Gambling related harm in Nottingham City:
Health needs assessment

Contents

1 Executive Summary

Gambling related harm is recognised as a highly prevalent public health problem which damages physical and mental health, breaks down relationships, erodes finances, and drives crime. We conducted a health needs assessment to estimate the local impact and inform a public health approach to prevent gambling related harm in Nottingham City.

Gambling is a commonly participated in activity which is heavily promoted and marketed. It is commonly defined as an activity of uncertain outcome where a person risks money or other valuable for a possible gain. This includes casino games, sports betting, lotteries, bingo and scratchcards. The Gambling Act defines gambling as, "betting, gaming or participating in a lottery."

People can experience a gambling problem: where there is a loss of control, and gambling has significant negative consequences. Signs can include concealing gambling participation, unsuccessful efforts to control or stop gambling, and gambling to "chase" losses. This can affect anyone, though a gambling problem is more likely to occur in young men and vulnerable groups (including people in deprived areas, unemployed people, people with mental ill health, or an alcohol problem). This is not exclusive to adults; children and young people are frequently exposed to gambling advertising and access gambling products. There is a relationship between gambling and other public health challenges, including homelessness, alcohol related harm, and smoking, and furthermore a gambling problem accounts for more than one death by suicide per day in the UK. More than 1 in 5 people who called GamCare from Nottingham in the 2021-22 financial year reported suicidal thoughts.

National data suggests 0.4% of people aged 16 and over, and 2% aged 11-16 in school show signs of a gambling problem (some surveys report higher figures than this). When national data is applied to our population, we estimate approximately 4,500 people aged 16 and over and approximately 1,000 adolescents aged 11-16 in school show signs of an early or established gambling problem. Each person with a gambling problem has 6-10 affected others on average, who too experience harm.

We predict the risk factors for a gambling problem are most strongly concentrated in Bulwell, Clifton East, Bestwood, Bilborough, Aspley and St Ann's**.** Gambling premises are most clustered in the city centre and areas of deprivation and vulnerability to gambling related harm.

The main support service nationally is the GamCare helpline and webchat which can connect people to the right type of support. There are a small number of NHS clinics in England, with a new clinic expected to open in the East Midlands in 2023-24. Double Impact are developing a new recovery service (Time Out) in the city, and Al-Hurraya offer culturally sensitive support including counselling to ethnic minority communities. There is a Nottingham Gamblers Anonymous group offering mutual support to people affected by gambling, and there is residential rehabilitation available for more complex and severe cases of gambling difficulty in the West Midlands, accessible via GamCare. There are also downloadable gambling software blockers, GamBan and GamStop.

Despite expanding support, there are far fewer people reaching out for help in Nottingham than the estimated number of people affected. This is likely explained by stigma associated with gambling, where guilt, shame and isolation keep the situation concealed until serious harm has occurred.

Acting against gambling related harm is important to prevent long lasting impacts for thousands of people in Nottingham and is an opportunity to co-intervene on related areas such as the prevention of suicide, homelessness, and alcohol harm. This health needs assessment has identified unmet need for gambling related harm, and we will apply this in a public health approach to prevent gambling related harm at a population level. This includes developing a strategy, considering options for local interventions, and exploring opportunities to intervene at an early stage to prevent harm.

2 Background

2.1 Gambling

Gambling is described as an activity of uncertain outcome, where a person risks loss of money or other valuable for a possible gain (such as pay-out). The Gambling Act define gambling as, "betting, gaming or participating in a lottery." Gambling comes in many forms, such as casino games and sports betting, but also includes bingo, lotteries, scratchcards, games machines, and penny machines. Gambling is also featured in console games (as loot boxes and skin gambling) and cryptocurrency. People can gamble in-person, or with an internet connected device.

A gambling problem is gambling, "with negative consequences and a possible loss of control,"(1). Signs include concealing gambling, gambling increasing amounts, restlessness when attempting to cut down, unsuccessful efforts to stop, thoughts occupied by gambling, gambling when distressed, and gambling to 'chase' losses. This has been called problem, compulsive, or disordered gambling. We use terms gambling problem, gambling difficulty and harmful gambling to reduce stigma.

2.2 Gambling related harm

Gambling is a recognised public health problem. A recent evidence review estimated 0.5% of the adult population in England have a gambling problem(2), with an estimated excess economic burden of £1.27 billion per year(3). Gambling problems intersect with other well recognised public health problems such as mental ill health, suicide prevention, alcohol, smoking and homelessness(4). People with a gambling problem have on average 6-10 affected others who may experience relationship strain, stress, financial loss, and health impacts.

2.3 Legislation

The Gambling Act (2005) sets out the requirements for legal gambling participation. The Gambling Commission and licensing authorities share regulation of gambling through licensing, policy and local risk assessment. This legislation has been updated through the years to enhance protection (such as banning credit cards and lowering maximum betting stakes) and reflect changes in gambling activity (such as identity verification requirements for online gambling). It is currently under review.

2.4 Gambling in Nottingham

Nottingham is a city in the East Midlands with a population of approximately 324,000 people who experience high levels of deprivation. There has been no prior local health needs assessment on gambling related harm. There could be unmet health needs which would benefit from a public health approach to prevent and reduce gambling related harm in Nottingham.

3 Method

The approach taken was informed by example gambling related harm health needs assessments(5,6) and the Public Health Framework for Gambling Related Harm Reduction(7). The health needs assessment is comprised of three parts:

1. Literature review – a search (Appendix A) of published and grey literature to describe the:
    i. Predictors of gambling participation and gambling problems
    ii. Impacts to people with a gambling problem, their social groups, community & society
    iii. Current gambling harm prevention activities and services for people in Nottingham
2. Data analysis – estimating the local prevalence of:
    i. Gambling participation, gambling problems, and risk of gambling problems
    ii. Gambling related harm, based on demand for support services
3. Mapping – using routine data and geospatial information system software to:
    i. Map the location of licensed gambling facilities
    ii. Map the prevalence of risk factors for disordered gambling

4 Literature review

4.1 Predictors of gambling participation and a gambling problem

Anybody can be affected by a gambling problem; however, some are more likely to experience this than others. Many predictors of gambling participation are seen for a gambling problem, but often with inverse associations (Figure 1)(2) indicating that people who experience more disadvantage are more likely to experience harm. The strongest associations are:

- High alcohol consumption (7.8 times as likely to show harmful gambling if drinking ≥50 units per week, and 3.3 times for 14-35 units)
- Male sex (4.2 times as likely as women)
- Poor mental health (2.4 times as likely if General Health Questionnaire (GHQ-12) score ≥4)
- Living in the most deprived IMD quintile (1.4 times as likely to have harmful gambling)

A gambling problem is more likely among people with limited support networks, exposed to gambling advertising, closer proximity to and greater density of in-person gambling facilities, and (for children) parental substance use and child maltreatment. Harmful gambling prevalence is high relative to levels of participation in homeless populations(8). Adverse childhood experiences, poor academic performance and anti-social behaviour predict gambling problems in adulthood(9), and children who have gambled are more likely to have smoked, consumed alcohol, or used drugs.

Figure 1 Summary of socio-demographic and health factors statistically associated with greater gambling participation and risk of a gambling problem

	Higher gambling participation		Risk of a gambling problem
Socio-demographic factors	45-64 years old	Age	16-24 years old
	Male	Sex	Male
	White-British	Ethnicity	White-British*
	Degree / NVQ	Highest educational qualification	No qualifications or below degree
	In employment	Employment	Unemployed
	Most deprived†	Index of Multiple Deprivation	Most deprived
Health factors	Good health	Self-reported general health	*Not associated*
	Low wellbeing	Wellbeing‡	Low wellbeing
	High life satisfaction	Life satisfaction	Low life satisfaction
	Good psychological health	Psychological health§	Poor psychological health
	Overweight or obese	BMI	*Not associated*
	Higher consumption	Alcohol consumption	Higher consumption
	Smoker**	Cigarette smoking	Smoker

Levels of gambling participation declined during the early part of the Covid pandemic but have been returning to pre-pandemic levels(10). However, people who gambled most frequently pre-pandemic did not show significant changes in gambling participation(11). Continued gambling during the first part of the UK Covid lockdown was more likely if a person had lower levels of education, experienced stress due to boredom, consumed alcohol frequently, and showed risk taking tendencies(12).

* Disproportionate impact for ethnic minority groups relative to levels of participation
† Greater use of scratch cards and bingo
‡ Measured using Warwick-Edinburgh Mental Well-being Scale
§ Measured using GHQ-12
** Greater use of scratch cards, football pools and bookmaker machines

The most popular gambling activities are the National Lottery (36%), scratch cards (17.9%), other lotteries (14.4%), horse races (8.1%) and online bets (7.8%)(2). In comparison, activities associated with risk of a gambling problem are spread betting (52%), bookmaker machines (46.4%), poker in pubs and clubs (45.6%), online slots, casino or bingo (44.2%) and betting exchanges (44%).

