

# Exploring area-based vulnerability to gambling-related harm: Who is vulnerable? Findings from a quick scoping review

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# Executive Summary

## Background

In Great Britain, there is a changing gambling policy and regulatory environment which has increased focus on risk. Local area risk assessments have been introduced into the Gambling Commission's updated Licensing Conditions and Codes of Practice with understanding local risk, and taking appropriate steps to mitigate risk, highlighted as a key concern. Policy is also becoming more focused on understanding and mitigating gambling-related harm more broadly, rather than focusing on problem gambling alone. Finally, in the Gambling Act 2005, children and vulnerable people were singled out for special regulatory attention. However, who is vulnerable, why and under what circumstances, has been subject to little investigation.

## Aims of this study

This study aimed to explore who may be vulnerable to gambling-related harm and to assess the strength of the evidence base supporting this.

## Methods

Semi-structured interviews were held with a range of stakeholders (academics, policy makers, industry, treatment providers and legal professionals) to explore understanding of terms like gambling-related harm and who they believed may be vulnerable to harm. From these interviews, a list of those deemed more likely to be vulnerable to harm was created. Quick scoping reviews of research literature then examined the evidence base for each group/characteristic mentioned.

## Results

There was a broad consensus among stakeholders that gambling-related harm meant adverse consequences arising from someone's gambling engagement that could affect the individual, their family, friends, broader social network or community. It was felt that harm could be short-lived or experienced over a longer time frame and that you did not have to be a "problem

gambler” to experience harm. However, the experience of harm was viewed as subjective, varying based on the circumstances of the individual. This makes predicting who will experience harm challenging. As such, a probabilistic approach was recommended, thinking about who is **more likely** to experience harm given what we know about them.

Many stakeholders felt that anyone could be vulnerable to gambling-related harm and that vulnerability was also subjective as it depended on a range of other circumstances. However, considering who may be more susceptible to harm was seen as useful: youth, students, those with mental health problems, substance use/misuse issues, learning difficulties, certain ethnic groups, migrants, homeless, those with constrained economic circumstances or living in deprived areas, prisoners, older people, problem gamblers, those with personality/cognitive impairments and women were identified as those potentially vulnerable to harm.

Looking at the research literature, there is good evidence to support youth, those with substance abuse/misuse/excessive alcohol consumption, poorer mental health, those living in deprived areas, from certain ethnic groups, those with low IQs, personality/cognitive impairments and those who are unemployed as potentially being more vulnerable to harm.

There is a smaller but emerging evidence base suggesting that homeless people, those experiencing financial difficulties and debt, prisoners and younger males with learning difficulties/disabilities may also be vulnerable groups.

Patterns of evidence relating to students, educational qualifications and low income individuals were inconsistent, though the latter may serve as a proxy for financial difficulties. Evidence relating to migrants was sparse, though the rationale for viewing this group as vulnerable was plausible.

## Implications

When thinking about who may be vulnerable to gambling-related harm, a probabilistic approach needs to be taken. The personal circumstances of each individual are not known. Therefore, broader generalisations have to be made. The groups listed above do not mean that everyone with those characteristics **will** experience harm rather than based on these characteristics there is an increased risk that they **may** experience harm. This is the central tenet of a risk-based approach to policy and regulation.

However, we should not think about groups of vulnerable people as silos. There are likely to be multiple and complex risk factors for harm, with some people having multiple characteristics of

potential vulnerability. Other public health areas focus on multiple risk factors; gambling should do the same.

## Limitations

This review is constrained by existing evidence. A solid evidential base looking at broader gambling-related harms has yet to be developed. Therefore, evidence from the scoping review mainly relies on studies looking at problem and at-risk gambling. This is not the same as gambling-related harm. Therefore some groups or themes may have been missed. The aim was to assess the evidence base that currently exists and we are constrained by this, though given the paucity of evidence in some areas we are confident we included most relevant British-based studies in our review.

