						
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted):			
Parents gambled regularly							
Yes	37.14	8.87	1756	1795			
No	34.82	8.44	6597	6581			
Whether either parent who regularly gambled had problems with their gambling							
Yes	33.26	9.26	245	245			
No	37.73	8.65	1490	1529			
Any close relative had a problem with gambling in last 12 months							
Yes	32.72	9.06	219	214			
No	35.45	8.55	8494	8515			

Higher mean attitude scores were associated with being a smoker and being a heavier drinker (Table 6.6). Lower scores were found for those who reported their own health to be bad or very bad, and among those with a longstanding illness or disability (Table 6.6).

Table 6.6 Attitude score, by health and lifestyle characteristics

ΑII

Health and lifestyle characteristics	Attitude score						
	Mean	Standard deviation	Bases (weighted):	Bases (unweighted).			
Self-reported general health status							
Very good/good	35.52	8.62	6967	6909			
Fair	35.11	8.13	1442	1486			
Bad/Very bad	34.17	9.19	376	400			
Presence of a longstanding illness							
Limiting longstanding illness							
Yes	34.39	8.54	1947	2067			
No	35.68	8.56	6777	6668			
Cigarette smoking status							
Current cigarette smoker	37.10	8.34	2061	2025			
Not current cigarette smoker	34.84	8.59	6604	6651			
Units of alcohol consumed by current drinkers on heaviest drinking day in last week							
Did not drink in last week	35.54	8.57	692	702			
1-4 units	34.67	7.96	3078	3187			
5-9 units	36.93	8.14	1285	1279			
10-14 units	38.78	8.46	691	672			
15-19 units	40.04	8.16	241	220			
20 units or more	39.69	8.60	299	273			

This is the first time to our knowledge that an attempt has been made to assess quantitatively attitudes towards gambling among the British general population (an interesting qualitative study⁷ provides complementary findings). We believe we have been successful in developing a scale of attitudes towards gambling that has produced evidence of being both reliable and valid. The items appear to constitute a coherent, but not redundant, set for assessing general attitude towards gambling. The attitude score derived from the ATGS is correlated with socio-demographic, gambling behaviour, and other health-related and risk factor variables, in a way that suggests that it has good validity as a measure of gambling attitudes. The deliberate choice of a general attitude measure gives the ATGS a certain strength whilst also conferring some limitations. Its chief strength is that it might be used at other times and in other places. It therefore has potential for comparative research. On the other hand, it cannot tell us anything about attitudes towards specific forms of gambling, nor about public attitudes towards gambling policy issues of current or future interest in Britain or elsewhere. For such purposes, the ATGS would need to be supplemented by more focused assessments.

The main overall conclusion that may be drawn from the present results is that British public attitudes towards gambling are, in general, more negative than positive. This is true of the overall attitude score as a whole, and of most of the individual items. Whilst the average person was inclined towards believing that people have a right to gamble whenever they want, and towards rejecting a total prohibition on gambling, most believed that gambling was more harmful than beneficial for individuals (for example 'a fool's game' and 'dangerous for family life' and not something that 'livens up life' nor 'a harmless form of entertainment'); and was more harmful than beneficial for society (e.g. 'too many opportunities for gambling nowadays' and not 'good for communities' nor 'an important part of cultural life').

It might be argued that this rather negative view of public attitudes is simply a reflection of the choice of statements that were included as items in the ATGS. It is certainly the case that results varied from item to item. Logically, therefore, it is indisputable that a more favourable impression of public attitudes towards gambling could be obtained by choosing items that would be likely to invite positive attitudes. It seems likely, for example, that an attitude scale that concentrated on the liberty of individuals to do as they choose would produce a result more favourable to gambling. One that focused on the potential harms of gambling would most likely produce an even less favourable attitude than the one produced by using the ATGS in the present survey. We would argue, however, that the careful process that was undertaken in order to choose a diverse set of statements has resulted in a fair assessment of the general position of the British public towards gambling. Indeed, we deliberately responded to the potential criticism of bias by excluding some items that produced the most negative attitudes in the pilot study. We believe, therefore, that our conclusion that current British attitudes are more negative than positive towards gambling is a sound one. It remains for others to challenge that view with further research.

The results from the ATGS have also indicated those sub-groups of the population who have the most positive or the most negative attitudes towards gambling. Among those with the most positive attitudes towards gambling are: the under 35s, heavier drinkers, those who have engaged in more than four different types of gambling activity in the last 12 months, or more than three types in the last week, and those who score on either of the problem gambling screens as a problem gambler, or as an 'at risk' gambler according to the PGSI. Of all the sub-groups examined in this chapter, only two obtained a mean attitude score above the theoretical midpoint of 42.0. Those groups were those who had engaged in the last 12 months in seven or more different types of gambling activity, and those who had engaged in six or more in the last week.

Those sub-groups showing evidence of the least favourable attitudes towards gambling were the over 55s, the widowed, those who described themselves as Asian or Asian British or of 'other' ethnic group, non-gamblers, and those who reported a parent with a gambling problem, or a close relative having a gambling problem within the last 12 months. Of all those groups, the one with the least favourable attitudes of all was the Asian/Asian British group.

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Endnotes:

- ¹ Kassinove (1998). *Development the gambling attitudes scales: preliminary findings*, Journal of Clinical Psychology, **54**, 763-771.
- ² Sutton, R. & Griffiths, M.D. (2006). *The casino attitudes scale: The development of a new brief psychometric instrument*. Nottingham: International Gaming Research Unit.
- ³ Wood, R.T.A.. & Griffiths, M.D. (2004). *Adolescent lottery and scratchcard players: Do their attitudes influence their gambling behaviour?* Journal of Adolescence, **27**, 467-475.
- ⁴ Wood, R.T.A., Griffiths, M.D., Derevensky, J.L. & Gupta, R. (2002). *Adolescent accounts of the UK National Lottery and scratchcards: An analysis using Q-sorts*. Journal of Gambling Studies, **18**, 161-183.
- ⁵ Wood, R.T.A. & Griffiths, M.D. (2002). *Adolescent perceptions of the National Lottery and scratchcards: A qualitative study using group interviews*. Journal of Adolescence, **25/6**, 655-668.
- ⁶ Orford, J., Sproston, K., Erens, B., White, C. and Mitchell, L. (2003). *Gambling and Problem Gambling in Britain*. London: Brunner-Routledge.
- ⁷ Attitudes to Gambling: A Qualitative Investigation for the Department for Culture, Media and Sport, Final Report (February, 2006), Corr Willbourn Research and Development, London.

APPENDIX 1 CHARACTERISTICS OF THE SAMPLE

A1.1 Introduction

This appendix provides an overview of the socio-demographic characteristics of the achieved sample. 10,144 addresses were selected at random from the small users Postcode Address File. 5,832 households took part in the survey. At each selected address, every person aged 16 and over was eligible to complete a questionnaire. Questionnaires were completed by 9,003 individuals.

The achieved sample was weighted to reflect the sex and age distribution of the general population in Britain. However, besides age and sex there may be differences between the sample and the general population that could affect the representativeness of the results. Where possible, the socio-demographic characteristics of the sample described below are compared with the general population in Britain in order to identify potential differences between the sample and the adult British population. The sample profile is also compared with that from the previous survey, in 1999.

Details of sample selection, response and weighting can be found in Appendix 2

A1.2 Age and sex distribution

Firstly, looking at sex, the sample contained slightly more women than men: 52% and 48% respectively. This reflects the ONS Mid-2005 Population Estimates data, where there was a slightly greater proportion of women than men (52% women vs. 48% men)¹.

In terms of age distribution, 14% were aged 16-24, 35% were aged 25-44, 31% were 45-64, and 19% were 65 and over. Men were more likely than women to be in the youngest age categories (52% of men compared with 49% of women were aged under 45). Correspondingly, women were more likely to be aged 65 and over (20%, compared with 17% of men). The age profile of both men and women is broadly the same as that of the 1999 survey. (Table A1.1).

Table A1.1 Age by sex

ΑII

Age	Sex Men	2007 Women	Total	1999 Men	Women	Total
	%	%	%	%	%	%
16-24	15	14	14	14	13	14
25-34	17	16	16	21	19	20
35-44	20	19	19	19	17	18
45-54	16	16	16	17	16	16
55-64	15	15	15	13	12	13
65-74	10	10	10	10	11	11
75 and over	7	10	9	7	12	9
Bases (weighted):	4354	4646	9003	3738	3945	7682
Bases (unweighted):	4258	4741	9003	3603	4059	7662

A1.3 Marital status

Just over half (55%) of respondents were married (or living as married) while 15% were separated, divorced or widowed, and 30% were single. Men were more likely than women to be single (33% compared with 27%), while women were more likely than men to be widowed (11% compared with 4% of men). This mirrors the distribution among the general population according to the ONS Mid-2005 Population Estimates where 50% of the population were married (or living as married) and 33% were single¹. The percentage of married respondents has decreased since 1999 (from 63%), and, correspondingly, the percentage of single people has increased (from 21%). (Table A1.2 and Figure A1.A).

Table A1.2 Marital status by sex

ΑII

Marital status	2007		Total 1999			Total
	Men	Women		Men	Women	
	%	%	%	%	%	%
Married/living as married	57	53	55	67	60	63
Separated/divorced	7	9	8	6	8	7
Single, never married	33	27	30	24	19	21
Widowed	4	11	7	4	13	9
Bases (weighted):	4354	4646	9003	3670	3894	7564
Bases (unweighted):	4258	4741	9003	3542	4006	7548

Figure A1.A Marital status **BGPS 2007** ■ Mid-2005 Population estimates 60 50 40 30 20 10 0 Married/living Separated/ Single, never Widowed Divorced as married married **Marital status**

A1.4 NS-SEC of household reference person

Information was collected about the main job of the household reference person, and this was used to place respondents into one of five NS-SEC categories.

In order to assess how representative the sample was in terms of NS-SEC, the survey data were compared with data from the Health Survey for England 2005² (HSE). Figure A1.B highlights that the sample, in terms of NS-SEC of the household reference person, for the BGPS and HSE '05 were almost identical. (NS-SEC has been introduced since 1999, so no comparison can be made with the previous survey.)

Table A1.3 NS-SEC of household reference person, by sex

NS-SEC of household reference person	Sex		Total
	Men	Women	
	%	%	%
Managerial and professional occupations	41	40	40
ntermediate occupations	7	11	9
small employers and own accounts workers	12	10	11
ower supervisory and technical occupations	13	11	12
emi-routine occupations	27	29	28
ases (weighted):	4354	4646	9003
Bases (unweighted):	4258	4741	9003

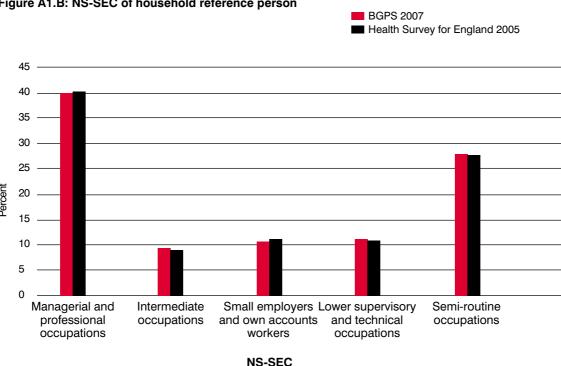


Figure A1.B: NS-SEC of household reference person

A1.5 Qualifications

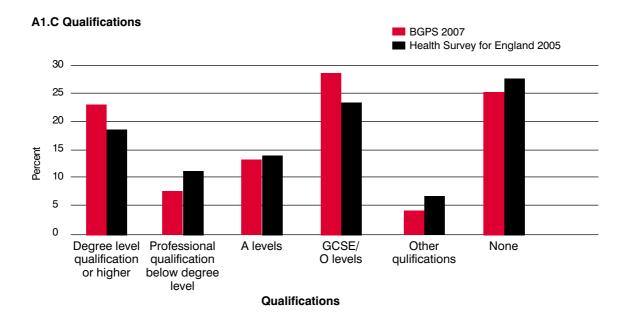
Table A1.4 shows respondents' highest educational or vocational qualifications. 23% of respondents were qualified to degree level or higher, while a quarter of respondents said they had no formal qualifications. Men were somewhat more likely than women to report gaining any qualifications (77% men compared with 73% women). (It should be noted that the qualifications listed are the highest ones held at the time of the survey and that many younger respondents were still in full-time education.)