The gambling landscape has been evolving beyond traditional formats. Online (or remote) gambling is very accessible and is heavily marketed(13). Online gambling play may be continuous, limitless, addictive, and associated with harmful gambling(2,4,14). Gambling participation and problems also occur in children and young people, and gambling is featured in console and PC gaming as loot boxes (where players pay for an item before its true value or benefit is revealed). Skin gambling is another example, where players use virtual cosmetic goods as currency to bet on the outcome of a game of chance(15). This has attracted concern due to the popularity of gaming among young people, and the potential to attract underage (and unregulated) gambling. Furthermore, spending on gaming loot boxes has been linked to gambling problems(16), and there is evidence of a relationship between excessive and harmful gaming and gambling(17). The relationship between cryptocurrency trading and gambling has been noted also, with connection to overspending, compulsive behaviours(18), and the similar demography of people affected by gambling problems(19).

4.2 Impact of gambling problems

A gambling problem causes profound long-term harm to individuals, affected others, communities, and wider society(14). The differing types of harm are summarised in Table 1(3,8,14,20). The potential consequences of a gambling problem are often similar to its risk factors(21).

Table 1 Summary of gambling related harms

Theme	Individual	Social circle	Community	Society
Physical and mental health	Depression & anxiety[††] Suicide risk Alcohol, substance use & smoking[††] Stress Shame & guilt	Emotional effects on family and friends including children Stress	Lack of social cohesion – gamblers & affected others isolated	Costs of treating and caring for adverse physical and mental health effects
Relationships	Relationship strain and breakdown Intimate partner violence (typically perpetrator)[††]	Neglect of dependents Child in care Intimate partner violence (typically victim)[††]	Troubled families Possible long-lasting impact on children to thrive	Costs of social support for adults & children
Financial & Employment	Bankruptcies & debts Use of savings & pension Homelessness[††] Impaired ability to learn or work	Legacy effects to children Use of child savings Child poverty Impaired ability to learn or work	Decreases social capital	Costs of supporting homeless population and those in financial difficulty
Crime	Crime to fund continued gambling & pay off gambling related debts	Victims of crime	Effects of crime on community safety	Costs of investigating & prosecuting crimes

[††] Evidence of bi-directional relationship

Gambling problems adversely affects physical and mental health (research suggests there are 250-650 gambling related suicides per year in the UK(20)), relationships (particularly for relatives, partners and children), finances (which can plunge families into poverty and homelessness(8,22)) and crime (where individuals may commit theft to fund gambling).

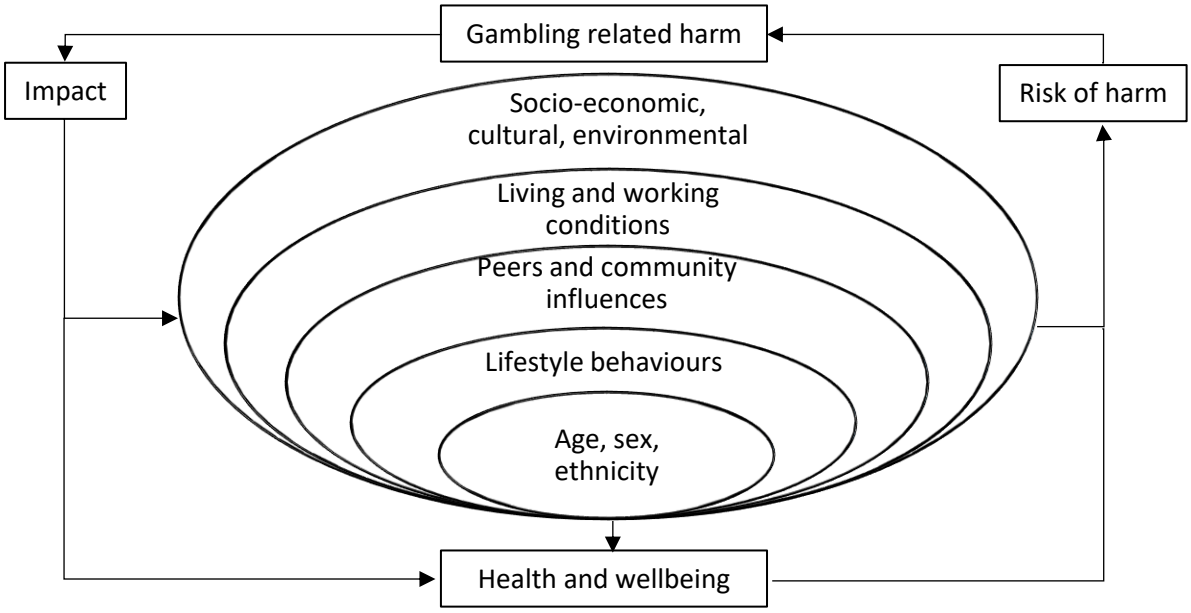
Each person with a gambling problem has 6-10 affected others on average who may also experience harm. This can last for years, and the intensity varies by the degree of emotional and financial involvement(23,24). People close to the individual can be impacted financially and psychologically, there may be fractured relationships, and abuse (to access money, to hide gambling, and to displace and apportion guilt and blame(25,26)). Children too can be affected; a gambling problem in a parent harms child wellbeing, particularly in relation to child distress and family dysfunction(27). There are also significant community and societal costs in responding to these harms.

The exact level of risk to mental ill health varies in published literature. In the 2021 Public Health England evidence review, the following estimations were made:

- Risk of suicide – In a retrospective cohort study in Sweden with a low risk of bias, the rate of death by suicide was 15.1% higher for people with a gambling disorder (Standardised Mortality Ratio 15.1 95% CI 8.7 to 21.6), with a higher risk for men, but not women. Another study reported people with a gambling problem were 2.2 times as likely to attempt suicide.
- Risk of mental health problems – This was challenging to quantify due to the range of measures used. In one study, a person at risk of or experiencing gambling problems was 3.8 times as likely to be newly diagnosed with a mental health disorder between 3-5 years of follow-up. Another study, based in Canada, found a gambling problem at baseline was associated with a new major depressive disorder at follow-up.

There is a strong connection between gambling and health. Gambling problems impact directly on health and wellbeing, as well via the determinants of health, which are a broad range of social and environmental factors (such as a person's social support network, living location, and employment status) which influence and shape health in the short and long term. Furthermore, these alterations in health and wellbeing and in the structural and social components of people's lives place them at higher risk of further harm from continued gambling (Figure 2).

Figure 2 Summary of the relationship between gambling and health via the determinants of health[‡‡]



[‡‡] Image adapted from Dhalgren and Whitehead

4.3 Gambling related harm prevention services for Nottingham

Table 2 (overleaf) summarises services which intend to prevent gambling related harm and are available to Nottingham City residents. Their geographical coverage, provider, the intervention, and any identified gaps in provision or effect are described below.

It is important to recognise that GambleAware are funded via a voluntary harm reduction levy on the gambling industry, and GamCare are subsequently funded for treatment and recovery support. These organisations are not completely independent from industry influence. GamCare are the main gatekeepers to support services at a national level.

The director of the 'National Problem Gambling Clinic' and clinical lead of the NHS Northern Gambling Service have called for a statutory levy on gambling organisations(28), to fund NHS integrated support services which are independent of the gambling industry, and can be used to fund research to further develop the evidence base(29). There is a new NHS clinic for gambling harm in adults expected to open in the East Midlands in the 2023-24 financial year.

Table 2 Prevention and support services in Nottingham

Area	Provider	Description	Gaps in provision or effectiveness
National	Legislation – The Gambling Act	The Gambling Act (2005) intends to prevent gambling harm by regulating and permitting gambling under conditions such as age restrictions and maximum bets. It is currently under review.	Legislation is criticised as outdated and there are calls for additional protections e.g., banning loot boxes and gambling advertising in sports(30).
	Gambling Commission	The Gambling Commission regulates gambling businesses including arcades, casinos, and the National Lottery. They can use regulatory powers and enforcement action if regulations are breached.	The Gambling Commission focuses on issues of national or regional significance, with local licensing authorities taking on local regulation(31).
	GambleAware	GambleAware(32) is a national charity who deliver information campaigns to educate people about the risks of gambling, and signpost people to the National Gambling Helpline (delivered by GamCare). They have also commissioned research into the effectiveness of their campaigns.	GambleAware are funded by the gambling industry. The GambleAware Campaign 'When The Fun Stops: Stop' was criticised for placing emphasis (in text size and eye-catching lights) on the word 'Fun'(33). Additionally, parts of the information campaign included a jovial tone which could minimise its importance, and offer a mixed message.
	GamCare	GamCare(34) are a charity who operate a 24/7 free helpline (0808 8020 133) and webchat for people with gambling problems, affected others, and professionals. Advisors provide guidance and connect people with support such as counselling, cognitive behaviour therapy, support groups and residential support. GamCare deliver brief or extended structured interventions and self-help tools for under 18s.	GamCare is also part industry funded, via GambleAware, and are the main gatekeepers to support services at a national level. Further information on local GamCare data is discussed in section 5.
	National Gambling Treatment Service – NHS Clinics	The National Gambling Treatment Service is an NHS service for people with gambling problems and affected others. People are supported through treatments including psychological support, behavioural therapy, medication, and psychiatric review. There are ambitions to expand the number of clinics nationally. There is a new clinic planned for the East Midlands, expected to open in 2023-24 based in Derby, which is expected to predominantly offer digital appointments. Clinics can be accessed via the GamCare helpline, via professional referral, and some clinics accept self-referrals. The clinics are intended for people with complex difficulties such as co-occurring homelessness, mental ill health, or substance use. It was recently announced this NHS service would stop receiving funding from GambleAware.	The East Midlands clinic will be located in Derby and is not yet a live service. Other clinics are located in London (for aged 13 and over)(35), Leeds(36), and Southampton(37) (for aged 17 and over who are GP registered in the city) and the West Midlands(38) (for people aged 18 and over who are GP registered in Stoke-on-Trent, Staffordshire, Telford, Shropshire and Wrekin). The East Midlands service is not expected to include an in-person site in Nottingham, and is a service for adults only. Referral and access pathways and monitoring frameworks are in development.