# 1 Introduction

## Overview of project

This project aims to explore area-based vulnerability to gambling-related harm. Gambling behaviour and who experiences harm from gambling varies among different types of people. This includes characteristics relating to the person, such as their age, gender or intellectual functioning, those relating to personal circumstances, such as employment or income, those relating to where people live, such as deprived areas, and the political landscape in which gambling is provided and regulated.

Gambling premises in Great Britain are unequally distributed. They tend to be found in more urban areas, town centre locations or around coastal areas. Gambling venues also cluster in certain areas within towns and cities. However, there are significant local variations in the distribution of gambling premises and it should be considered as a local issue.

The focus on vulnerable persons and harm comes directly from the licensing objectives set out in the Gambling Act, 2005 (the Act), which states that children and vulnerable people should be protected from being harmed or exploited by gambling. To date, there has been little investigation about who may be vulnerable or why. Information about the characteristics of who is more or less vulnerable to gambling-related harm has only been considered in very general terms using evidence from large-scale national surveys, such as the British Gambling Prevalence Survey (BGPS). How vulnerability and harm may vary at a local level has not been explored. This project aims to help fill this gap. The aims of this project are as follows:

- to explore and document the range of characteristics that suggest someone is vulnerable to harm from gambling,
- to investigate how these characteristics can be measured at a local level, using a range of different data, and
- to develop a local risk index model showing areas where those who may be more vulnerable to harm are located.

Working with Westminster and Manchester City Councils, we are exploring models of area-based vulnerability to gambling-related harm and aim to map our results visually, so that areas of potential risk are highlighted. Our intention is that these results become a tool for both Local/Licensing Authorities (LA) and industry when making decisions about the location of gambling venues, helping them to think through the specific needs of local communities and enabling them to work together to develop plans to protect vulnerable people.



## Policy context

The Gambling Act changed the way in which gambling was licensed and regulated in Great Britain. These changes included handing over responsibility for the licensing of gambling premises to LAs. To date, LAs remain responsible for issuing licenses for gambling premises, in accordance with the terms set by the Act. This includes the following three licensing objectives:

- (a) preventing gambling from being a source of crime or disorder, being associated with crime or disorder or being used to support crime,
- (b) ensuring that gambling is conducted in a fair and open way, and
- (c) protecting children and other vulnerable persons from being harmed or exploited by gambling.

The advice contained within the Act is that LAs should 'aim to permit' premise licenses so long as applications are reasonably consistent with these three licensing objectives.

In the years since the Act was implemented, there have been some noticeable shifts in how gambling premises are distributed. A major change is that many gambling premises have moved from back street to high street locations and there has been rising concern about how some premises are 'clustering' in certain areas (Harman, 2011).

Recent research has shown that whilst there is some evidence of clustering, the patterns are highly localised and warrant further investigation (Astbury & Thurstain-Goodwin, 2015). More recently, industry regulator the Gambling Commission (GC) has stated that gambling industry operators should (from April 2016) conduct local risk assessments for premises to demonstrate that they understand local issues and to show what measures they propose to introduce to mitigate against this risk (See Box 1).

**Box 1:** The new provisions for local risk assessment in the LCCP, 2015

**Social responsibility code provision 10.1.1**

**Assessing local risk**

**All non-remote casino, adult gaming centre, bingo, family entertainment centre, betting and remote betting intermediary (trading room only) licences, except non-remote general betting (limited) and betting intermediary licences.**

***This provision comes into force on 6 April 2016***

1. Licensees must assess the local risks to the licensing objectives posed by the provisions of gambling facilities at each of their premises, and have policies, procedures and control measures to mitigate those risks. IN making risk assessments, licenses must take into account relevant matters identified in the licensing authority's statement of licensing policy.
2. Licensees must review (and update as necessary) their local risk assessments:
  - a. to take into account of significant changes in local circumstances, including those identified in a licensing authority's statement of licensing policy;
  - b. when there are significant changes at a licensee's premises that may affect their mitigation of local risks;
  - c. when applying for a variation of a premises licence; and
  - d. in any case, undertake a local risk assessment when applying for a new premises licence.