Compared with the sample profile of the Health Survey for England 2005 (HSE)2 in Figure A1.C, the British Gambling Prevalence Survey 2007 has a higher proportion of respondents with a degree qualification or higher (23% compared with 19% in the HSE), and a higher proportion of respondents who have attained GCSEs/O-levels (28% and 23% respectively). HSE is a survey of the population of England while the British Gambling Prevalence Survey is a British survey. This may partly account for the over-representation of some qualification categories. The sample profile had changed, somewhat, since 1999, with a higher proportion of people qualified to degree level or above (23% compared with 17%).

Table A1.4 Qualifications, by sex

ΑII

Qualifications	2007		Total	1999		Total
	Men	Women		Men	Women	
	%	%	%	%	%	%
Degree level qualification or higher	24	21	23	20	13	17
Professional qualification below degree le	evel 7	7	7	12	12	12
A-levels	14	12	13	10	9	10
GCSEs/O-levels	28	29	28	17	20	19
Other qualifications	4	4	4	14	12	13
None	23	27	25	27	33	30
Bases (weighted):	4354	4646	9003	3589	3738	7324
Bases (unweighted):	4258	4741	9003	3455	3849	7304



A1.6 Ethnic group

Respondents were asked to classify which ethnic group they considered they belonged to. Due to small numbers these were grouped into the following categories: White, Asian or Asian British, Black or Black British and other ethnic group. The proportion of White respondents has decreased since the 1999 survey – from 95% to 91%. (Table A1.5)

Table A1.5 Ethnic group, by sex

ΑII

Ethnic group	2007		Total	1999		Total	
	Men	Women		Men	Women		
	%	%	%	%	%	%	
White	91	91	91	95	95	95	
Asian or Asian British	4	4	4	2	2	2	
Black or Black British	2	2	2	1	1	1	
Other ethnic group	3	3	3	2	2	2	
Bases (weighted):	4354	4646	9003	3663	3886	7549	
Bases (unweighted):	4258	4741	9003	3531	4000	7531	

The vast majority of respondents classified themselves as White (91%). 4% of respondents were Asian or Asian British, 2% were Black or Black British and 3% were in the 'other' ethnic group category. These figures are almost identical to those from the ONS Mid-2004 Population Estimates for England³ as illustrated in Figure A1.D.

Figure A1.D Ethnic group

BGPS 2007

Mid-2004 Population Estimates

100

90

80

70

40

30

20

White Asian or Black or Other

Black British

ethnic group

A1.7 Self-reported general health status

Asian British

All informants were asked to rate their general health on a five point scale ranging from very good to very bad. The majority of respondents reported that they had 'very good or good' general health (79%), with a further 16% reporting that they had 'fair' health and 6% reporting 'bad or very bad' health.

Ethnic group

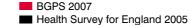
Comparisons with estimates from the Health Survey for England 2005, show that a higher proportion of respondents reported having 'very good or good' health in the BGPS than in HSE '05 (79% vs 75%), Correspondingly, BGPS respondents were less likely to report 'bad or very bad health' than HSE '05 respondents (4% vs 7%)². (This question was not asked in 1999.)

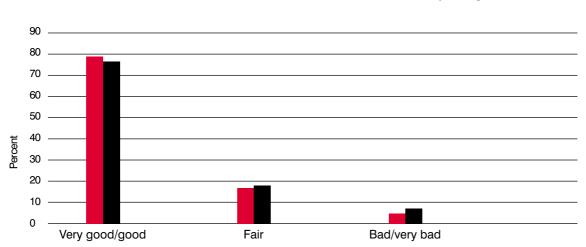
Table A1.6 Self reported general health status, by sex

All

Self reported general health	Sex	Sex	
	Men %	Women %	%
/ery good/good	80	79	79
air	16	17	16
ad/very bad	4	4	4
ases (weighted):	4354	4646	9003
Bases (unweighted):	4258	4741	9003

Figure A1.E Self reported health status, by sex





General health status

A1.8 Country of residence

The achieved sample was distributed throughout Britain as follows: 85% England, 9% Scotland, and 6% Wales. This compares favourably with the ONS 2005 population estimates, which show the adult population of Britain to be distributed as follows: 86% England, 9% Scotland, 5% Wales¹(table not shown).

British Gambling Prevalence Survey 2007

ONS, *Mid Population Estimates* 2005. See http://www.statistics.gov.uk/statbase/Expodata/Spreadsheets/D9388.xls

² R Craig and J Mindell (eds). *Health Survey for England 2005: The Health of Older People* (2005). See http://www.ic.nhs.uk/webfiles/publications/hseolder/vol5mad.pdf

³ ONS (2005). *Population Estimates by Ethnic Group (experimental)* http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14238

APPENDIX 2 METHODOLOGY

A2.1 Questionnaire development

The questionnaire developed for the 2007 survey used the 1999 prevalence study questionnaire as its basis to ensure maximum comparability of results between the two studies. New questionnaire items were added, and the list of different gambling activities extended to ensure new forms of gambling, emergent since 1999, were included within the 2007 prevalence study. Questions were included to capture information about respondents' winnings, as well as losses, in an attempt to enable mean expenditure for each activity to be calculated. These questions were included as the academic literature surrounding this issue has argued that the most relevant estimate of gambling expenditure is net expenditure, which requires information on winnings as well as losses to be collected¹. Issues surrounding collecting expenditure information in surveys and the differences in approach between 1999 and 2007 are presented in chapter 2. A new set of 14 attitude statements was also specifically developed for this study. The main differences in questionnaire content between 1999 and 2007 are presented in section A2.2.

The first draft of the questionnaire was designed and finalised after discussion with the Gambling Commission, the Advisory Group, and review by an expert panel within NatCen. The questionnaire was subjected to two rounds of pre-testing: cognitive testing and a pilot.

Cognitive testing was conducted in May 2006. Cognitive interviewing draws on insights from cognitive and motivational psychology, and provides extremely useful information about how respondents interpret survey questions. The aim of the cognitive phase was to test the first draft of the survey questions and suggest improvements and modifications ahead of a further pilot stage in July 2006. 15 cognitive interviews were carried out, five of which were conducted with problem gamblers who were living in a residential home for problem gamblers. Researchers conducted all cognitive interviews and asked respondents to "think aloud" whilst completing the questionnaire. Specific questions were also asked to further uncover respondents' comprehension, recall and thought processes whilst completing the questionnaire.

Results from the cognitive interviews were analysed by the research team and a report of findings, containing recommendations for improvements to the questionnaire, was provided to the Gambling Commission and discussed with the Advisory Group. As a result of cognitive testing, a number of improvements were made to the questionnaire.

These mainly related to the descriptions given to each activity, the order in which the gambling activities were presented, and the format for collecting expenditure information. Cognitive testing showed that respondents were, on the whole, able to provide information about their net losses and net winnings for each activity (though, of course, it was not possible to validate whether the figures given were correct). The revised questionnaire was cognitively tested among a further three respondents. These interviews showed that the questionnaire was much improved and that respondents were consistent in their understanding of the questions. Thus, it was decided to proceed with this version for the pilot.

The second phase of pre-testing was a large scale pilot conducted in July 2006. This phase aimed to employ the survey procedures to be used in the mainstage study and to identify where improvements could be made. The pilot involved five interviewers from NatCen's field force administering the survey in pre-selected households. Information was collected from 55 individuals aged 16 and over residing within 40 different households. Quotas were set on age group and sex to ensure that a range of people were included in the pilot. A further quota was set on mode of completion. Respondents could choose to complete the questions either by filling in the paper based self-completion booklet, or by going online to a specifically created web-site and entering the unique web survey password allocated to them to gain access to the questionnaire. Nine of the 55 pilot respondents completed the study online.

Feedback questions were asked of pilot respondents in relation to the ease of completing the questionnaire. Interviewers reported their own feedback, and feedback from respondents, to researchers at the pilot debrief.

Responses to the attitude statements among pilot respondents were analysed after the pilot was completed. A set of 24 attitude statements had been included within the pilot questionnaire. The 14 best performing items which contributed to an overall, balanced, set of statements were identified and included in the main stage questionnaire². The choice of which statements to include in the final set was discussed fully with the Gambling Commission and the Advisory Group.

A2.2 Questionnaire content

The questionnaire content for the 2007 study used the 1999 study as its base, in order to maintain maximum comparability with the previous study. The questionnaire was updated to include:

- New forms of gambling activity emergent since 1999.
- Additional questions about socio-demographic characteristics.
- New questions about health and lifestyle behaviours.
- Revised attitude statements.
- New problem gambling score (PGSI).

- Questions about net winnings as well as losses in the last seven days.
- Frequency of participating in any gambling activity in the last year.

The following tables summarise the main changes to content between the 1999 and 2007 study.

Table A2.1 Main gambling activities included in the 1999 and 2007 studies

Activity description	1999	2007
National Lottery Draw	✓	✓
Other lotteries	✓	✓
Scratchcards	✓	✓
Football pools	✓a	✓
Bingo	✓	✓
Fruit machines/slot machines	✓	✓
Horse races	✓	✓b
Dog races	✓	✓b
Other betting with a bookmaker	✓	✓b
Fixed odds betting terminals	_	✓
Online betting (on any activity)	_	✓
Online gambling	_	✓
Table games in a casino	✓	✓
Betting exchange	_	✓
Spread betting	✓	✓
Private betting with friends or colleagues	✓	✓
Other gambling activities	✓	✓

^a In 1999, this category also include "fixed odds coupons".

Table A2.2 Problem gambling screens, socio-demographic, health and lifestyle and other questions included in the 1999 and 2007 studies

Item	1999	2007
Problem gambling screens		
South Oaks Problem Gambling Screen	1	_
DSM IV	✓	1
Problem Gambling Severity Index	_	✓
Attitude statements		
8-item attitude score	✓	_
14 item attitude score	-	✓

Item	1999	2007			
Health and lifestyle characteristics					
Self reported general health status	_	✓			
Presence of longstanding illnesses	_	✓			
Cigarette smoking status	_	✓			
Alcohol consumption in past week	_	✓			
Other					
Qualifications	✓	✓			

continued

^b This did not include online betting.