	NHS Website	The NHS website lists support services, and is accessible at https://www.nhs.uk/live-well/addiction-support/gambling-addiction	This requires an internet connected device, proactive searching, and it may not signpost to local services.
	Gordon Moody	Residential rehabilitation for complex and severe cases. They have recently launched a female only service. They also run the Gambling Therapy website which provides online support(39).	The service is in Dudley and can be accessed via the GamCare helpline(40).
	Software blockers	GamBan is downloadable to up to 15 Apple and Android devices (for free via GamCare) to block gambling websites. GamStop is downloadable (for free via GamCare) on Windows computers and Android phones, to block all gambling apps and websites.	Requires awareness of the software and confidence to use. Does not prevent gambling at bookmakers, lottery, scratch cards, bingo halls, casinos or other in-person gambling.
	Sporting Chance	Sporting Chance are a national sport funded organisation offering free gambling harm treatments for professional sportspeople. Their GATE programme raises awareness of gambling related harm and offers treatment such as cognitive behaviour therapy, psychotherapy, residential treatment and mutual aid support groups.	Sporting Chance is for elite and professional sportspeople only. Their residential clinic is in Hampshire for those requiring more intensive treatment. Much of the education and individual work is otherwise delivered online.
	EPIC Restart Foundation	A charity offering free support after treatment to people affected by their gambling to help rebuild their lives and remain gambling abstinent. This is delivered through mentors with lived experience, with personalised coaching. They cover the cost of travel and accommodation expenses for programme delegates. They aim to reach approximately 1000 people in 2023.	This is for people affected by their own gambling only. Almost all sessions are held virtually. At present people can self-refer or refer via a treatment service (e.g. GamCare). EPIC Risk Management is a partner organisation (formerly the same organisation) offering education and consultancy, including with industry.
	GamAnon	GamAnon is a mutual support group for people affected by another person's gambling. They hold in-person meetings (usually scheduled the same night as Gamblers Anonymous group meetings) and are a safe space to learn about gambling problems and its impact, use the group environment to solve problems, and provide support.	There are no in-person GamAnon meetings in the East Midlands listed on the website. The closest in-person group to Nottingham is based in Wolverhampton. GamAnon do however host regular online meetings via Zoom.
Local	Licensing	Nottingham City Council is the local licensing authority, responsible for regulating gambling and betting premises in the city apart from National Lottery and spread betting. They issue licenses and permits for gambling, collect and report data, and conduct inspections and take enforcement action if needed in the interests of preventing gambling associated crime, ensuring gambling is conducted fairly, and protecting vulnerable people from gambling harm, including children.	Local licensing authorities have little influence on national or regional level gambling issues. They do not regulate all forms of gambling, such as online gambling. There is no statutory public health gambling licensing objective in England though there is scope to review and amend licensing policy when new findings are identified in an assessment of the local area.

	Time Out project	This is delivered by Double Impact and aimed to map community assets, measure gambling harm prevalence, connect with and identify needs of people affected by gambling, and pilot and evaluate a recovery programme. The programme was co-designed with people with lived experience, and aims to provide post-treatment support to people affected by gambling. They have a website which uses questions from a gambling screening tool, and signposts to GamCare for further support. The peer-led recovery programme will consist of 10 modules with a longer-term ambition of facilitated recovery.	Significant groundwork was required. The recovery pilot is not a live service and the survey has had low response rates. The Time Out project is currently being evaluated by the University of Lincoln, with a report expected in early 2023. The evaluation assesses engagement with Time Out website and resources, the awareness raising efforts, referral pathways, and perceptions of service need among professionals and people with lived experience.
	Gamblers Anonymous	Gamblers Anonymous are confidential groups comprised of people affected by gambling who provide mutual support. There is a group who meet at the wheelchair accessible Nottingham Royal Naval Association Club on Wednesday and Sunday evenings in Lenton.	The confidential nature of the group limits the ability to assess its reach and impact. The next nearest group to central Nottingham is in Derby.
	GamCare sites	GamCare do not have a dedicated site in Nottingham but can meet in person based on need. This typically occurs at NatWest branches, Nottingham University, the wellbeing hub, and Double Impact sites.	There is a lack of a consistently used and accessible space. Attendance requires awareness and transport access.
	Al-Hurraya	A charity which provides culturally sensitive empowering support to BAMER communities in Nottingham, including counselling services and weekly mutual aid meetings in Lenton (which includes gambling and gaming addictions)(41).	Meetings are also for people with drug, alcohol, gaming, and internet addiction problems. People with a gambling problem may not engage if services are combined with other stigmatised problems(42).

5 Data analysis

5.1 Prevalence estimates

5.1.1 People aged 16 and over

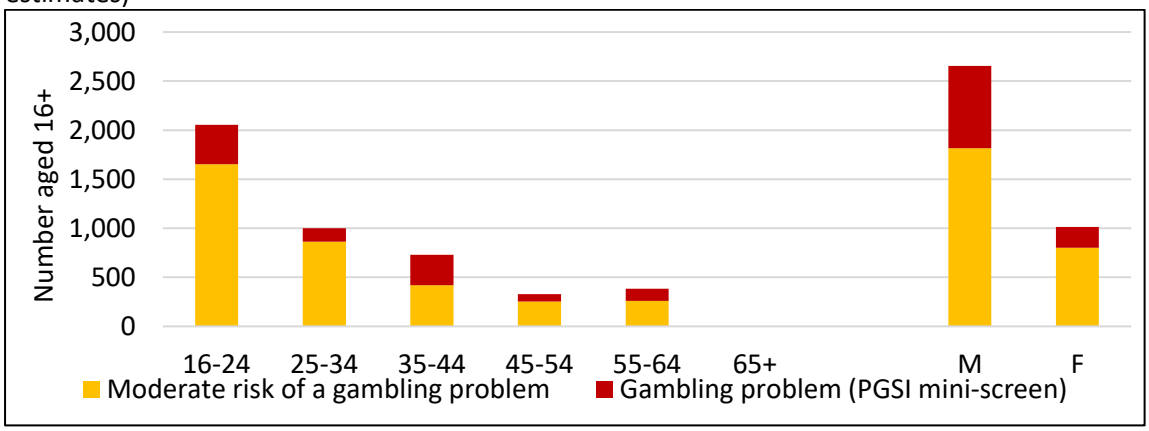
Gambling Commission end-2020 survey data was applied to ONS mid-2020 Nottingham population estimates(43) to give an estimated prevalence adjusted for the local population size and structure. Almost 40% of people were estimated to have gambled in the last 4 weeks. An estimated **1 in 250 people** aged 16 and over in Nottingham are estimated to have a gambling problem. There are an estimated 4,497 people aged 16 and over in Nottingham with a gambling problem (1,050) or at moderate risk of a gambling problem (3,447). Moderate risk means they are showing some signs of a gambling problem and/or harm, but don't meet the screening tool threshold for a gambling problem. The greatest *percentage* prevalence of gambling problems is seen for 35-44s, followed by 16-24s, whilst the greatest *number* are aged 16-24, then 35-44.

Table 3 Estimated prevalence of gambling participation and gambling problems among people age 16 and over in Nottingham (2020 national data applied to ONS mid-2020 population estimates)

Metric		M	F	16-24	25-34	35-44	45-54	55-64	65+	All 16+
People surveyed	%	47.8	52.2	10.1	14.4	16.2	18.9	16.9	23.6	100
	n	1,915	2,092	403	577	651	754	677	945	4,007
Gambling in last 4 weeks	%	44.5	39.6	31.2	39.0	45.8	48.4	46.5	39.1	39.9
	n	62,148	53,454	23,422	22,173	17,334	17,011	14,152	15,288	109,380
Online gambling in last 4 weeks[§§]	%	26.7	20.6	17.3	21.5	29.2	29.8	27.0	17.4	22.5
	n	37,290	27,772	12,987	12,238	11,044	10,463	8,217	6,808	61,757
In-person gambling in last 4 weeks[§§]	%	26.7	25.3	15.2	25.9	26.6	28.9	29.1	26.4	23.9
	n	37,290	34,109	11,448	14,770	10,067	10,158	8,867	10,318	65,628
Moderate risk of a gambling problem	%	1.3	0.6	2.2	1.5	1.1	0.7	0.9	0.0	**1.3**
	n	1,816	800	1,652	862	418	253	261	0[***]	**3,447**
Gambling problem (PGSI ≥4)[†††]	%	0.6	0.1[%%]	0.5	0.2	0.8	0.2	0.4	0.0	**0.4**
	n	838	212[%%]	402	139	311	76	122	0[***]	**1,050**

In Figure 3, we observe an increasing number of people are at risk of a gambling problem with decreasing age, and there is a similar trend for the number of people with a gambling problem.