The introduction of local risk assessments into the Licensing Conditions and Codes of Practice (LCCP) reflects a broader policy movement which encourages LAs, the regulator and the industry to work in partnership to address local issues and concerns. This form of partnership working was enshrined within the Local Government Association's and the Association of British Bookmakers' Framework for Local Partnerships on Betting Shops.

This framework recognised there are local concerns about betting shops and their impact. It drew on practice from alcohol licensing and local partnerships between the alcohol trade and communities to suggest a range of ways that industry, LAs, community safety teams, and the police could work together to address concerns. Suggestions included setting up local Betwatch schemes, as has been done in Ealing, or creating other bespoke solutions to deal with issues, like the responsible gambling partnership set up in Medway.

This movement towards increased partnership working is arguably underpinned by the GC's adoption of a risk-based approach to regulation, ensuring that resources are spent where they can be most effective and are needed most. This risk-based approach was emphasised in a recent speech to stakeholders where the GC stated that they wanted to better understand risk and have a proportionate response to risk, which included looking at future risks and thinking about risk in a probabilistic way:

*“Risk is not necessarily related to an event that has happened. Risk is related to the probability of an event happening and the likely impact of that event – in this case on licensing objectives” (GC, 2015)*

With the change in responsibility for premises licensing introduced by the Act, all LAs were required to create a Statement of Licensing Policy. This sets out the principles that LAs propose to use in exercising their licensing functions. The statement has to be commensurate with the objectives of the Act but does allow some flexibility for LAs to set out the general principles they will draw on when reviewing applications, particularly relating to issues of location. All premise applications received should then be treated in accordance with these principles and this policy statement. Statements of Licensing Policy are due to be reviewed and refined in 2015 and updated to take effect from January 2016. Given the new focus on localised-risk assessment and partnership working in broader policy and regulatory circles, it is likely that revised Statements of Licensing Policy will incorporate these tenets.

A final important policy change is the devolvement of public health to LAs. The Health and Social Care Act, 2012 gave responsibility for health improvement to LAs. This gave each LA a new duty to take appropriate steps to improve the health of people in its area. Under this provision, new Directors of Public Health were appointed and units created to support the new public health functions of LAs. The intention was for LAs to have freedom in how they chose to improve their population’s health and it was hoped that this would create a new focus on improving health and reducing inequalities.

These changes are important since gambling is often considered a public health issue. The Responsible Gambling Strategy Board (RGSB), the body responsible for providing advice to the GC and government about gambling, advocates that gambling is considered within a public health framework. Other jurisdictions, like New Zealand, have gone further and defined gambling a public health consideration with policy responsibility residing within its Department of Health.

In Great Britain, policy responsibility for gambling continues to be held by the Department for Culture, Media and Sport. However, devolvement of responsibility for public health to LAs may mean that an increasing health focus is given to local gambling policy. This is most likely to occur in relation to the third licensing objective of the Act, which states that vulnerable people should be protected from harm. Who ‘vulnerable people’ are or the ways in which they may be vulnerable is not defined by the Act, though the GC states that for regulatory purposes this is likely to include:

*“people who gamble more than they want to, people who gamble beyond their means and people who may not be able to make informed or balanced decisions about*

*gambling due to, for example, mental health, a learning disability or substance misuse relating to alcohol or drugs.” (GC, 2012)*

There is clear overlap with people of interest to public health policy makers and practitioners, namely those with mental health problems, other health issues and substance misuse problems. As the public health function within LAs matures, it is likely that gambling issues and protection of the vulnerable may increasingly fall within the remit of public health specialists. However, this broader policy shift has not occurred to date and it is noticeable that the GC’s consultation document on LAs revised Statements of Licensing Policy did not include any reference to public health.

It is against this policy and regulatory background that this project has been commissioned. Our aim is to explore what area-based vulnerability to harm might look like and support these policy changes. This will be done using Westminster and Manchester City Councils as case studies to demonstrate what a local area risk profile might look like when those vulnerable to gambling harm are identified, mapped and results displayed visually.

Should this project be successful, it is hoped that the methods and outputs could be used by other LAs and built into local area profiles, risk assessments and the up-coming revisions to Statements of Licensing Policy.