Table A2.2 continued

Item	1999	2007		
Problem gambling correlates				
Parents regularly gambled	✓	✓		
Perceived parental problem gambling	✓	√		
Problem gambling among close relative in past 12 months	_	✓		
Sought help for problem gambling	✓	✓		
Age first gambled	_	✓		
Debt caused by gambling	_	✓		

Item	1999	2007
Ethnic group	✓	✓
Age	✓	✓
Sex	✓	✓
Personal income	_	✓
Household income	✓	✓
Economic activity of individu	ıal √	_
Economic activity of HRP	✓	✓

Table A2.3 Last week expenditure questions included in the 1999 and 2007

Expenditure in last week	1999	2007
Stake on National Lottery Draw (total amount spent)	✓	_
Stake on other lottery (total amount spent)	✓	_
Stake on football pools (total amount spent)	✓	_
Stake on bingo tickets (total amount spent)	✓	_
Net losses: National Lottery Draw	_	√
Net losses: Other lotteries	_	✓
Net losses: Scratchcards	✓	1
Net losses: Football pools	_	✓
Net losses: Bingo	_	✓
Net losses: Fruit machines/ slot machines	✓	1
Net losses: Horse races	✓	✓
Net losses: Dog races	✓	1
Net losses: Other betting with a bookmaker	✓	✓
Net losses: Fixed odds betting terminals	_	✓
Net losses: Online betting (on any activity)	_	✓
Net losses: Online gambling	_	✓
Net losses: Table games in a casino	✓	1
Net losses: Betting exchange	_	✓
Net losses: Spread betting	✓	✓
Net losses: Private betting with friends or colleagues	✓	1
Net losses: Other gambling activities	✓	✓

Expenditure in last week	1999	2007
Net winnings: Football pools	_	✓
Net winnings: Bingo	_	✓
Net winnings: Fruit machines/ slot machines	_	√
Net winnings: Horse races	_	✓
Net winnings: Dog races	_	✓
Net winnings: Other betting with a bookmaker	_	√
Net winnings: Fixed odds betting terminals	_	✓
Net winnings: Online betting (on any activity)	_	√
Net winnings: Online gambling	_	✓
Net winnings: Table games in a casino	_	√
Net winnings: Betting exchange	_	✓
Net winnings: Spread betting	_	✓
Net winnings: Private betting with friends or colleagues	_	1
Net winnings: Other gambling activities	_	√
Net winnings: National Lottery Draw	_	1
Net winnings: Other lotteries	_	✓
Net winnings: Scratchcards		/

A2.3 Sample

The population surveyed was the population, aged 16 and over, living in private households in England, Scotland and Wales. Those living in institutions were excluded from the survey. The sampling frame was the small users Postcode Address File (PAF). 317 postcode sectors were selected as the primary sampling units (PSUs). Before selection, sectors were stratified by Government Office Region (GOR – 11 regions), NS-SEC (12 categories) and the percentage of persons from non-white ethnic groups³. 32 addresses were randomly selected from each postcode sector. 10,144 addresses were selected in total. Within each household, all adults aged 16 and over were eligible to be included in the study.

A2.4 Data collection

A2.4.1 Timing of fieldwork

Fieldwork was conducted between September 2006 and March 2007. All interviewers working on the project were personally trained by the researchers at 19 training sessions held across Britain.

A2.4.2 Approach

Advance letter

An advance letter was sent to all selected addresses. This informed the resident that their address had been chosen, gave some brief information about the project and informed them that the named interviewer would be visiting their address shortly.

Dwelling unit and household selection

At addresses where more than one dwelling unit was identified, interviewers made a random selection of one dwelling unit to be included in the study. Within dwelling units, there can be multiple households units. A household is defined as a person or group of people who share living accommodation or one meal a day. Where more than one household per dwelling unit was identified, interviewers made a random selection of one household to be included in the study.

Household interview

At each household, interviewers attempted to conduct a short, face to face, interview with the household reference person (HRP) or their spouse/partner. Interviewers made a minimum of five calls to a household to attempt to collect this information. The household interview collected socio-economic information about the HRP, and demographic information about each person resident in the household. (The content of the household questionnaire is shown in Appendix 3.) Once the household questionnaire had been completed, every person aged 16 and over was asked to fill in a self-completion booklet (or complete the questionnaire online, see below). A high street voucher of £5 was given to the HRP or spouse/partner once the household questionnaire had been successfully completed. This incentive was given irrespective of whether anyone in the household completed their individual questionnaire.

Collection of individual information

Respondents were offered two ways to complete the individual questionnaire: in the paper self-completion booklet or online. The questions asked by both methods were identical. Each person aged 16 and over from a productive household was given an individual self-completion booklet and was also allocated a unique web-survey password that they could use to access the online questionnaire. A specifically designed website was created to host the web-survey, and the URL printed on the front of the self-completion questionnaire. This was to offer more flexibility to respondents who are typically harder to reach, for example younger adults. Overall 7% (out of 9,003 respondents) chose to complete their questionnaire online.

Interviewers were instructed either to wait while the self-completion questionnaire was filled in, or to return at a later date to collect it.

Telephone unit recontact

Two rounds of reminder telephone calls were made by NatCen's Telephone Unit to a minority of respondents who had promised to complete and return their questionnaire but had not yet done so. The first round of reminder calls were conducted between January and February 2007, and the second round in March 2007. All Telephone Unit operatives received personal training about the study from the research team and were briefed to encourage respondents to complete the questionnaire and return it to NatCen's Operations Department, in the postage paid envelope provided. In a number of cases, replacement questionnaires or prepaid envelopes were posted to the respondent to facilitate this. The second round of Telephone Unit reminder calls was conducted in the last two weeks of the field work period. Due to time constraints, information from co-operating respondents was completed over the phone by the Telephone Unit interviewers. Data from 53 respondents were collected using this method.

A2.5 Response

Response rates achieved for the 2007 study are shown in table A2.4.

Table A2.4 Response

	n	%	%
Addresses issued	10144		
Non-residential address	939		
In-scope addresses	9205	100	
No contact at address	473	5	
Refused all information	2588	28	
Other reason no interview	312	3	
Productive household interview	5832	63	
Eligible adults within productive households	11052		100
Self-completion questionnaire not returned	1054		10
Online questionnaire not completed	568		5
Personal refusal	112		1
Proxy refusal	131		1
Away/ill/incapacitated/other	184		2
Productive questionnaires	9003		81
Overall response rate			52

Interviews were achieved in 5,832 addresses (a response rate of 63% of in-scope addresses). Questionnaires were completed by 9,003 out of 11,052 eligible individuals (a response rate of 81%). This represents an overall response rate of 52%.

A2.6 Data processing

Completed questionnaires were scanned and data subject to an edit program. A computer edit program was written to check all code ranges, routing, numeric values and consistency. Records which failed to pass the computer edit were amended by reference back to original questionnaire, where errors were corrected or missing information/not answered codes added where necessary. This process was repeated until all records passed the edit as "clean". Occupations were coded to the Standard Occupational Classification (SOC) from which NS-SEC is derived. All information was treated confidentially and data records are anonymous.

Listings of respondent entries of "other" gambling activities given at A17 were provided to the research team, who reviewed these and recommended appropriate action. This included potentially back coding the information entered to the relevant gambling activity, retaining the information, or deleting it if it was not classified as gambling. Advice was sought from the Gambling Commission when making these decisions.

Analysis of survey findings was carried out using both Stata and SPSS analysis packages.

A2.7 Weighting

The data were weighted in three stages. The first stage was to correct for dwelling unit and household selection probabilities, for the small number of addresses where either more than one dwelling unit or household was identified. The second stage calibrated the achieved household sample so that the distributions for age/sex and Government Office Region matched the ONS 2005 mid-year population estimates. The third stage corrected for individual non-response within participating households.

Comparisons of the age and sex profile of the British population according to estimates from the Office of National Statistics show that the achieved sample was, in fact, a close reflection of the general population and therefore the weights were small. Table A2.5 compares population estimate with the unweighted sample for the 2007 study and shows the mean weight for each sub-group.

Table A2.5 Comparison of the unweighted sample with population estimate	Table A2.5	Comparison of	the unweighted	sample with	population estimate
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Age	Population	n estimates	BGPS 20	07	Mean w	eights
	% male	% female	% male	% female	Men	Women
16-19	3.3	3.2	2.9	2.6	1.25	1.21
20-24	4.1	3.9	2.8	3.3	1.31	1.22
25-34	8.1	8.1	6.7	8.1	1.21	1.03
35-44	9.4	9.6	9.1	10.1	1.05	0.97
45-54	7.8	8.0	8.2	8.7	0.96	0.93
55-64	7.1	7.4	8.3	9.1	0.87	0.84
65-74	4.9	5.5	5.6	5.8	0.88	0.92
75 and over	3.6	5.9	3.8	4.9	0.95	1.07
Total	48.4	51.6	47.3	52.7	1.02	0.98

A2.8 Scoring the problem gambling screening instruments

A2.8.1 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.

A2.8.2 Scoring the DSM IV

The DSM IV criteria, along with the corresponding question number from the questionnaire from the self-completion booklet, are shown in the first two columns of table A2.6. The third column shows which responses were counted as positive.

Table A2.6 Scoring the DSM-IV

Item	Question Number	"Positive"
Chasing losses	C1	Fairly Often/Very Often
A preoccupation with gambling	C2	Fairly Often/Very Often
A need to gambling with increasing amounts of money	C3	Fairly Often/Very Often
Being restless or irritable when trying to stop gambling	C4	Fairly Often/Very Often
Gambling as escapism	C5	Fairly Often/Very Often
Lying to people to conceal the extent of gambling	C6	Fairly Often/Very Often
Having tried but failed to cut back on gambling	C7	Fairly Often/Very Often
Having committed a crime to finance gambling	C8	Occasionally/Fairly Often/Very Often
Having risked or lost a relationship/job/educational opportunity because of gambling	C9	Occasionally/Fairly Often/Very Often
Reliance on others to help in a financial crisis caused by gambling	C10	Occasionally/Fairly Often/Very Often

The threshold for "problem gambling" was three or over, in line with previous research and the 1999 prevalence study⁴. Cases were excluded from the problem gambling analysis if more than half the DSM IV items were missing (and the score was <3). A total of 541 cases were excluded for this reason.

A2.8.3 Scoring the PGSI

The PGSI criteria, along with the corresponding question number from the questionnaire from the self completion booklet are shown in table A2.7.

Table A2.7 PGSI items

Item	Question Number
Bet more than can afford to loose	C11
A need to gambling with increasing amounts of money	C12
Chasing losses	C13
Borrowed money or sold items to get money to gamble	C14
Felt had a problem with gambling	C15
Gambling causing health problems including stress and anxiety	C16
People criticising gambling behaviour	C17
Gambling causing financial problems for you or your household	C18
Felt guilty about way that you gamble or what happens when you gamble	e C19

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 zero and 27 points is possible. There are four classifications categories for PGSI scores. Their description and scored cut-off points are shown in table A2.8.

Table A2.8 PGSI classification categories

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 eight or over, in line with previous research⁵. 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 548 cases were excluded for this reason.

A2.9 Scoring the attitude scale

The attitude scale consists of questions D1 to D14 of the self-completion questionnaire (see Appendix 3). A Cronbach's alpha statistic was calculated to check that the 14 items constituted an internally reliable (i.e. reasonably homogenous) scale. The Cronbach's alpha value showed a high level of internal reliability (0.88) and so a scale was calculated.

Firstly, the seven positively worded items were recoded so that a higher number was indicative of more favourable attitudes towards gambling. The midpoint of three on any item, therefore, indicated neither agreement nor disagreement; scores above three indicated an attitude favourable to gambling; scores below three indicated an attitude unfavourable to gambling. A total attitude score, based on responses to the 14 items, was calculated. The maximum total score was 70 (14 times five). A score of 42 indicates an overall neutral attitude; higher scores indicate an overall favourable attitude towards gambling; those below 42 show an overall unfavourable attitude.

Table A2.9 Scoring the attitude scale

Item	Scale
D1	1=Strongly agree, 2 = Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D2	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D3	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D4	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D5	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D6	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D7	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D8	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D9	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D10	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D11	1=Strongly disagree, 2=Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree
D12	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D13	1=Strongly agree, 2=Agree, 3=Neither agree/disagree, 4=Disagree, 5=Strongly disagree
D14	1=Strongly disagree, 2 = Disagree, 3=Neither agree/disagree, 4=Agree, 5=Strongly agree

A2.10 Calculating expenditure

Means were calculated for net expenditure for each activity, by substituting the midpoint of each band with a numeric value and using this value to calculate overall mean losses and mean winnings for each activity. Means were only calculated for respondents who had participated in the activity in the past seven days, and had reported their winnings or losses. Net expenditure for each activity was then calculated by subtracting mean losses from mean winnings for each activity.

An example of how banded response categories presented in the questionnaire were substituted with numeric values is given below.