Figure 3 Estimated absolute number of people age 16 and over in Nottingham with gambling problems and risk of gambling problems (2020 national data applied to mid-2020 population estimates)



[%%] Not officially reported in survey data. Calculated by subtracting number who are male from total age 16+

[§§] Including lotteries

[***] Unable to calculate the absolute expected number, as the surveyed percentage prevalence was rounded to 0%

[†††] The Problem Gambling Severity Index is a screening tool for a gambling problem in adults

This data has important limitations. This is national data being applied to the local population to provide an estimate, and does not directly measure local prevalence or include an estimated number of affected others. It is likely the above is an underestimate; people with gambling problems are more likely to be impulsive and inattentive which affects survey completion, surveys can underrepresent marginalised groups (such as homeless people and people not proficient with English), and people may conceal and not disclose gambling problems due to guilt and low self-esteem. There was incomplete data for people aged 65 and over, limiting our understanding for this group. Additionally, this survey is a snapshot and the prevalence could differ over time.

5.1.2 People aged 11-16

Findings from the Gambling Commission Youth Survey 2020 were applied to ONS mid-2020 Nottingham population estimates, summarised in Table 4(43). This is a survey for people aged 11-16 in school in England or Scotland. People aged 16 are featured in this survey and the survey data applied in 5.1.1. We are reporting both findings for 16-year-olds because there are differences in questions, screening tools, and invitation methods.

Table 4 Age-stratified estimates among people aged 11-16 in Nottingham (Gambling Commission Young People and Gambling Survey 2020 applied to ONS mid-2020 population estimates)

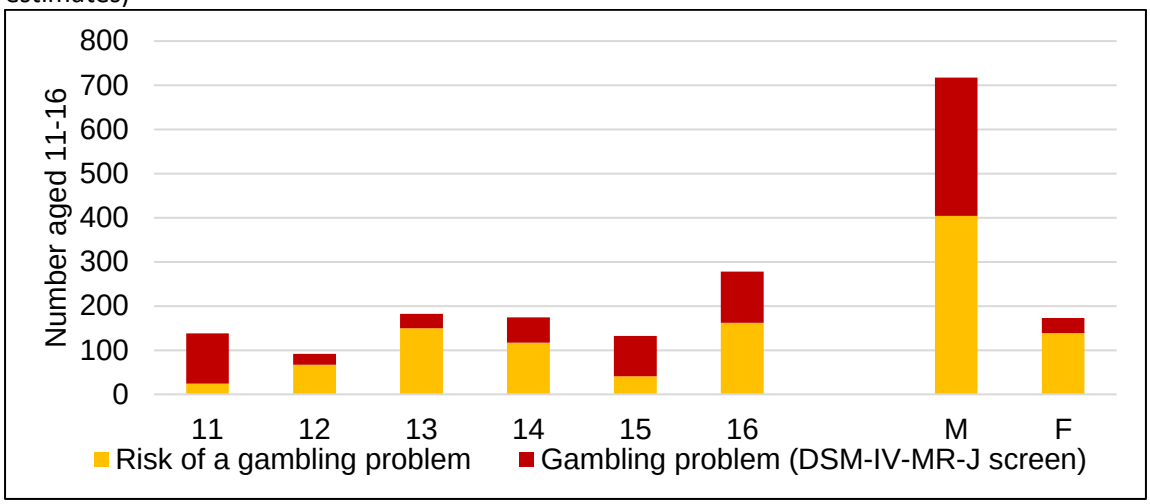
Metric			M	F	11	12	13	14	15	16	All 11-16
People surveyed		n	728	850	113	252	344	332	392	203	1645
		%	44.3	51.7	6.9	15.3	20.9	20.2	23.9	12.3	100
Gambling participation in last 7 days		%	11	6	7	9	8	9	8	14	9.1
		n	1238	633	267	345	295	326	282	465	1,979
Online gambling on websites and apps in last 7 days		%	1	1	2	0‡‡‡	2	2	1	1	1.4
		n	113	105	76	10	74	72	35	33	300
Online gambling using national lottery in last 7 days		%	1	0‡‡‡	2	0‡‡‡	2	1	1	1	1.2
		n	113	26	76	10	74	36	35	33	264
In-person gambling in last 7 days	Fruit machines	%	2	1	5	1	2	2	2	1	2.2
		n	225	105	191	38	74	72	70	33	479
	Bingo (excluding bingo hall)	%	2	1	2	0‡‡‡	2	2	2	3	1.8
		n	225	105	37	5	37	34	35	47	166
	Casino	%	2	1	2	0‡‡‡	1	2	1	4	1.7
		n	225	105	76	10	37	72	35	133	363
	Bingo hall	%	2	1	1	1	2	2	2	2	1.7
		n	225	105	38	38	74	72	70	66	359
	Betting shop	%	2	1	3	0‡‡‡	2	1	1	2	1.5
		n	225	105	114	10	74	36	35	66	336
	Gaming machines in betting shop	%	2	1	2	0‡‡‡	1	1	1	1	1
		n	225	105	76	10	37	36	35	33	227
Risk of a gambling problem (DSM-IV-MR-J screen)		%	3.6	1.3	0.6	1.7	4.1	3.2	1.2	4.9	**2.6**
		n	404	139	24	67	150	117	41	162	**561**
Gambling problem (DSM-IV-MR-J screen)		%	2.8	0.3	3.0	0.6	0.9	1.6	2.6	3.5	**2**
		n	313	34	114	25	32	57	91	116	**434**

Nearly 2000 people aged 11-16 in Nottingham are estimated to have gambled in the last 7 days, of which the greatest proportion are 16-year-olds. The most popular activities were fruit machines, casinos, bingo halls, and online websites or apps. National survey data suggests **1 in 50** 11-16-year olds are estimated to show signs of a gambling problem. When applied to the local population, we

‡‡‡ The survey reported the prevalence was between 0-0.5% but did not report the actual amount. A 0.25% estimate was applied to offer a median estimate and avoid under-reporting.

estimate there are almost 1000 (995) 11-16-year olds in Nottingham with a gambling problem (434) or at risk of a gambling problem (561). A gambling problem was most prevalent for 11- and 16-year olds, whilst risk of a gambling problem was most prevalent for 13- and 14-year olds.

Figure 4 Estimated absolute number of in-school 11-16-year-olds in Nottingham with gambling problems and risk of gambling problems (2020 national data applied to ONS mid-2020 population estimates)



There may be similar issues with survey validity and reliability, and it is difficult to directly compare findings between adolescent and adults due to differences in tools, questions, and sampling. It is possible that gambling is over-reported if adolescents perceive gambling as socially desirable (which would remain a cause for concern). Evidence demonstrates secondary school students are frequently exposed to gambling advertising, and this is associated with recent gambling activity(44). For adult and adolescent prevalence estimates, the total number of people affected is likely to be much higher, as people with a gambling problem have 6-10 affected others on average.

5.2 Demand for support

GamCare helpline and treatment data was obtained for April 2021 to March 2022 for people from a Nottingham postcode (Table 5). There were 48 individual callers making a total of 59 calls in this period, of 8,313 callers (0.6%) and 12,245 calls (0.5%) nationally. Most people were the gambling individual, men, aged 26-45, and most had some level of debt. Findings also indicate an expressed need among people aged over 65, reinforcing the likely under-reporting influence of 2020 survey data (5.1.1) and demonstrates local expressed need for support for all adult age groups.

Table 5 GamCare helpline callers and treatment clients linked to Nottingham postcodes 2021-22[§§§]

Category		Helpline callers, n (%)	Treatment clients, n (%)
Caller type	Gambling individual	39 (84.8%)	15 (75%)
	Affected other	7 (15.2%)	5 (25%)
Sex	Male	32 (68.1%)	12 (60%)
	Female	15 (31.9%)	8 (40%)
Age	<18	0 (0%)	0 (0%)
	18-25	4 (8.3%)	1 (5%)
	26-35	18 (37.5%)	10 (50%)
	36-45	17 (35.4%)	5 (25%)
	46-55	5 (10.4%)	4 (250%)

[§§§] Excludes missing data, data from those who did not consent to sharing, and unknown or invalid ('null') data. Percentages are calculated based on the presented subtotal for the respective category. See Appendix A for complete data.