## Phase 1 report

This report focuses on the first of our research objectives: to explore and document the range of characteristics that suggest someone may be vulnerable to harm. The intention is that this report helps to highlight the range of issues that LAs may wish to consider when developing their own local area profiles and is a useful tool for industry operators when thinking about local area risk assessment.

To create a localised risk index of who is vulnerable to harm, we first need to understand and document who and what ‘vulnerable’ means in this context.<sup>1</sup> Other terms used in the Act and

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<sup>1</sup> This report primarily focuses on characteristics of vulnerability that are more likely to be visible at a local area level and thus can be built into local area profiles. The field of gambling studies has been dominated by contributions from psychologists and much of the research evidence available to date focuses on individual characteristics such as impulsivity, cognitive distortions, erroneous processing of information. Whilst these features are likely to contribute to vulnerability, it is broadly accepted that personal circumstances, social and economic contexts, the broader environment of the individual and how these interact is of paramount importance. Given the broader aim of this project to help develop local area risk indices, primary attention is given to personal and contextual features of vulnerability as these are features which LAs and industry alike can realistically use in local area risk profiles.

by policy makers, such as harm from gambling or gambling-related harm are also considered. The aim of this first project phase was to assess how vulnerable people and gambling harms are, or should be, defined and to briefly review existing evidence base relating to vulnerable people. To do this, two different methods were used:

- first, using data collected from interviews with key stakeholders, different understanding of terms like gambling-related harm and vulnerable people were explored. Results from these interviews are presented in Chapter 2,
- second, drawing on findings from stakeholder interviews, a list of characteristics of those believed to be vulnerable to harm from gambling was developed. Each characteristic was then reviewed against existing research evidence to assess the strength of the association. Results are presented in Chapter 3.

Finally, key themes from both are presented in Chapter 4. These themes will inform the development of our subsequent local area risk models.

## Overview of methodology

As previously noted, this report uses two methodologies to examine the relationship between gambling and vulnerable persons. These are briefly described here but more detail is provided in Appendices B-D.

The first method generated insight from semi-structured consultation interviews with key stakeholders. Stakeholders included academics, policy makers, industry, treatment providers and legal professionals. This broad range of stakeholder types was included to ensure that views were gathered from those with a range of different expertise, backgrounds and viewpoints. For example, the academic group included those from a variety of different academic disciplines. The industry group included those from various different sectors and treatment providers with different approaches to treatment and varying levels of experience were interviewed. Ensuring that a broad spectrum of stakeholders were included in the interviews meant we could better understand the diversity of opinions and also assess points of consensus. Semi-structured interviews collected stakeholders' views about the following:

- understanding and definition of gambling-related harm,
- exploring who might be vulnerable to gambling-related harm, why and how has this may have changed, and
- the kinds of evidence that are used when making gambling policy/licensing decisions.

Interviews were conducted either one to one or at a specially convened workshop (for more detail about the interviews and a copy of topic guide used, see Appendices C & D).

The interviews specifically explored who each stakeholder felt might be vulnerable to harm and why. There was a dual purpose for these interviews. The first purpose was to explore how key stakeholders involved in the gambling industry and/or in creating or responding to policy and/or working with those with problems view some of the key aspects of the Gambling Act. The basis on which these views were held was also explored. For example, this could be through first-hand experience, through knowledge gained from research or policy literature or simply be a personally held belief (shaped through a variety of influences). Understanding these views is important as it sheds light on how policy is being understood, and reflected, in everyday practice by important actors who are responsible for shaping how the public interacts with gambling more generally. This makes stakeholders' ideas and views of vulnerability highly salient in better understanding current ideas about vulnerability and harm in everyday life.

The second purpose was to assess how broadly held beliefs about groups who may be vulnerable compare with empirical evidence on the topic. Received wisdom can sometimes be erroneous and it is important to explore differences between the perception of vulnerability, however broadly held, and current evidence. To do this, a list was generated of people who were viewed as vulnerable or characteristics of groups which may make them vulnerable to harm. The next step was to take this list and conduct a quick scoping review (QSR) for each group/characteristic to assess what research evidence currently says about this relationship.