Table A2.10 Total losses in last seven days

Response category Numeric value	
Lost less than £1 50p	
Lost £1-£5 £3.00	
Lost £5.01-£10 £7.50	
Lost £10.01-£20 £15.00	
Lost £20.01-£50 £35.00	
Lost more than £50 £50.00	

It is important to note that since these means are calculated from banded rather than numeric data, they should not be viewed as exact figures. Moreover, the maximum value in each case is simply taken as the highest response category (e.g. £50) and so the few outlying high values are not taken into account.

A2.11 Data analysis and reporting

Presentation of results

In general, the commentary highlights differences that are statistically significant at the 95% level. This means that there is a five in 100 chance that the variation seen is simply due to random chance. It should be noted that statistical significance is not intended to imply substantive importance.

Computing confidence intervals

All survey data are estimates of the true proportion of the population sampled. With random sampling, it is possible to estimate the margin of error either side of each percentage, indicating a range within which the true value will fall.

These margins of error vary according to the percentage of the estimate for the sampled population, and by the number of people included in the sample, and the sample design.

Survey data are typically characterised by two principal design features: unequal probability of selection requiring sample weights, and sampling within clusters. Both of these features have been considered when presenting the 2007 survey results. Firstly, weighting was used to minimise response bias and ensure that the achieved sample was representative of the general population (living in private households). Secondly, results have been analysed using the survey module in STATA (a statistical analysis package), which can account for the variability introduced through using a complex, clustered, survey design.

The survey module in STATA is designed to handle clustered sample designs and account for sample-to-sample variability when estimating standard errors, confidence intervals and performing significance testing. Given the relatively low prevalences of problem gambling estimates, the tabulate command was used to compute 95% confidence intervals for these estimates. The distinctive feature of the tabulate command is that confidence intervals for proportions are constructed using a logit transformation so that their end point always lies between zero and one. (The standard errors are exactly the same as those produced by the mean command.)

Endnotes:

¹ Blaszczynski, A., Dumlao, V. & Lange, M. (1997). *How much do you spend gambling? Ambiguities in survey question items*. Journal of Gambling Studies, **13**, 237-252.

² Detailed information about how the final 14 items were chosen is given chapter 6.

³ Optimal stratifiers were chosen based on analysis of the 1999 prevalence study data. See S Scholes, G Flore (2006). *Choosing optimal stratifiers for the National Study of Gambling Attitudes and Activities*, Survey Methods Unit Newsletter (24), NatCen. A copy of this article can be viewed at: http://www.natcen.ac.uk/natcen/pages/news and media docs/newsletters/smu/smunews 24.pdf

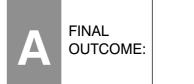
⁴ H R Lesieur, M D Rosenthal. *Analysis of pathological gambling for the Task Force on DSM-IV*. In T Widiger, A Frances, H Pincus and R Ross (eds) Source book for the Diagnostic and Statistical Manual, Fourth edition: Volume Four. 1993, Washington D.C: American Psychiatric Association.

⁵ H Wynne (2003). *Introducing the Canadian Problem Gambling Index*, Canada http://www.gamblingresearch.org/download.sz/The%20CPGI%20V5%20-%20from%20Hal.pdf?docid=6446, p. 18.

Appendix 3 Questionnaires

P2555 PINK TEAM

National study of gambling attitudes and activities HOUSEHOLD QUESTIONNAIRE



ADI	DRESS	DETAI	 LS		DU/HHOLD	SELECTION	LABEI			
		Ti	tle, first nar	me, surname	_					
House	eholder name:				Interviewer [name:					
Teleph n	none umbers:				Interviewer number:					
					Contact name for call backs:					
tel	No ephone:	2		Number refused: 3				al no. o		
Call No.	Date DD/MM	Day of week	Call Start Time 24hr clock	Record all PERSON	RECORD AL visits, even if no e calls on page 2	reply.	*Call Status (enter codes)	Call Time 24hr Clock	4 if ca followed persona non-ca time	l by al/
1	/		:							
2	/		:							
3	/		:							
4	/		:							
5	/		:							
6	/		:							
7	/		:							
8	/		:							
9	/		:							
10	/		:							
	Status of Any othe		= No reply	y, 2 =Contact made, 3 =Ap	pointment made,	4 = Any intervie	wing do	ne,		
			RESS: If this	s address is being reallocated by the second	ed to another inte	rviewer		900	END	,

Call No.	Date DD/MM	Day of week	Call Start Time 24hr clock	VISITS RECORD Record all PERSONAL visits, even if no reply. Record phone calls on page 2	*Call Status (enter codes)	Call Time 24hr Clock	4 if call followed by personal/ non-capi time
11	/		:				
12	/		:				
13	/		:				
14	/		:				
15	/		:				
16	/		:				
17	/		:				
18	/		:				

Call No.	Date DD/MM	Day of week	Call Start Time 24hr clock	TELEPHONE CALLS RECORD Record all telephone calls, even if no reply.	*Call Status (enter codes)	Call End Time 24hr Clock
1	/		:			:
2	/		:			:
3	/		:			:
4	/		:			:
5	/		:			:
6	/		:			:
7	/		:			:
8	/		:			:

^{*}Call Status codes: 1= No reply, 2 = Contact made, 3 = Appointment made, 4 = Any interviewing done, 5= Any other status

Stable address – as collected during interview
STABLE ADDRESS/ADDITIONAL INFORMATION TO HELP WITH FUTURE CONTACTS: Write in below any information the respondent gives about stable address/telephone number, or any other information which may help us to contact him or her in the future (for instance a relative's address if the respondent is likely to move).
Contact Person :
Relationship to respondent:
Stable address:
Postcode:
Telephone No:
Other information:

A: I	Establish number of dwelling u	nits (DUs) and	d select or	пе					
A 1.	IS THIS ADDRESS TRACEABLE, RES	IDENTIAL AND (OCCUPIED A	AS A MAII	N RESIDEI	NCE?			
	Any [DU residential an	d occupied	as main re	esidence	1	Go to A2		
		2	Go to B2						
	Non -residential and/or	un occupied as r	nain residen	ce (i.e. de	adwood)	3	Go to B2		
	Uncertain whether residential and/or occ	cupied as main re	sidence (i.e.	unknown e	eligibility)	4	Go to B1		
		410	Go to part F *						
A2.	ESTABLISH NUMBER OF DUS AT THE	E ISSUED ADDR	ESS (include	occupied	I & unoccu	pied DUs)		
		EN'	TER NUMBE	R OF DU	s HERE:				
А3.	INTERVIEW SUMMARY:			ONE D	U ONLY	Α	Go to A6		
			TW	O OR MO	RE DUs	В	Go to A4		
		OR COL	DE: Number	of DUs no	t known	С	Go to B1		
A4.	IF 2+ DUs: List all DUs at address (con Brentwood): ● In flat/room number order OR from b	·		•		nt of ARF	and return to		
	Description	DU Code	Descripti	on			DU Code		
		01					07		
		02					08		
		03					09		
		04					10		
		05					11		
		06					12		
	 If 2-12 DUs: Look at the selection label on page 1 of the ARF In the 'DU' row: find the number corresponding to the total number of DUs. In the 'Sel' row the number immediately beneath total number of DUs is the 'selected DU' code. Ring on grid above and write in at A5 below. IF 13+ DUs: Make a selection using the lookup chart on page 6. Write in at A5 below. 								
A5.	ENTER CODE NUMBER OF SELECTE	D DU HERE:							
A6.			Yes	1	Go to A7				
	CORRECT AND COMPLETE ON THE L	ABEL?	No	2		e address on address label IERE). Then go to A7			
A7.									
A8.	IS THE (SELECTED) DU RESIDENTIA	L AND OCCUPIE	D AS A MAI	N RESIDI	ENCE?				
		Residential ar	nd occupied	as main re	esidence	1	Go to part C		
			Not resident	ial (i.e. de	adwood)	2	Go to B2		
	Residential but	not occupied as r	nain residen	ce (i.e. de	adwood)	3			
	Uncertain whether residential and/or occ	cupied as main re	Uncertain whether residential and/or occupied as main residence (i.e. unknown eligibility) 4 Go to B1						

	B1: Unknown Eligibility		
B1.	CODE OUTCOME: UNKNOWN ELIGIBILITY		
	OFFICE APPROVAL ONLY: Issued but not attempted (includes reissues)	612	
	OFFICE APPROVAL ONLY: Inaccessible	620	
	Unable to locate address	630	
	Unknown whether address is residential: info refused	641	Go to B3 *
	Unknown whether address is residential: No contact	642	
	Residential address, unknown whether occupied by hhold: info refused	650	
	Other unknown eligibility (include number of dwelling units not established, write)	690	

	B2: Deadwood		
B2.	CODE OUTCOME: DEADWOOD (INELIGIBLE)		
	Not yet built/under construction	710	
	Demolished/derelict	720	
	Vacant/empty housing unit	730	
	Non-residential address (e.g business, school, office, factory etc)	740	Go to B3*
	Address occupied, no resident household (e.g. occupied holiday/weekend home)	750	
	Communal establishment/institution – no private dwellings	760	
	Other ineligible	790	

B3:	B3: reasons for using 612-690, 710-790				
В3.	RECORD ANY FURTHER INFORMATION ABOUT OUTCOME CODES 612 - 690 OR 710 -790				
		END			

C: Select 1 households at (selected) DU

C1. ESTABLISH NUMBER OF HOUSEHOLDS IN (SELECTED) DU, ASK: Do you all share a living room? Do you usually share at least one meal a day?

COUNT A GROUP OF PEOPLE AS A HOUSEHOLD IF: Either they share at least one meal a day **OR** they share living accommodation.

ENTER NUMBER OF HOUSEHOLDS HERE:			Go to C2
OR CODE: NON CONTACT WITH ANYONE AT (SELECTED) DU	31	1	Go to E3 (pg 15)*
CONTACT MADE WITH (SELECTED) DU, BUT INFORMATION REFUSED ABOUT HH's	42	1	

C2. HOUSEHOLD SUMMARY:

ONE HOUSEHOLD ONLY

2+ Households

Α	Go to HQ
В	Go to C3

C3. IF 2+ HOUSEHOLDS:

List households in alphabetical order of names (if more than one adult per household, list in alphabetical order within household). Identify households by the first names or initials of adult members of the household. (Continue on separate sheet if necessary, staple to front of ARF and return to Brentwood)

Names/Initials	HH selection code	Names/Initials	HH selection code
	01		07
	02		08
	03		09
	04		10
	05		11
	06		12

IF 2-12 HHOLDS:

- Look at the selection label on page 1 of the ARF
- In the 'Total' row: find the number corresponding to the total number of hholds
- In 'Select' rows (: numbers underneath is the selected hhold codes. Ring on grid above and write in at C4.

IF 13+ Hholds:

Make a selection using the lookup chart on page 6. Write in at C4.