	56-65	1 (2.1%)	0 (0%)
	>65	3 (6.3%)	0 (0%)
Debt	None	4 (36.4%)	5 (41.7%)
	Under £10,000	5 (45.5%)	5 (41.7%)
	At least £10,000	1 (9.1%	1 (8.3%)
	Unquantified debt	1 (9.1%)	1 (8.3%)

This is a significant mismatch between earlier prevalence estimates and those seeking support via the national helpline, notwithstanding its likely underestimation of harmful gambling prevalence. Stigma (from stigmatising language, and feelings of shame) is a significant barrier to accessing support(42), as is the perception that gambling is not harmful(10).

Figure 5 compares the gambling activity reports between helpline callers and treatment clients. The most reported activities are online gambling (the most popular are casino slots, casino table games, and sports events) and bookmakers (the most popular are fixed odds betting terminals, sports or other events, and horse races). Casino (e.g., roulette, casino gaming machine, casino other activity) and other activities (e.g., scratchcards, football pools, live events) were less commonly reported.

Figure 5 Gambling activities disclosed by GamCare helpline callers and treatment clients linked to a Nottingham City postcode (2021-22)

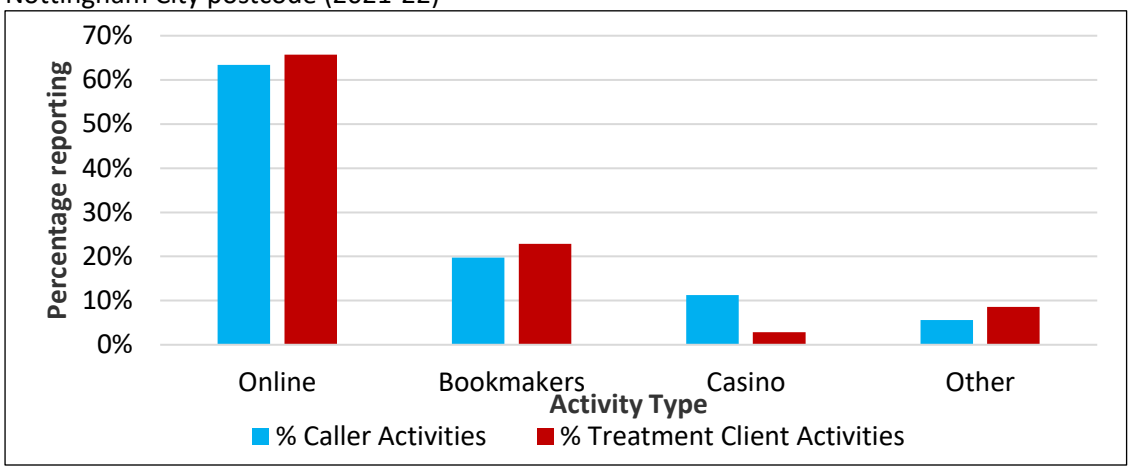
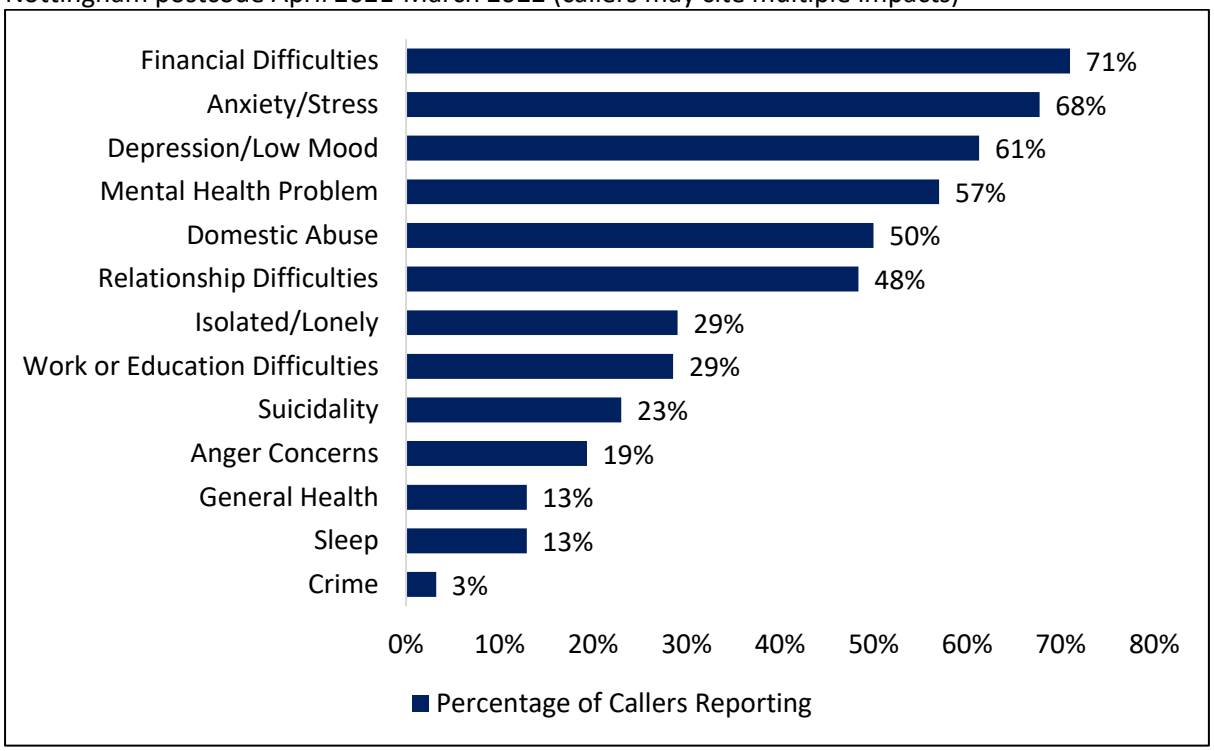


Figure 6 (on the next page) displays the types of gambling harm reported by helpline callers from a Nottingham City postcode. The percentage refers to the percentage of callers who cite this impact.

Callers typically cited multiple impacts, the most common being financial difficulties, poor mental health and emotional wellbeing, and relationship difficulties. Current or prior thoughts of suicide were reported by 23% of callers. There were also reports of domestic abuse, crime, and impacts on general (not necessarily mental) health, as well as work and education.

Figure 6 The types of gambling related harm reported by GamCare helpline callers linked to a Nottingham postcode April 2021-March 2022 (callers may cite multiple impacts)

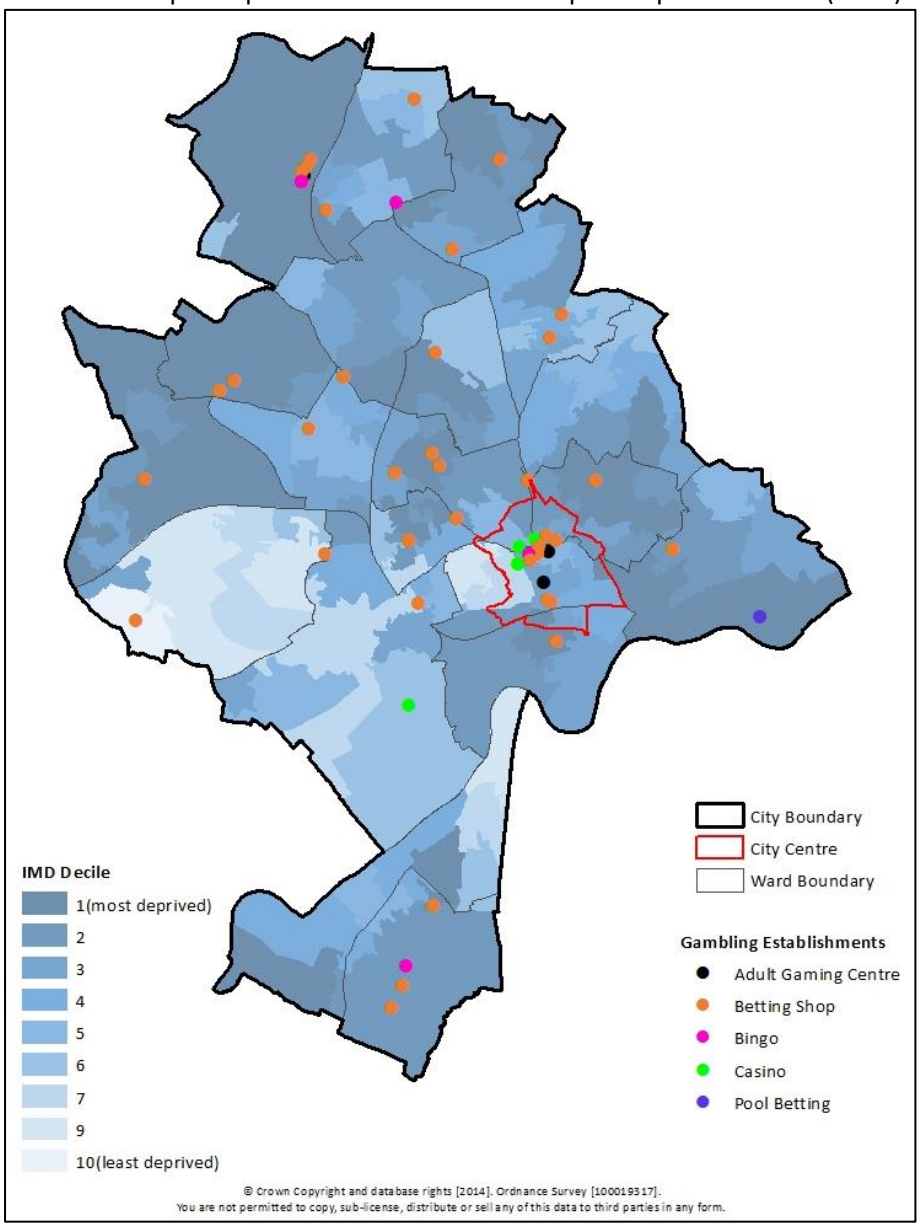


6 Mapping

6.1 Licensed gambling premises

We used Gambling Commission data, ONS mid-2020 population estimates and Index of Multiple Deprivation rankings to create two maps. Figure 7 shows the location of licensed gambling premises by type, on a background colour indicator of the level of deprivation at lower super output area level, where a darker shade indicates a more deprived area.