C4. ENTER DETAILS OF SELECTED HHOLDs:

	HH select	tion code	Details/description	
Hhold 1				Go to HQ
			Continue on this ARF	

NUMBER OF DUs/Persons:	+ DUs/Persons SELECT NUMBER:	NUMBER OF DUs/Persons:	SELECT NUMBER:
13	12	57	39
14	8	58	3
		59	
15 16	11 7	60	48 35
17	13	61	22
18	3	62	10
19	14	63	51
20	2	64	37
21	14	65	64
22	8	66	65
23	13	67	66
24	5	68	28
25	12	69	45
26	6	70	53
27	17	71	25
28	17	72	48
29	2	73	50
30	21	74	39
31	10	75	51
32	26	76	11
33	8	77	12
34	22	78	74
35	8	79	42
36	3	80	9
37	28	81	33
38	19	82	51
39	25	83	69
40	16	84	78
41	41	85	53
42	32	86	19
43	9	87	66
44	40	88	23
45	7	89	17
46	35	90	19
47	8	91	40
48	36	92	11
49	15	93	35
50	44	94	12
51	35	95	41
52	2	96	3
53	24	97	10
54	17	98	25
55	49	99	61
56	27	100	99

HOUSEHOLD QUESTIONNAIRE (HQ)

	Can I check, how many people aged 16 and over live in your household?								
	WRITE IN								
If nur	nber of persons in household not established:								
Why	not?								
	No contact with anyone at household	312							
	Contact made, not with household member	320							
	Full refusal of information about household	422	Go to E3 (page 15)						
	No information as all household members physically/ mentally unable/incompetent	531							
	No information as all household members inadequate English	541							
	TO IDENTIFY WHETHER YOU ARE CURRENTLY SPEAKING TO	O THE H	OUSEHOLD REFEREN						
Α.	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented?								
A.	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR	R ACCOM							
Α.	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented?								
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person	R ACCOM 1 2	IMODATION. GO TO D						
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person 2 or more people IF MORE THAN ONE PERSON CODED AT A:	R ACCOM 1 2 nted.	IMODATION. GO TO D GO TO B						
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented?	R ACCOM 1 2 nted.	IMODATION. GO TO D GO TO B						
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented? Of these people, who has the highest income (from earnings, ber	R ACCOM 1 2 nted. nefits, pen	MMODATION. GO TO D GO TO B asions and any other so						
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented? 1 Person 1 Person 1 Person	R ACCOM 1 2 nted. nefits, pen 1	MMODATION. GO TO D GO TO B asions and any other so						
	PERSON OR SPOUSE OR PARTNER ASK: In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented? 1 Person 2 or more people 2 or more people	R ACCOM 1 2 nted. nefits, pen 1 2	MMODATION. GO TO D GO TO B asions and any other so GO TO D GO TO C						
В.	In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 1 Person 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented? 1 Person 2 or more people, who has the highest income (from earnings, berefore) 1 Person 2 or more people (Don't know)	nted. nefits, pen 2	MMODATION. GO TO D GO TO B asions and any other so GO TO D GO TO C GO TO C						
B.	In whose name is the accommodation owned or rented? IF LIVING RENT FREE ASK FOR PERSON RESPONSIBLE FOR 2 or more people IF MORE THAN ONE PERSON CODED AT A: You have told me that this accommodation is jointly owned or rented of these people, who has the highest income (from earnings, bereat 1 Person 2 or more people (Don't know) (Refusal) IF MORE THAN ONE PERSON CODED AT B Who is the eldest (of these people)?	nted. nefits, pen 2 3 4	MMODATION. GO TO D GO TO B asions and any other so GO TO D GO TO C GO TO C GO TO C						

HQ2. COMPLETE GRID BELOW FOR EACH PERSON AGED 16+. FIRST ENTER DETAILS OF HRP ON FIRST LINE OF GRID FOLLOWED BY ALL OTHER ADULTS IN THE HOUSEHOLD

Age

What was your/(.....NAME'S) age last birthday?

Relationship to HRP

SHOW CARD A

From this card, please tell me the relationship of you/(.....NAME) to (.....NAME HRP)? Just tell me the number beside the answer that applies.

Marital Status

SHOW CARD B

Are you/ (... ...is NAME)...READ OUT...

Individual Outcome Code (AFTER BOOKLET COMPLETION)

INTERVIEWER: Transfer appropriate two-digit code from page 9 to grid.

ADULT GRID (THOSE AGED 16+)

LIST HRP FIRST, THEN LIST OTHER ADULTS IN DESCENDING ORDER OF AGE (STARTING WITH ELDEST FIRST).

PERSON NO	FIRST NAME	SEX M F	AGE	RELATIONSHIP TO HRP (SC A)	MARITAL STATUS (SC B)	ARF LABEL	FINAL S.C. OUTCOME
01 HRP		1 2		N/A			
02		1 2					
03		1 2					
04		1 2					
05		1 2					
06		1 2					

PERSON NO	FIRST NAME	SEX M F	AGE	RELATIONSHIP TO HRP (SC A)	MARITAL STATUS (SC B)	ARF LABEL	FINAL S.C. OUTCOME
07		1 2					
08		1 2					
09		1 2					
10		1 2					

Outcome codes for self completions

Productive

- 51 Productive self completion questionnaire
- 52 Informed by office respondent completed on-line
- 53 Respondent informed interviewer that has completed questionnaire on-line

Unproductive

- 72 Personal refusal by named person
- 73 Proxy refusal (on behalf of named person)
- 74 Person ill at home during survey period
- 75 Person away/at college/in hospital during survey period
- 76 Questionnaire not returned/completed
- 77 Questionnaire not completed as respondent unable to complete (i.e. language difficulties, physically/mentally unable)
- 78 Other reason
- 79 Questionnaire returned blank, (apart from cover)

Outstanding after multiple return visits

- 80 Return envelope left with respondent, respondent to return to office
- 81 Respondent informed interviewer that intending to complete on-line

HQ3.	How many people aged u	nder 16	live in yo	ur household?	
	WRITE IN				

HQ4. COMPLETE GRID BELOW FOR CHILDREN AGED UNDER 16.

CHILD GRID FOR CHILDREN AGED 0-15

INTERVIEWER: PLEASE LIST BY AGE (ELDEST FIRST)

PERSON NO	FIRST NAME	SE	X	AGE	RELATIONSHIP TO HRP (SHOWCARD x)
11		1	2		
12		1	2		
13		1	2		
14		1	2		
15		1	2		
16		1	2		
17		1	2		
18		1	2		
19		1	2		
20		1	2		

HQ5. INTERVIEWER: FILL IN THE FOLLOWING QUESTIONS ABOUT THE **HRP**. USE FIRST **NAME OF HRP** WHERE APPROPRIATE.

	SHOW CARD C Which of these descriptions applies to what you/(NAME OF HRP) were doing (CODE FIRST TO APPLY)	ı last week.		
	In paid employment or self-employment (or away temporarily)	⁰¹)	CO TO 1107	
	Waiting to take up paid work already obtained	02 }	GO TO HQ7	
	Looking for paid work or a Government training scheme	03]		
	Going to school or college full-time (including on vacation)	04		
	Doing unpaid work for a business that you or a relative owns	05		
	On a Government scheme for employment training	06		
	Intending to look for work but prevented by temporary sickness or injury(sick or injured for 28 days or less)	07	GO TO HQ6	
	Permanently unable to work because of long-term sickness/disability	08		
	Retired from paid work	09		
	Looking after the home or family	10		
	Doing something else	₁₁ J		
HQ6.	Have you /has (NAME OF HRP) ever had a paid job, apart from casual or ho Yes	oliday work 1 2	? GO TO HQ7 GO TO HQ16	
HQ7.	 ASK ABOUT PRESENT JOB IF HRP IS CURRENTLY IN WORK, ASK ABOUT LAST JOB IF CURRENTLY NOT IN WORK NEVER WORKED GO TO Q16 			
	What is/ was the name or title of your/(NAME OF HRP) job (in the week endir ENTER JOB TITLE	ng last Sun	day)	
HQ8.	What does/ did the firm/organisation you/(NAME OF HRP) work(ed) for mainly you/ they work(ed))?	ly make or	do (at the place	where
	DESCRIBE FULLY – PROBE MANUFACTURING or PROCESSING or DIST AND MAIN GOODS PRODUCED, MATERIALS USED, WHOLESALE or RE			

Q9. What kind of work do/ did you/(NAME OF HRP) do most of the time? INTERVIEWER CHECK: What skills or qualifications are/ were needed for the	job?	
Q10. Are/ were you / (NAME OF HRP) working as an employee or are/ were you sel	f-employ	/ed?
An employee	1	GO TO HQ11
Self employed	2	GO TO HQ13
INTERVIEWER: IF IN DOUBT, CHECK HOW THIS EMPLOYMENT IS TREAT TAX & NI PURPOSES	ED FOR	l
IF EMPLOYEE		
Q11. Are/ were you / (NAME OF HRP) a READ OUT		
Manager	1	
Foreman or supervisor	2	
DO NOT INCLUDE PEOPLE WHO ONLY SUPERVISE: Children (e.g. teache Animals, security or buildings (e.g. caretakers, security guards.)	rs, nanı	nies, childminders
Q12. How many people work(ed) for your/(NAME OF HRP) employer at the place w	here you	u/they work(ed)?
1-24	1	
25-499	2	GO TO HQ15
or 500 or more employees	3	
Can't say	8	
IF SELF-EMPLOYED (CODE 2 AT HQ10)		
Q13. Are/ were you/(NAME OF HRP)) working on your/their own or do/ did you/they	have er	nployees?
On own/with partner(s) but no employees	1	GO TO HQ15
With employees	2	ASK HQ14
Q14. How many people do/ did you/(NAME OF HRP) employ at the place where you	u/they w	ork(ed)?
1or 2	1	
3-24	2	
25-499	3	
or, 500 or more employees	4	
Can't say	5	

	In your (main) job are/ were you/(<i>NAME OF HRP</i>) working full or part time? Full-time Part-time	1 2	
HQ16	SHOW CARD D This card shows incomes in weekly, monthly and annual amounts. Thinking of whole, which of the groups on this card represents the total income of the whole household before deductions for income tax, National Insurance, etc.		me of your household as a
	Just tell me the number beside the row that applies to you. Enter number:		
HQ17.	 EXPLAIN SELF COMPLETION QUESTIONS TO RESPONDENT Use prompt card to explain about sections a & b. Explain about on-line questionnaire (it's much easier to complete the question of the properties of the self-completions at a later date, remember to go of when you will be returning. 		
	FINAL STAGE (MAKE SURE YOU ASK THESE QUESTIONS BEFORE YOU I YOUR FIRST VISIT)	LEAVE T	HE HOUSEHOLD ON
HQ18.	. A certain number of interviews on any survey are checked by a supervisor to n with the way the interview was carried out. Can we contact you for this purpos	se?	e that people were satisfied
	Yes	1	
	No Don't know	2 3	
HQ19.	. Would you be willing for the National Centre to contact any member of your ho everything you say would be treated in complete confidence.	ousehold	in the future? As before,
	Vac		
	Yes	1	COMPLETE STABLE ADDRESS INFORMATION ON PAGE 2
	res No	1	ADDRESS INFORMATION
			ADDRESS INFORMATION
HQ20	No	2	ADDRESS INFORMATION ON PAGE 2
HQ20.	No Don't know Is there a telephone number in your accommodation that can be used to recei IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes	2 3 ve and to	ADDRESS INFORMATION ON PAGE 2
HQ20.	No Don't know Is there a telephone number in your accommodation that can be used to recei IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes No	2 3 ve and to 1 2	ADDRESS INFORMATION ON PAGE 2
HQ20	No Don't know Is there a telephone number in your accommodation that can be used to recei IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes	2 3 ve and to	ADDRESS INFORMATION ON PAGE 2
	No Don't know Is there a telephone number in your accommodation that can be used to recei IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes No	2 3 ve and to 1 2	ADDRESS INFORMATION ON PAGE 2
	No Don't know Is there a telephone number in your accommodation that can be used to recein IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes No Refusal	2 3 ve and to 1 2	ADDRESS INFORMATION ON PAGE 2
HQ21	No Don't know Is there a telephone number in your accommodation that can be used to recein IF YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes No Refusal	2 3 ve and to 1 2	ADDRESS INFORMATION ON PAGE 2
HQ21	No Don't know Is there a telephone number in your accommodation that can be used to recein if YES, RECORD PHONE NUMBER(S) ON FRONT PAGE Yes No Refusal INTERVIEWER TO COMPLETE Duration of interview mins B. Date / / / / / / / / / / / / / / / / / / /	2 3 ve and to 1 2	ADDRESS INFORMATION ON PAGE 2

YOU RETURN THE ARF TO THE OFFICE.

Voucher Receipt			
I (NAME) confirm that I have received a £5 voucher of the many participation in the National Study of Ga	•		
Signed	Date	/	/2006

INTERVIEWER ADMIN SECTION

T	E: Record household outcome details		
	PLEASE RECORD OUTCOME TO HOUSEHOLD QUESTIONNAIRE:		
E1.	PRODUCTIVE OUTCOME:		
	Household questionnaire completed - all questionnaires placed	110	Go to part F
	Household questionnaire completed - No questionnaires placed	210	
E2.	UNPRODUCTIVE OUTCOMES:		
	NOT COMPLETED: No contact made with responsible adult(s)	330	Go to E3
	Information refused	430	
	Broken appointment	451	
	III at home	510	
	Away during fieldwork period	521	
	In hospital during fieldwork period	522	
	Physically or mentally unable/incompetent	532	
	Inadequate English	542	
	Other reasons why unproductive	560	
E3.	RECORD ANY FURTHER INFORMATION ABOUT OUTCOME CODES 310-5510-599,	340, 421-4	160,
	PLEASE RECORD AS MUCH DETAIL AS POSSIBLE, AS WE WILL LOO	K AT THIS	S INFORMATION

	F: Interviewer observation of address (all outcome codes except 710- 790)				
	NOTE THAT THESE QUESTIONS MUST BE ANSWERED FOR ALL NON-DI	EADWOO	D ADDRESSES.		
	INFORMATION SHOULD BE COLLECTED BEFORE MAKING CONTACT.				
	FOR OFFICE REFUSALS: PLEASE OBTAIN THIS INFORMATION IN ALL C	ASES.			
	IF NOT ALREADY OBTAINED, VISIT THE ADDRESS BUT DO NOT APPRO	ACH OCC	CUPANTS.		
F1.	Are any of these physical barriers to entry present at the house/flat/building? CODE ALL THAT APPLY:				
	Locked common entrance	1			
	Locked gates	2			
	Security staff or gatekeeper	3			
	Entry phone access	4			
	None of these	5			
	Unable to obtain information	8			
F2.	Which of these best describe the selected flat or house (i.e. the selected dwelling unit) of the intended respondent? CODE ONE ONLY:				
	Detached house	1			
	Semi-detached house	2			
	Terraced house	3			
	Flat or maisonette – purpose built	4			
	Flat or maisonette - conversion	5			
	Other	6			
	Unable to obtain information	8			
F3.	Which of these best describes the condition of residential properties in the are CODE ONE ONLY:	ea?			
	Mainly good	1			
	Mainly fair	2			
	Mainly bad	3			
	Mainly very bad	4			
	Unable to obtain information	8			
F4.	How is the external condition of the selected flat or house (i.e. the selected dy residential properties in the area? CODE ONE ONLY:	velling uni	t) relative to other		
	Better	1			
	About the same	2			
	Worse	3			
	Unable to obtain information	8			

ARF

Version

1

SERIAL NUMBER LABEL

CONFIDENTIAL

National study of gambling attitudes and activities

What it this study about?

This is a study about the general public's attitudes to gambling and their experiences of taking part in different gambling activities, including the National Lottery. Even if you do not take part in the National Lottery or other gambling activities, we would still like you to complete this questionnaire, so that your views and experiences are represented.

Questionnaire to be filled in by:

First name	pletion label	

Self-com

How to fill in this questionnaire:

There are two ways to fill in this questionnaire:

 If you have internet access, you can complete this questionnaire on-line by going to:

http://websurveys.natcen.ac.uk/gamblingstudy

This will launch the web version of this questionnaire and it will guide you through each question. You will need to enter the web survey password printed on the self-completion label opposite.

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i	ı	į	۱	١	ŧ

You can answer the questions in this booklet by simply ticking the box alongside the answer that applies to you.

Example only (do not fill in)

Tick one only

Do you live in a house or flat?

A house

Sometimes you will find that the box you have ticked has an instruction to go to another question. Please follow that instruction carefully.

A flat 🖊

Example only (do not fill in)

Do you live in a house or flat?

A house □→► Go to Z3

A flat ✓ → Go to Z4

Don't worry if you make a mistake: simply cross out the mistake and tick the correct box.

When you have completed it, please put this questionnaire in the envelope provided and return to the interviewer.

SECTION A

SN 1001-1006 CHRL 1006 CARD 1007 BATCH 1008-1012

EVERYONE PLEASE ANSWER

A1 How often have you spent money on any of the following activities in the last 12 months?

- Please go through the whole list and tick an answer for each activity, thinking about the last 12 months only.
 - If you have not spent money on an activity in the last 12 months please tick 'not in the last 12 months'.
 - If you are not sure how often you have spent money on each activity, please give your best estimate.

		Ticker Includ	2 Scratc Incluc Do no	3 Ticket Incluc e.g. 'N Do no buying	4 The fo	5 Bingo o Include Do not
		Tickets for the National Lottery Draw Include: Thunderball and Euromillions. Do not include: scratchcards.	Scratchcards Include: National Lottery scratchcards games played on-line. Do not include: newspaper or magazine scratchcards.	Tickets for any other lottery Include: charity lotteries for hospices, sports or social clubs, e.g. 'Monday Lottery' Do not include: Irish Lottery or other international lotteries or buying raffle tickets.	The football pools Do not include: betting on football matches with a bookmaker.	Bingo cards or tickets Include: playing boards at a bingo hall. Do not include: newspaper bingo tickets, or bingo played on-line.
	Every day/ 4-5 almost days a every day week	5		5	 	- -
	4-5 days a week	= =	= =	8	B	⊕
	2-3 days a week	8	B			8
Tick one	About once a week		a a	2	ā	3
Tick one box for each activity	2-3 days a month	S		E .	s	s
activity	About once a month	8	8	8	8	8
	6-11 times a year		, to	is .	b	ä
	1-5 times a year			8		
	1-5 Not in the times a last 12 year months	1013-1014	90	99 0177-101	00 LOTA-1101	Ē

A1 continued How often have you spent money on any of the following activities in the last 12 months?

 6 Fruit/slot machines Do not include: quiz machines. 7 Virtual gaming machines in a bookmaker's to bet on virtual roulette, keno, bingo etc Do not include: quiz machines. B Table games (roulette, cards or dice) in a casino Do not include: poker or casino games played on-line. 9 On-line gambling like playing poker, bingo, slot machine style games or casino games for money include: gambling on-line through a computer, mobile phone or interactive TV. Do not include: bets made with on-line bookmakers or bettire exchanges. 10 On-line betting with a bookmaker on any event or sport include: betting on-line through a computer, mobile phone or interactive TV. Do not include: bets made with a betting exchange or spread betting. The sting exchange or bookmaker to determine the odds. This is sometimes called 'peer to peer' betting.) 	Fruit/slot machines Do not include: quiz machines. Virtual gaming machines Virtual gaming machines Virtual gaming machines in a bookmaker's to bet on virtual coulette, keno, bingo etc Do not include: quiz machines. Table games (roulette, cards or dice) in a casino Do not include: poker or casino games played on-line. On-line gambling like playing poker, bingo, slot machine style games or casino games for money include: gambling on-line through a computer, mobile phone, or interactive TV. Do not include: bets made with on-line bookmakers or betting exchanges. On-line betting with a bookmaker on any event or sport include: bets made with a betting exchange or spreadbetting. 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.)	style bettir bettir brone or one or one or one or other o			6	▶ ≥ 5 □	8	0 9 7 9 9	9	# 5 4 8
	Every day/ almost every day almost a	almost day very day v			ruit/slot machines o not include: quiz machines.	irtual gaming machines in a bookmaker's to bet on virtual vulette, keno, bingo etc o not include: quiz machines.	able games (roulette, cards or dice) in a casino o not include: poker or casino games played on-line.	n-line gambling like playing poker, bingo, slot machine style ames or casino games <u>for money</u> iclude: gambling on-line through a computer, mobile phone r interactive TV. o not include: bets made with on-line bookmakers or bettir changes.	n-line betting with a bookmaker on any event or sport include: betting on-line through a computer, mobile phone or teractive TV. o not include: bets made with a betting exchange or spreadetting.	etting exchange This is where you lay or back bets against other people using stting exchange. There is no bookmaker to determine the dds. This is sometimes called 'peer to peer' betting.)
days a days a week week week week week week week we	days a da		About	once a week	ī.	Ī	Ī	3		
days a da		About a source a sour	2-3	days a month	8	8	g .	8	ε -	s
days a da		About 2-3 once a days a week month	About	once a month	s	3	s	8	8	8
days a once a days a or week month m week month m m m month m m m month m m m m m m m m m m m m m m m m m m m	About 2-3 A once a days a or week month m week month m can be a ca	days a or month month month m	6-11	times a year	.s	8		3	<u></u>	b
2-3 About 2-3 About days a once a week month month month month month conce a c	About 2-3 About once a week month month month month once a large and a large a	2-3 About days a once a month month month month of the contraction of	1-5	times a year		os o	ä	8	8	s
2-3 About 2-3 About 6-11 days a once a days a once a times a tir week week month month year >> Description of the content o	About 2-3 About 6-11 once a days a once a times a tir week month month year year year year year year year year	2-3 About 6-11 days a once a times a tir month month year year year year year year year year	Not in the	last 12 months	80	00 001-1001	DB DB	60 - 6001	B80	Z Z

Not in the 8949E 1047-1060 1005-1006 1007-1008 1009-1040 1041-1042 months last 12 times a 4-5 year times a 6-11 year 8 month once a About Tick one box for each activity days a month About once a week 8 days a week How often have you spent money on any of the following activities in the last 12 months? days a week Every day/ every day almost 16 Private betting, playing cards or games for money with friends, Include: tote betting and betting on virtual dog races shown in (In spread-betting you bet that the outcome of an event will be Include: tote betting and betting on virtual horse races shown higher or lower than the bookmaker's prediction. The amount you win or lose depends on how right or wrong you are.) Do not include: bets made with on-line bookmakers or Do not include: bets made with on-line bookmakers or Do not include: bets made with on-line bookmakers or 12 Betting on horse races in a bookmaker's, by phone or 14 Betting on any other event or sport in a bookmaker's. 13 Betting on dog races in a bookmaker's, by phone or 17 Another form of gambling in the last 12 months betting exchanges, or spread-betting. Include: Irish Lottery, 49's. by phone or at the venue family or colleagues betting exchanges. betting exchanges in a bookmaker's. Please describe 15 Spread-betting a bookmaker's. at the track A1 continued

A2 Have you spent money on any of the 17 activities (including	the National Lottery) listed at A1 in the last 12 months?