Figure 7 Location of licensed gambling premises by type in Nottingham City (2022) with relative Index of Multiple Deprivation decile at lower super output area level (2019)



This shows betting shops are the most numerous type of gambling premises in Nottingham, and are particularly clustered in the city centre, and then scattered throughout the city. This demonstrates that some premises are more closely packed in some parts, and there is also ease of access to a nearby premises in most areas. Deprived areas are more likely to contain a gambling premises and/or observe clustering. Only two wards have no licensed gambling premises. This is a snapshot of in-person licensed premises only, so does not capture online (remote) gambling, scratchcards, lottery and other forms not listed in the figure key.

Figure 8 Number of licensed gambling premises per 1000 total population at ward level in Nottingham City (2022)

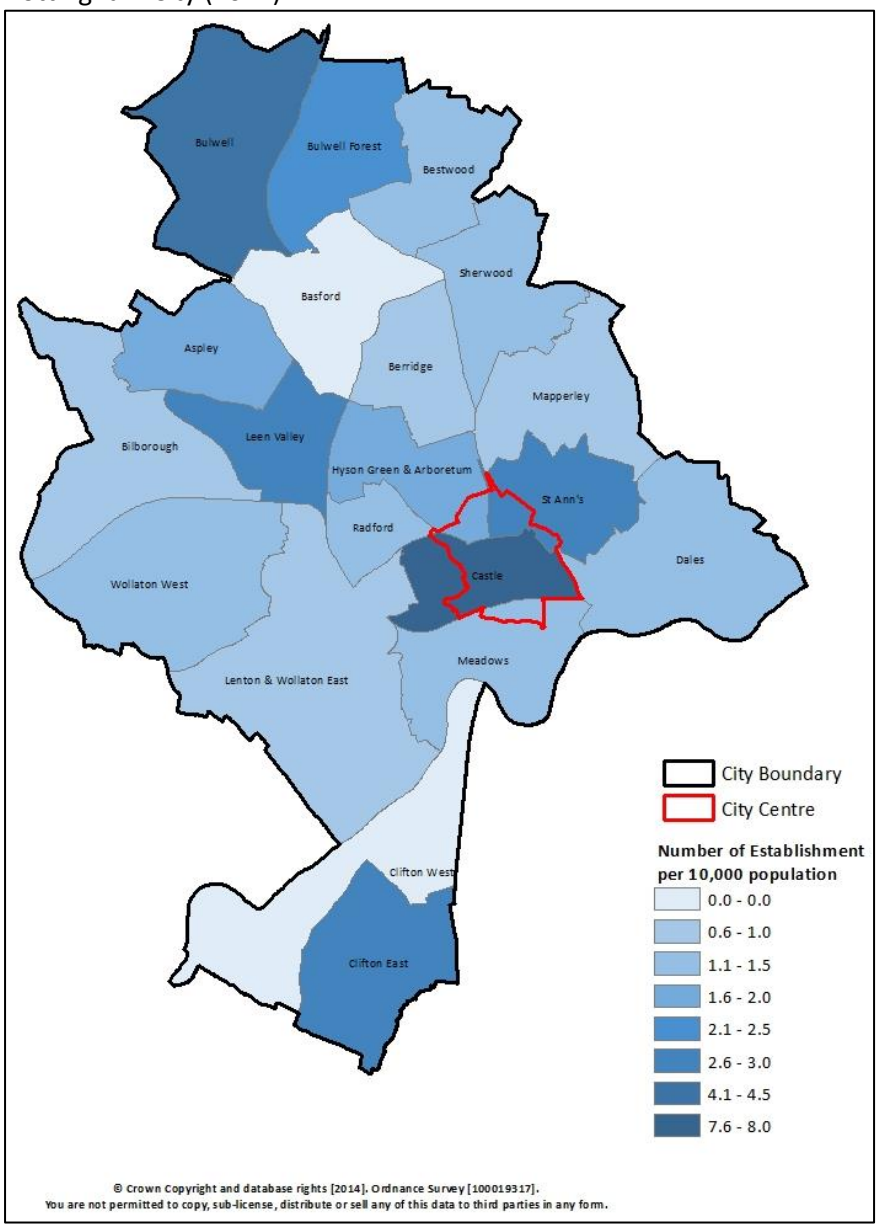


Figure 8 displays the number of gambling premises per 1000 total population at ward level. This shows that Castle, Bulwell, Clifton East and Leen Valley have the greatest density of licensed gambling premises per 10,000 people, and only Clifton West and Basford have no in-person licensed premises. When compared against Figure 7, a relationship can be observed between wards with high density of gambling premises at a population level, and areas of high deprivation.

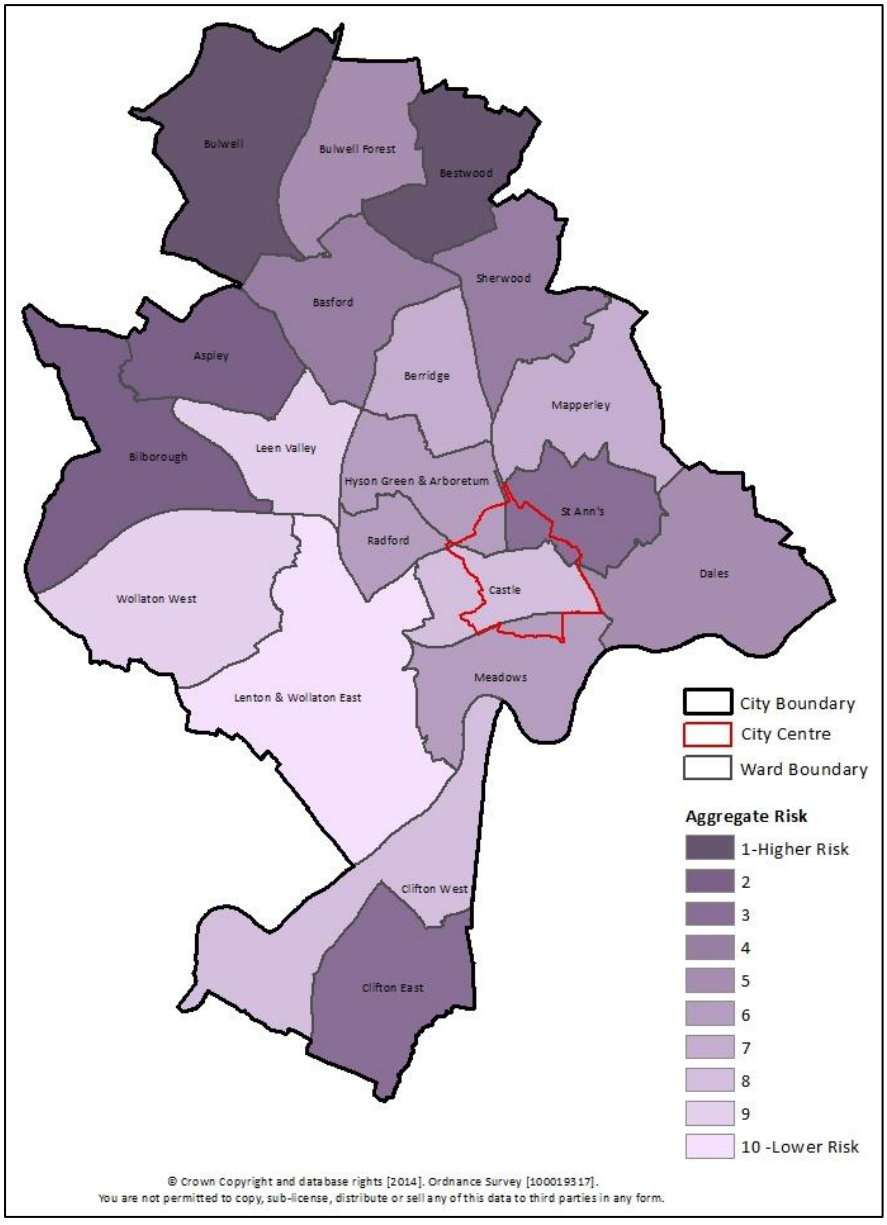
6.2 Risk profile

We sourced Nottingham ward level Office for Health Improvement and Disparities Fingertips data for risk factors for gambling problems, to estimate where risk occurs in higher levels. Proxy measures were used where direct measures were not available. Nottingham wards were ranked from 1 to 20 by prevalence, rate, or score (as applicable) from highest risk (for example, highest rate of unemployment, scoring 1) to lowest (scoring 20). Each ward's risk scores were then summed to produce an aggregate score per ward. This aggregate score was ordered from highest to lowest. The same rank value was applied to wards with an identical aggregate score. This was then used to produce a heat map to show differences in risk of a gambling problem at ward level.