Yes ☐ → Go to A3

No ☐ → Go to Section D (page 19)

A3 In the last 12 months, did you bet with a bookmaker on the FIFA World Cup? Yes ☐ → Go to A4

No ☐ → Go to Section B (page 6)

A4 In the last 12 months, did you bet on other events with a bookmaker, or did you only bet on the FIFA World Cup? Yes, I bet on other events with a bookmaker a bookmaker a bookmaker B (page 6)

No, I only bet on the FIFA world cup with a bookmaker betookmaker betookmaker bookmaker bookmaker betookmaker betookm

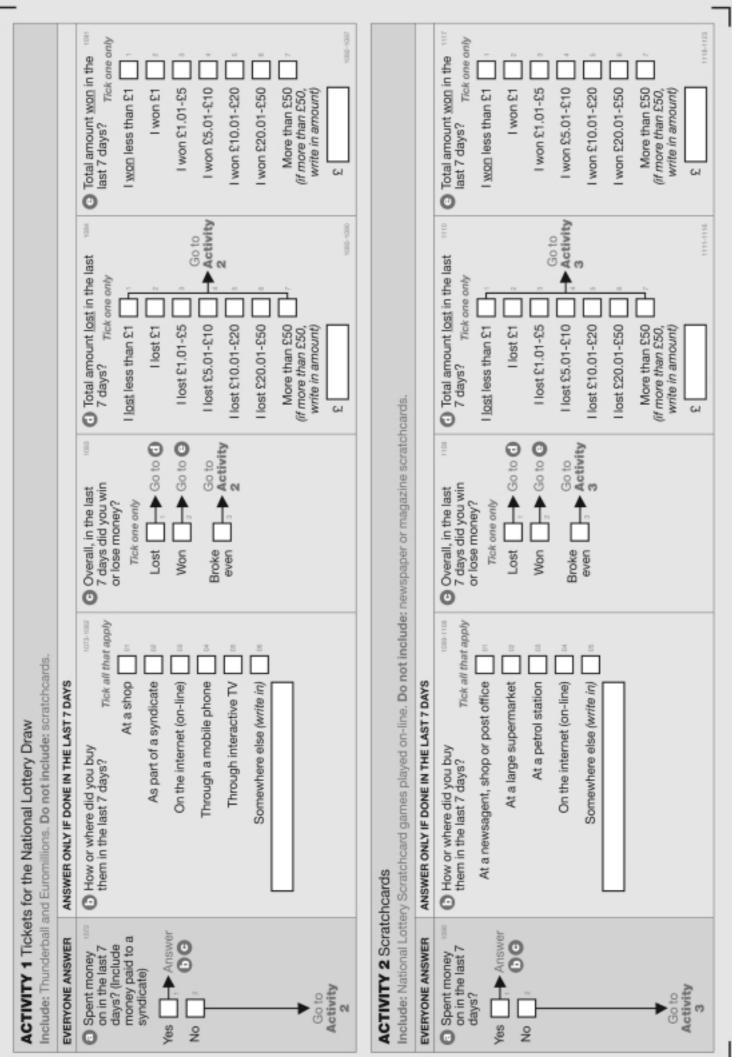
SECTION B

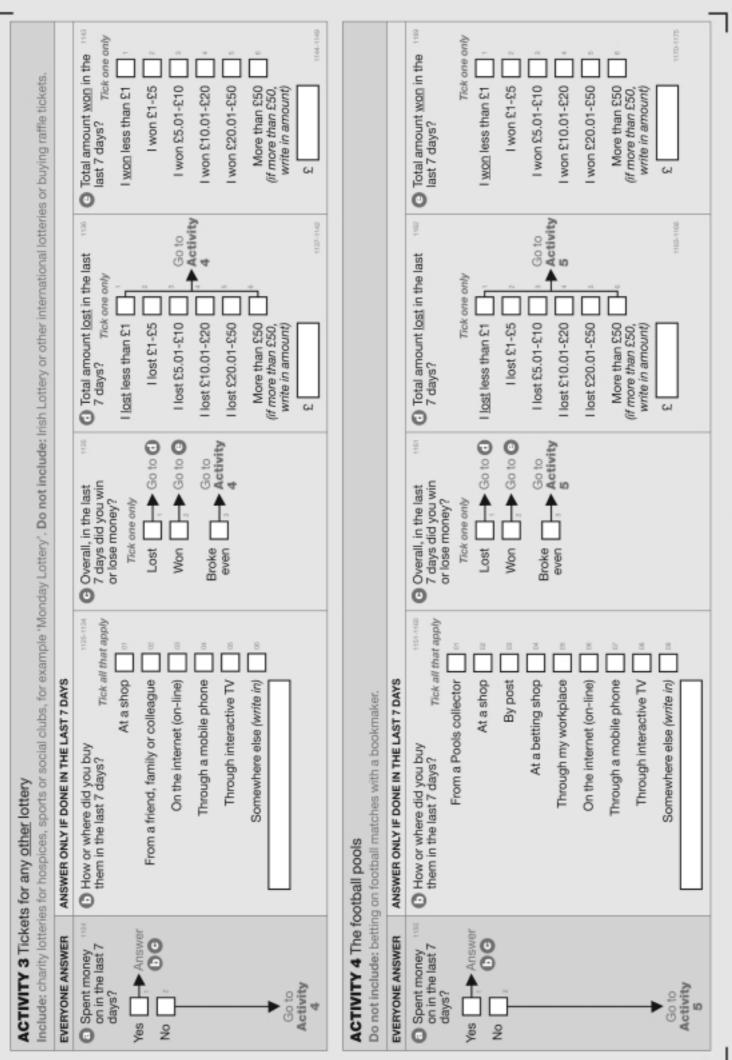
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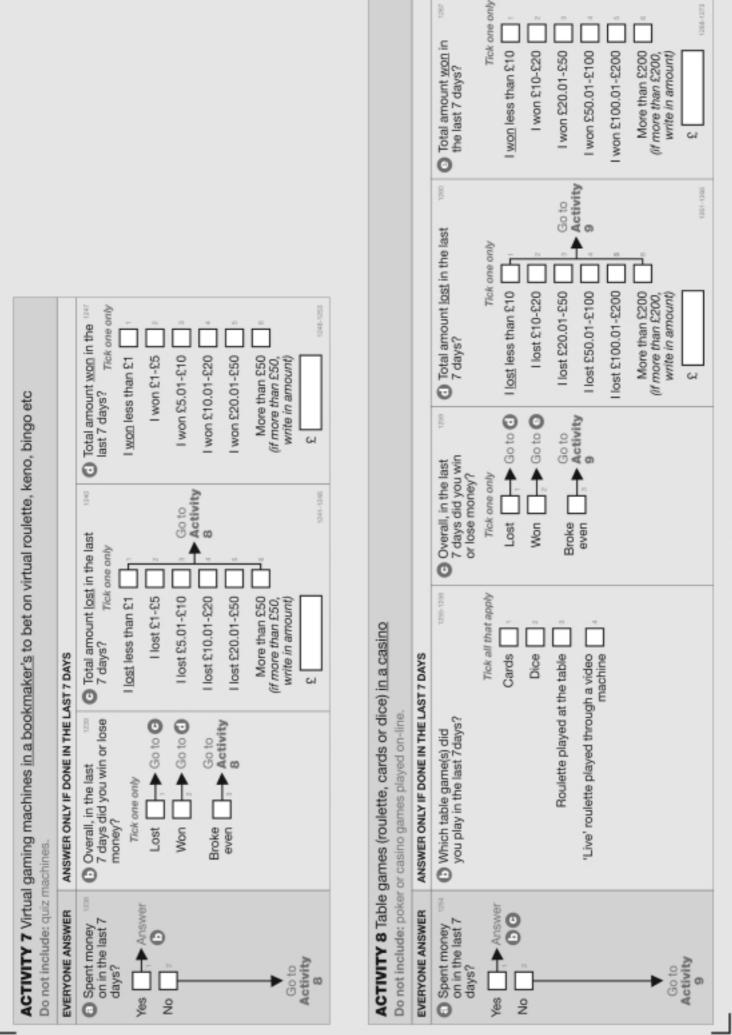
and whether you won or lost money. Not all of the activities will apply to you, but it's important that you answer the questions as honestly and accurately as you B2 In this section we want to know if you have spent money on each activity in the last 7 days. If you have, we'd like to know how or where you did the activity can. The example below shows you how to answer these questions. There are also some important instructions below. Please read these carefully.

EXAMPLE ACTIVITY Scratchcards	TY Scratchcards			
EVERYONE ANSWER	ANSWER ONLY IF DONE IN THE LAST 7 DAYS	7 DAYS		
© Spent money on in the last 7 days? Yes V + Answer No 0 0 0	D How or where did you buy scratchcards in the last 7 days? Thek all that apply At a shop At a shop Through a mobile phone Through interactive TV Somewhere else Somewhere else '(write In)	O Overall, in the last 7 days did you win or lose money? 7 hex one only Lost V → Go to O Won → Go to O Broke → Go to O Activity	Tick one only I lost less than £1 I lost £5.01-£10 More than £20 White In amount) £	Tick one only Mone than £20, write in amount) Wone than £20, write in amount)
• If you have spent money on the activity in the last 7 days, tick 'yes' and answer b, and c. • If you have not, tick 'no' and go to the next activity.	Tick how or where you did the activity.	• If you lost money, tick lost and go to d. • If you won money, tick 'won' and go to e. • If you broke even, tick 'broke even' and go to the next activity.	 Please indicate the amount you lost. For example, if you bought two scratchcards in the past 7 days and each cost £1, this means you started with £2. If you did not win any money on one scratchcard, but on the other scratchcard you won £1, that means, in total, you ended up with £1. Therefore, overall you lost £1. You would tick that you lost between £1-£5. If you don't know the exact amount, give your best estimate. Then go to the next activity. 	If you won, please indicate the amount you won. For example if you started with £25 but ended up with £30, you won £5. If you don't know the exact amount, give your best estimate. Then go to the next activity.

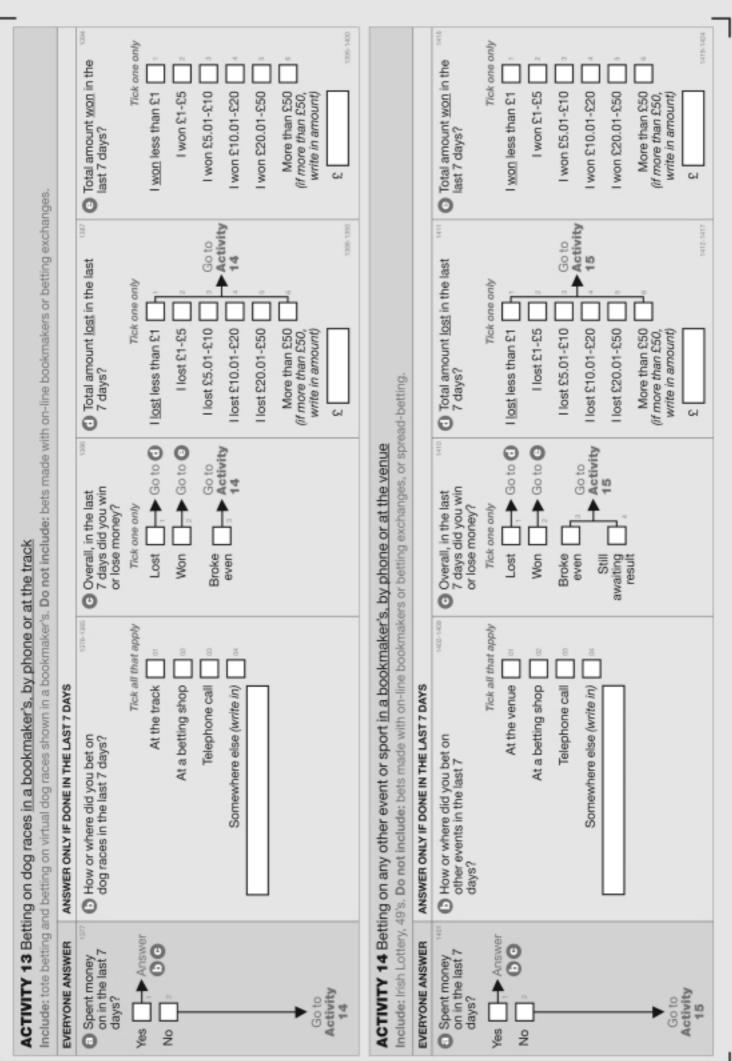
Now, please go to activity 1 and answer these questions for yourself, thinking about what you have done in the last 7 days.