The predictor variables were:

- Index of Multiple Deprivation (2019)
- Long-term unemployment rate per 1,000 working age population (2021-2022)
- Smoking at age 15 (2014, as the only available small area smoking related variable)
- Rate of alcohol attributable hospital admissions (2016-2021 broad definition; as a proxy for high alcohol consumption)
- Rate of hospital admissions for deliberate self-harm (2016-2021, as a proxy for poor mental health, as the only small area variable for this predictor)

Figure 9 Aggregate ranked risk of a gambling problem in Nottingham City by ward



Bulwell, Clifton East, Bestwood, Bilborough, Aspley and St Ann's are areas of higher aggregate risk for developing a gambling problem. There is a relationship between areas of highest risk and areas of highest premises density (Figure 8), with overlapping risk exposure and vulnerability to harm. These estimates are based on limited variables due to the small area geography being examined. Collectively, Figures 7, 8 and 9 display widespread exposure to in-person gambling with hotspots of exposure and risk.

7 Conclusion

7.1 Summary of findings

- Gambling has significant effects on the health and wellbeing of people who develop a gambling problem, as well as those close to them, their communities and society.
- People are more likely to develop a gambling problem if they are a young adult male, are unemployed, live in a deprived area, have mental ill health, high alcohol consumption, or smoke cigarettes.
- Gambling impacts on mental health, financial security, relationships, and crime, and is associated with substance use, homelessness, and suicide.
- Local services which provide information and support in Nottingham are GamCare, Gamblers Anonymous, Time Out and Al-Hurraya. An NHS Gambling Clinic is being planned in the East Midlands and is expected to open in 2023-24.
- Gambling Commission data estimates there are approximately 4,500 people aged 16 and over in Nottingham with a gambling problem or at moderate risk of a gambling problem.
- Gambling Commission data estimates approximately 1,000 school attending 11-16-year-olds in Nottingham have or are at risk of having a gambling problem.
- There were 48 callers from Nottingham to the GamCare helpline in the most recently completed financial year, of which 7 callers were affected by another person's gambling.
- The most common impacts for local helpline callers are financial difficulties, poor mental health and emotional wellbeing, and relationship strain or breakdown.
- Over one fifth of helpline callers from Nottingham report current or past suicidal thoughts.
- Licensed in-person gambling premises are scattered throughout the City but are clustered in the city centre and some deprived areas. Only two wards have no gambling premises.
- Bulwell, Clifton East, Bestwood, Bilborough, Aspley and St Ann's are identified as areas of higher aggregate risk for developing a gambling problem, with overlap seen between risk and high density of gambling premises.

7.2 Strengths

- We have used literature to describe gambling related harm and applied data to estimate the local prevalence and impact of gambling problems in Nottingham
- Data was appraised and selected based on completeness, availability, accuracy, relevance, and timeliness of sources in context.
- The Gambling Commission survey and population years offered the most complete and feasible choice of data.
- This needs assessment has identified hidden unmet needs of a problem increasingly appreciated to be of public health importance and adverse economic consequence
- We have used small area data to predict where the greatest need is likely located, and we will use this to inform our future work to prevent and address gambling related harm.

7.3 Limitations

- Prevalence of gambling participation, gambling problems and gambling harms is poorly measured due to bias, and has poor availability, particularly for online gambling. It is likely these findings underestimate the true prevalence of gambling problems and associated harms, particularly in relation to online gambling.
- The local estimates are based on national survey data, and do not directly measure the local prevalence and impact.
- Survey data was missing for some groups (see Table 3 and 4 footnotes for details) which was either managed as 0 cases or percentage prevalence (which underreports prevalence) or as a median value (which risks inaccuracy)

- Whilst the risk profile findings may be informative, they are based on aggregated data which may translate less well to individuals in these areas and assume a constant level of gambling problem prevalence within these areas. Additionally, some of the variables included are proxy measures of risk factors due to data availability limitations.
- This needs assessment does not include an analysis of local costs as it is challenging to accurately quantify prevalence of harms, though it is known there is a significant economic burden associated with gambling harm.

7.4 Interpretation of findings

- Gambling is a normalised and commonly practiced activity, and some people experience profound long-lasting harmful impacts.
- Gambling is a public health problem and a range of local impacts has been demonstrated.
- The exact local prevalence of gambling related harm is not known, but we have estimated that thousands of local people are likely to have unreported gambling problems, and each person with a gambling problem has 6-10 affected others on average.
- There are far fewer people in Nottingham reaching out to existing support services than the estimated number of people with a gambling problem or otherwise affected by gambling.
- Support services exist but appear not be readily accessed. The reasons for these have not been identified explicitly, but may relate to feelings of shame, guilty, stigma, and concealment which is commonly cited in published literature.
- Gambling premises are easy to access in Nottingham and tend to be clustered in deprived areas and in the city centre. This does not capture wider exposure including advertising (on social media, TV, billboards, in sports) and participation (online, scratchcards, lottery, gambling with peers such as cards and betting pools, and in-game gambling)

7.5 Recommendations

- Gambling related harm prevention should be included as a **continued public health work stream** in Nottingham. It is recommended to embed this in mental health and suicide prevention work.
- We need to **understand the local situation** in more detail, to obtain with greater clarity, the number of people affected by gambling, and hear the voices of those with lived experience. This will be applied in the planning and evaluation of local public health activities.
- A **gambling related harm working group** will be established, to bring together public health, NHS, social care, education, licensing, academia, charities, and other stakeholders, to prevent gambling related harm in a joined-up way.
- We will **develop a strategy** to prevent and reduce gambling related harm in Nottingham. This will be developed in collaboration with stakeholders including people with lived experience. It will offer a practical, realistic, multi-faceted plan which is relevant to the local population to prevent harm for people with gambling problems and for affected others. This will consider how to address and influence related structural issues and licensing policy.
- We should **consider options for local interventions** to address gambling related harm. There is a broad range of potential evidence based public health interventions that may be considered, including raising awareness, active signposting, increasing access to and visibility of support services, reducing stigma, and primary prevention activities.
- Gambling intersects with a range of well-established public health issues. We will **explore opportunities to embed gambling related harm detection and prevention** in existing support services for other related public health problems in Nottingham.
- We will **learn from and work with others** including subject experts, people with lived experience, and public health teams experienced in gambling related harm prevention, to maximise impact, share findings, and develop and apply the evidence base in practice.

8 References

1. Gambling Commission. Problem gambling vs gambling-related harms [Internet]. 2020. Available from: https://www.gamblingcommission.gov.uk/statistics-and-research/publication/problem-gambling-vs-gambling-related-harms

2. Public Health England. Quantitative analysis of gambling involvement and gambling-related harms among the general population in England [Internet]. 2021. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1020883/Gambling_evidence_review_quantitative_report.pdf

3. Public Health England. Gambling-related harms evidence review: the economic and social cost of harms. 2021.

4. Public Health England. Risk factors for gambling and harmful gambling: an umbrella review. 2021.

5. Swindon Borough Council. Gambling Harms in Swindon - Rapid Health Needs Assessment. 2018.

6. Lincolnshire County Council. Public health approach to gambling in Lincolnshire: Health needs assessment. Lincoln; 2022.

7. Association of Directors of Public Health for Yorkshire and Humber. Public Health Framework for Gambling Related Harm Reduction. 2019.

8. Vandenberg B, Livingstone C, Carter A, O'Brien K. Gambling and homelessness: A systematic review and meta-analysis of prevalence. Addictive behaviors. 2022 Feb 1;125:107151.

9. Bristow LA, Afifi TO, Salmon S, Katz LY. Risky Gambling Behaviors: Associations with Mental Health and a History of Adverse Childhood Experiences (ACEs). J Gambl Stud. 2022 Sep 1;38(3):699–716.

10. Gunstone B, Gosschalk K, Zabicka E, Sullivan-Drage C. Annual GB Treatment and Support Survey 2021 On behalf of GambleAware. 2019.

11. Sharman S, Roberts A, Bowden-Jones H, Strang J. Gambling and COVID-19: Initial Findings from a UK Sample. Int J Ment Health Addict. 2022 Oct 1;20(5):2743.

12. Fluharty M, Paul E, Fancourt D. Predictors and patterns of gambling behaviour across the COVID-19 lockdown: Findings from a UK cohort study. J Affect Disord [Internet]. 2022 Feb 1 [cited 2022 Nov 2];298(Part A):1–8. Available from: https://pubmed.ncbi.nlm.nih.gov/34744027/

13. Hing N, Smith M, Rockloff M, Thorne H, Russell AMT, Dowling NA, et al. How structural changes in online gambling are shaping the contemporary experiences and behaviours of online gamblers: an interview study. BMC Public Health [Internet]. 2022 Dec 1 [cited 2022 Nov 2];22(1):1–16. Available from: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-14019-6

14. Public Health England. Harms associated with gambling: An abbreviated systematic review [Internet]. 2021. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1020652/Gambling-evidence-review_harms-report.pdf

15. Gambling Commission. Virtual currencies, eSports and social casino gaming - position paper. 2017.

16. Yokomitsu K, Irie T, Shinkawa H, Tanaka M. Characteristics of Gamers who Purchase Loot Box: a Systematic Literature Review. Curr Addict Rep [Internet]. 2021 Dec 1 [cited 2022 Nov 2];8(4):481–93. Available from: https://pubmed.ncbi.nlm.nih.gov/34258146/

17. Saunders JB, Hao W, Long J, King DL, Mann K, Fauth-Bühler M, et al. Gaming disorder: Its delineation as an important condition for diagnosis, management, and prevention. J Behav Addict [Internet]. 2017 [cited 2022 Nov 2];6(3):271–9. Available from: https://pubmed.ncbi.nlm.nih.gov/28816494/

18. Delfabbro P, King DL, Williams J. The psychology of cryptocurrency trading: Risk and protective factors. J Behav Addict [Internet]. 2021 Jun 1 [cited 2022 Nov 7];10(2):201–7. Available from: https://pubmed.ncbi.nlm.nih.gov/34152998/

19. Johnson B, Co S, Sun T, Lim CCW, Stjepanović D, Leung J, et al. Cryptocurrency trading and its associations with gambling and mental health: A scoping review. Addictive behaviors [Internet]. 2023 Jan [cited 2022 Nov 2];136:107504. Available from: https://pubmed.ncbi.nlm.nih.gov/36174424/

20. Gambling With Lives. Gambling: Suicidal ideation, attempts and completed suicides. 2020.

21. Marionneau V, Egerer M, Raisamo S. Frameworks of gambling harms: a comparative review and synthesis. Addiction Research & Theory [Internet]. 2022 [cited 2022 Nov 2]; Available from: https://www.tandfonline.com/doi/abs/10.1080/16066359.2022.2113071

22. Vandenberg B, Livingstone C, Carter A, O'Brien K. Gambling and homelessness in older adults: a qualitative investigation. Addiction [Internet]. 2022 Jun 1 [cited 2022 Nov 2];117(6):1702–12. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/add.15756

23. Rockloff M, Browne M, Russell AMT, Hing N, Armstrong T, Greer N. Legacy gambling harms: What are they and how long do they last? J Behav Addict. 2022 Oct 12;

24. Ferland F, Blanchette-Martin N, Côté M, Tremblay J, Kairouz S, Nadeau L, et al. Do the Consequences Experienced by the People in the Life of a Problem Gambler Differ Based on the Nature of Their Relationship with the Gambler? J Gambl Stud. 2022 Sep 1;38(3):1075–92.

25. Azemi F, Bytyqi V. Understanding the Phenomenology of Gambling in the United Kingdom: A Qualitative Study on the Experiences of Gamblers' Families (Pre-Print). Res Sq. 2022;

26. Banks J, Waters J. An examination of the interrelationship between disordered gambling and intimate partner violence. Int Rev Vict. 2022 Jan 18;0(0).

27. Suomi A, Lucas N, Dowling N, Delfabbro P. Parental problem gambling and child wellbeing: Systematic review and synthesis of evidence. Addictive Behaviors. 2022 Mar 1;126.

28. Noyes J, Bowden-Jones H, Gaskell M. The Case for a Statutory Gambling Levy. 2022.

29. Bowden-Jones H, Hook RW, Grant JE, Ioannidis K, Corazza O, Fineberg NA, et al. Gambling disorder in the United Kingdom: key research priorities and the urgent need for independent research funding. Lancet Psychiatry. 2022 Apr 1;9(4):321–9.

30. Gambling Health Alliance. Taking a public health approach to gambling: Response to gambling act review. 2020.

31. Gambling Commission. Guidance to licensing authorities [Internet]. 2021. Available from: https://www.gamblingcommission.gov.uk/guidance/guidance-to-licensing-authorities

32. GambleAware. About us [Internet]. 2021. Available from: https://www.begambleaware.org/about-us

33. van Schalkwyk MCI, Maani N, McKee M, Thomas S, Knai C, Petticrew M. "When the Fun Stops, Stop": An analysis of the provenance, framing and evidence of a 'responsible gambling' campaign. PLoS One. 2021 Aug 1;16(8).

34. GamCare. About Us [Internet]. 2021. Available from: https://www.gamcare.org.uk/about-us/

35. Central and North West London NHS Foundation Trust. National Problem Gambling Clinic [Internet]. 2022. Available from: https://www.cnwl.nhs.uk/services/mental-health-services/addictions-and-substance-misuse/national-problem-gambling-clinic

36. Leeds and York Partnership NHS Foundation Trust. Northern Gambling Service [Internet]. 2022. Available from: https://www.leedsandyorkpft.nhs.uk/our-services/northern-gambling-service/referrals-contacting-us/

37. Southern Health NHS Foundation Trust. Southern Gambling Service [Internet]. 2022. Available from: https://www.southernhealth.nhs.uk/our-services/a-z-list-of-services/gambling-service

38. NHS Inclusion. West Midlands Gambling Harm Clinic [Internet]. 2022. Available from: https://www.inclusion.org/our-services/addiction-services/west-midlands-gambling-harms-clinic/

39. Gordon Moody. Gambling Therapy [Internet]. 2022. Available from: https://www.gamblingtherapy.org/

40. Gordon Moody. Gordon Moody [Internet]. 2022. Available from: https://gordonmoody.org.uk/

41. al Hurraya. Al Hurraya [Internet]. 2022. Available from: https://www.al-hurraya.org/

42. Pliakas T, Stangl A, Siapka M. Building Knowledge of Stigma Related to Gambling and Gambling Harms in Great Britain: A scoping review of the literature. 2022.

43. Gambling Commission. Statistics and Research Collections [Internet]. 2022. Available from: https://www.gamblingcommission.gov.uk/about-us/statistics-and-research#group

44. Noble N, Freund M, Hill D, White V, Leigh L, Lambkin D, et al. Exposure to gambling promotions and gambling behaviours in Australian secondary school students. Addictive Behaviors Reports. 2022 Dec 1;16:100439.

9 Appendix

9.1 Literature search

A structured search was conducted using Medline, Embase, PsycINFO, TripPro, NHS Knowledge and Library Hub, Google, Google Scholar and GambleAware.

Search terms used:[****]

GAMBLING
GAMBLING DISORDER
FAMILY
FRIENDS
RISK FACTORS
SOCIETY
COMMUNITIES
UNITED KINGDOM
"gambling addiction"
"problem gambling"
"compulsive gambling"
"prob* gambl*"
"compulsive gambl*"
"gambling related harm*"
"gambling harm*"
Risk*
Risk factor*
Impact*
Society
Communit*
Famil*
Prevention
Intervention*
Support
Effect*
"harm reduction"
"harm prevention"
"United Kingdom"

The following sources were searched using the term 'gambling' with all returning items explored:

- Nottingham City Council website
- Nottinghamshire Healthcare NHS Foundation Trust website

The following grey literature sources were explored without use of search terms:

- GamCare website
- Gambling Commission website

[****] Combination applied to determine most appropriate results. Keywords vary depending on indexing of database.

9.2 GamCare helpline and treatment complete data

Data presented in Table 5 excluded null data, which consisted of missing or invalid data entries. The proportion of data entries coded as null varied by data category. Null data was particularly prevalent for debt data.

The complete data is tabulated below. The percentage value for Table 6 is calculated using a denominator which includes null data.

Table 6 GamCare helpline callers and treatment clients linked to Nottingham postcodes 2021-22 – complete data

Category		Helpline callers, n (%)	Treatment clients, n (%)
Caller type	Gambling individual	39 (81.3%)	15 (75%)
	Affected other	7 (14.6%)	5 (25%)
	NULL	5 (10.4%)	0 (0%)
Sex	Male	32 (66.7%)	12 (60%)
	Female	15 (31.3%)	8 (40%)
	NULL	1 (2.1%)	0 (0%)
Age	<18	0 (0%)	0 (0%)
	18-25	4 (8.3%)	1 (5%)
	26-35	18 (37.5%)	10 (50%)
	36-45	17 (35.4%)	5 (25%)
	46-55	5 (10.4%)	4 (250%)
	56-65	1 (2.1%)	0 (0%)
	>65	3 (6.3%)	0 (0%)
	NULL	0 (0%)	0 (0%)
Debt	None	4 (8.3%)	5 (25%)
	Under £10,000	5 (10.4%)	5 (25%)
	At least £10,000	1 (2.1%)	1 (5%)
	Unquantified debt	1 (2.1%)	1 (5%)
	NULL	37 (77.1%)	8 (40%)