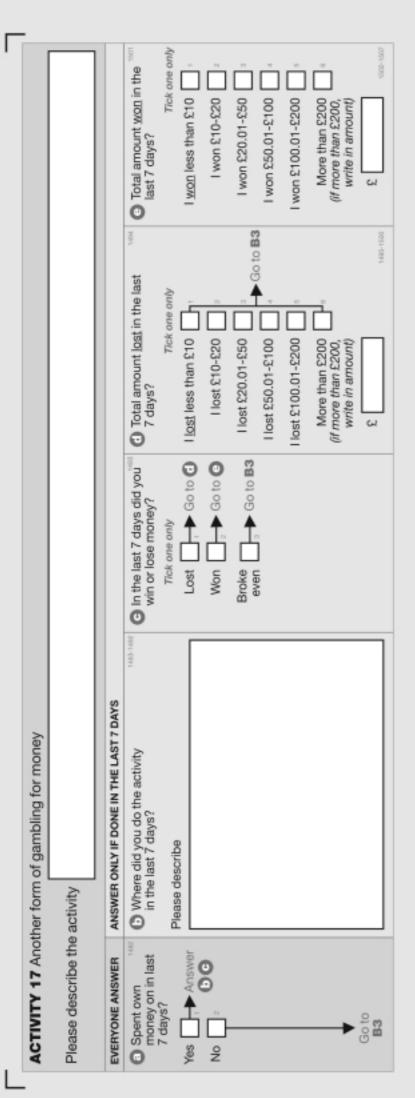




3TH-13T6 Tick one only Tick one only ACTIVITY 11 Betting exchange (This is where you lay or back bets against other people using a betting exchange. There is no bookmaker to determine the Total amount won in the Total amount won in the won £5.01-£10 won £5.01-£10 1 won £1-£5 won £10.01-£20 won £20.01-£50 won £20.01-£50 More than £50 I won £1-£5 won £10.01-£20 won less than £1 won less than £1 More than £50 if more than £50, if more than £50, write in amount) write in amount last 7 days? last 7 days? GI include: tote betting and betting on virtual horse races shown in a bookmaker's. Do not include: bets made with on-line bookmakers or betting exchanges. 1330 ► Activity Activity 1304-1309 Go to Go to 인 5 Total amount lost in the last Total amount lost in the last Tick one only Tick one only llost £5.01-£10 llost £5.01-£10 lost £1-£5 lost £10.01-£20 lost £20.01-£50 lost less than £1 1 lost £1-£5 lost £10.01-£20 lost £20.01-£50 lost less than £1 More than £50 More than £50 if more than £50, write in amount) if more than £50, write in amount) 7 days? 7 days? Go to Activity **→** Go to O ■ Go to 🖸 Go to 🖸 ◆ Go to 🖸 Activity Go to 7 days did you win 7 days did you win Overall, in the last Overall, in the last or lose money? Tick one only or lose money? Tick one only ACTIVITY 12 Betting on horse races in a bookmaker's, by phone or at the track Lost Won Broke awaiting result Lost even ≡ St Won Broke even 1964-1961 Tick all that apply Tick all that apply Other sports events Other events At the track Dog races Horse races Football At a betting shop ANSWER ONLY IF DONE IN THE LAST 7 DAYS ANSWER ONLY IF DONE IN THE LAST 7 DAYS Telephone call Somewhere else (write in) odds. This is sometimes called 'peer to peer' betting. O How or where did you bet on horse races in the last 7 days? What activity did you bet on at the betting exchange in the last 7 days? **EVERYONE ANSWER EVERYONE ANSWER** on in the last 7 on in the last 7 Spent money Spent money Go to Go to Activity days? days? 5 Xes √es Yes ŝ ž



Tick one only Tick one only Total amount won in the Total amount won in the won £5.01-£10 won less than £10 1 won £10-£20 won £20.01-£50 won £50.01-£100 won £10.01-£20 won £20.01-£50 More than £50, if more than £50, won £100.01-£200 More than £200 1 won £1-£5 won less than £1 (if more than £200, write in amount write in amount ACTIVITY 15 Spread-betting (In spread-betting you assume that the outcome of an event will be higher or lower than the bookmaker's prediction. last 7 days? last 7 days? GI 1430 ► Activity ▼ Activity 101-1406 1457-1482 Go to Go to 16 Total amount lost in the last 7 days? Total amount lost in the last Tick one only Tick one only lost less than £10 lost £10-£20 lost £1-£5 lost £5.01-£10 lost £10.01-£20 lost £20.01-£50 lost £20.01-£50 lost £50.01-£100 More than £50, (if more than £50, lost £100.01-£200 More than £200 lost less than £1 write in amount (if more than £200, write in amount 7 days? ACTIVITY 16 Private betting, playing cards or games for money with friends, family or colleagues Go to O Activity Go to Activity Go to 🖸 Go to O Go to @ Go to 18 7 days did you win 7 days did you win Overall, in the last Overall, in the last or lose money? Tick one only or lose money? Tick one only awaiting result Lost Won Broke even ij Lost Won awaiting Broke even Still The amount you win or lose depends on how right or wrong you are.) Tick all that apply 426-1428 Tick all that apply At a sports ground At work In my home In someone else's home At a pub By telephone call or text message Somewhere else (write in) ANSWER ONLY IF DONE IN THE LAST 7 DAYS By e-mail ANSWER ONLY IF DONE IN THE LAST 7 DAYS Sports events Other events Financial markets What did you spread-bet on in the last 7 days? O How or where did you bet privately in the last 7 days? **EVERYONE ANSWER EVERYONE ANSWER** 00 Spent money on in the last 7 on in the last 7 Spent money Go to Activity 17 Activity days? Go to days? Yes Yes ŝ S



EVERYONE PLEASE ANSWER

B3 Thinking about the total amount of money (if any) you gambled on all of these activities in the last 7 days, would you say that:

1908

7ACK ONE ONLY	Overall, I usually gamble more money in a week	Overall, I usually gamble less money in a week	Overall, I usually gamble about the same amount of money in a week

SPARE 1509-1600

SECTION C

In the last 12 months...

Tick one box for each question

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

i	ï	2	=	
	1			
١	L	1	J	ı
i	ř	Ť	٦	ı
	3	ă	۶	i
i	ì	₹	١	۰
	L	4		

In the past 12 months, how often	Tick	Tick one box for each question	each questi	001
	Almost always	Most of the time	Some- times	Never
C11have you bet more than you could really afford to lose?	_	~	Ô	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C12have you needed to gamble with larger amounts of money to get the same excitement?	Ē	~		## ## ## ## ## ## ## ## ## ## ## ## ##
C13have you gone back to try to win back the money you'd lost?		~		1 a
C14have you borrowed money or sold anything to get money to gamble?		, , , , , , , , , , , , , , , , , , ,	100	21 th
C15have you felt that you might have a problem with gambling?	_	<u>~</u>	o o	3816 A
C16have you felt that gambling has caused you any health problems, including stress or anxiety?		~		9116
C17have people criticised your betting, or told you that you have a gambling problem, whether or not you thought it is true?		N		4017
C18have you felt your gambling has caused financial problems for you or your household?		· ·	, p	10 10 10 10 10 10 10 10 10 10 10 10 10 1
C19have you felt guilty about the way you gamble or what happens when you gamble?	Ē	~	Ô	010 P

SECTION D

EVERYONE PLEASE ANSWER

Below is a list of things people have said about gambling.

Please tick one box for each statement to show how much you agree or disagree.

	Strongly]				
		D8 Gambling is a hamless form of entertainment	time D10 On balance gambling	D11 Gambling livens up	D12 It would be better if	altogether	drug	D14 Gambling is good for communities
	Strongly disagree	000s	1200	S .	NECS 8	9 NES4	2 2	9,000
Tick one box for each statement	Disagree	Ď	Ġ			Ů	Ů	Ů
	Neither agree nor disagree	Ô	Ô	Ô	Ô	Ô	Ô	Ô
Tick one t	Agree	ũ	Õ	Õ	~	~	å	å
	Strongly agree		Ē					Ē
		D1 There are too many opportunities for gambling nowadays	D2 People should have the right to gamble whenever they want	D3 Gambling should be discouraged	D4 Most people who gamble do so sensibly	D5 Gambling is a fool's game	D6 Gambling is dangerous for family life	D7 Gambling is an important part of cultural life

SECTION E

ng about your parents/step-parents/guardians, any of them regularly gamble? Yes	E2 (a) In the last 12 months, has any Yes → Answer (b) close relative of yours (including problem? No → Go to E3	IF YES (b) In the last 12 months, have you sought help from any of the following people on behalf of a close relative or partner about a gambling problem	Tick all that apply Have not spoken to anyone	GP/Nurse 🗀 🛪	Probation or prison officer	Faith or religious leader	GamCare □ ™
do or did a do or did a liF YES (b) Do you have, or ha		No → Go to E2 (a)	Don't know ☐ ► Go to E2 (a)	/ou feel that any of your parents/guardians/step-parents r had, a gambling problem?	Yes 📗	No No	

E 23

Ш	
E4 (a) Do you feel you have ever had a gambling problem? Yes	Gamblers Anonymous Gordon House On-line help service Another addiction service Credit/Debt adviser Employer Someone else 11

	→ Answer (b)	question	ve drunk	le units tl	1.5 units	1 alcopc
	Yes ☐ → Answer (b) No ☐ → Go to E10	he following	cohol you hav	mber of who	1 unit	Single spirit measure (whisky, gin vodka, etc)
wadays?	* ~	to answer t	ost units of al	'0'. e nearest numk Units	1 unit	1 small glass wine, sherry or vermouth
lcohol at all nc		e table below	what is the m	sumed, write answer to the t day.	3 units	1 pint of strong beer, lager, stout or cider
(a) Do you drink alcohol at all nowadays?		IF YES (b) Please use the table below to answer the following question	In the last 7 days, what is the most units of alcohol you have drunk in <u>any one day</u> ?	If no alcohol consumed, write '0'. Please give your answer to the nearest number of whole units the you drank on that day. Units	2 units	1 pint of normal 1 pint of strength beer, stout, lager, stout or shandy or cider
E 3						

hat

9

PAGE 22

White

E12

Mixed

1714-17133

E10

E11

177

E14 Thinking about all possible sources of income (including earnings from employment, benefits, tax credits, pensions etc), which band does your personal, annual, income fall into before deductions for tax and national insurance?

(The columns below show income in both weekly and annual amounts.)

Weekly amount	ō	Annual amount	
Under £59 per week	ō	Under £3,100 per year	5
663 - 093	ō	83,100-25,198	ů
6613-0013	ò	25,200 - £10,399	8
6623 - 0023	ō	210,400 - 215,599	3
6683 - 0083	ò	215,600 - £20,799	8
2400 - 2499	ò	520,800 - £25,999	8
6653 - 0053	ō	656,000 - 636,399	
6693 - 0053	ō	236,400 - 251,999	ıs —
6663 - 0023	ъ	666'22'000'523	8
21,000 – 1,999	ō	278,000-£103,999	ē.
£2,000 or more	ō	£104,000 or more	=

E15 Did you complete this form by yourself, or did someone help you with it?

I completed it myself	Someone read the questions to me	Someone wrote down the answers I gave	Someone answered the questions for me	Someone translated the questionnaire into my own language	I discussed the questions with other members of my household	Someone helped in some other way	
		Son	Sor	Som			

THANK YOU VERY MUCH FOR YOUR HELP

Please check that you have answered all questions that apply to you.

Then put this questionnaire into the envelope provided and return it to the interviewer.

SPAPE 1738-1989

- The National Centre for Social Research (NatCen) is the largest independent social research institute in Britain. It designs, carries out and analyses research studies in the fields of social and public policy, and is the UK's leading centre for quantative and qualitative research on these issues. NatCen has offices in London, Brentwood and Edinburgh, and has a nationwide panel of over 1000 interviewers.
- Founded in 1969 as (SCPR), *NatCen* conducts high quality and innovative work that informs policy debates and the public. It employs over 100 research staff who work on a wide range of social policy areas, including health, crime, education, employment, travel, social attitudes and families.
- **NatCen** is a not-for-profit company that concentrates on work of public interest. It conducts social research on behalf of a range of public bodies, including central government departments and agencies, universities, research councils, and charitable trusts and foundations.
- NatCen's resources enable it to conduct many of the largest and most technically demanding studies in Britain. In addition to its Qualitative Research Department and Qualitative Research Unit, it includes a specialist Survey Methods Unit which focuses on statistical and methodological research, teaching and technical advice.



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