QSRs are a methodology recommended by the Government Social Research Office. They are used to quickly determine the range of studies that are available on a specific topic and produce a broad 'map' of the existing literature. As they are conducted under short time frames, they are typically constrained by (a) search strategy (using fewer bibliographic sources, availability of sources, typically focusing on those that are available electronically) and/or (b) question, focusing on a limited range of issues. All of these constraints are applicable to this study; see Appendix D for further details.

The remainder of this report documents findings from both of these stages, focusing on broad themes and definitions first (Chapter 2) followed by evidence from the QSRs relating to vulnerable people (Chapter 3). Throughout these chapters, quotes from stakeholders illustrate key points. The group to which each stakeholder belongs is given at the end of the quote. The following codes are used: T = Treatment stakeholders; I = Industry stakeholders; A = Academic stakeholders; P = Policy stakeholders; L = Legal stakeholders.<sup>2</sup>

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<sup>2</sup> For some quotes, the stakeholder group is not given as this could potentially identify the contributing interviewee.

## 2 Defining terms

This chapter provides an overview of how different terms often used in gambling policy are defined. Contextual information relating to current policy is given alongside views from each stakeholders and, where appropriate, related research evidence.

### Gambling-related harm

#### Policy perspectives

Gambling-related harm is a term that is being increasingly used in British gambling policy circles. The Gambling Act enshrined harm as a key policy concept when it stated that the third licensing objective was for children and other vulnerable persons to be protected from harm or exploitation by gambling. However, the Act did not define what harm meant or specify the types of harms that were related to gambling. This can only be inferred through other definitions within the Act. For example, the Act defines a responsible authority (with respect to premises) as one:

*“which has functions by virtue of an enactment in respect of minimising or preventing the risk of pollution of the environment or of harm to human health in an area in which the premises are wholly or partly situated”*

or, an authorised person as:

*“an officer of an authority other than a licensing authority is an authorised person for a purpose relating to premises if— (a) the authority has statutory functions, for an area in which the premises are wholly or partly situated, in relation to minimising or preventing the risk of pollution of the environment or of harm to human health.”*

Here, provisions are made that Responsible Authorities can, under certain circumstances, include others bodies or individuals who have formal responsibility for minimising or preventing the risk of harm to human health. This is the only place in the Act where harm is qualified in any way. Notably, the focus is on harm to the health of the public.

The Gambling Review Report (known as the Budd Report), which preceded the Act, also considered harm and grappled with the problem of the extent to which you restrict the liberties of the many to prevent harm to others. In response to this central dilemma, the Budd report noted the widely held view that:

*“the state should respect the right of the individual to behave as he or she wishes, provided there is no harm to others. That view (the “liberal view”) is held with varying degrees of robustness by the population of this country (and by members of the Review Body).” (DCMS, 2001)*

The difficulty with this statement is that, at the time of writing, there was limited evidence about the range of harms that ‘others’ experience from gambling. Yet again, harm was not defined, though throughout the report there was reference to harms to the individual (psychological and financial harms of excessive engagement), harms to families and harms to communities. This uncertainty, and lack of evidence base, was explicitly acknowledged in the Budd Report which stated that:

*“Since we are uncertain about the effects on individuals and on society as a whole of changes in regulation we suggest fairly cautious moves in the first place, with scope for further deregulation in due course if the results seem acceptable. We also recognise that some localities might choose to limit the number and scale of gambling establishments because of their effects, in the widest sense, on the local community. That seems to us to be a legitimate task of local government.” (DCMS, 2001)*

In short, in major policy reviews and legislation, the concept of harm is important. It is given primary importance in the Gambling Act and is a key tenet of the liberal approach to balancing protection and individual freedoms. However, what harm means, to whom and at what level behaviours and consequences are considered harmful was not articulated.

Since then, a number of attempts both nationally and internationally have been made to address this gap. The term gambling-related harm seems to have developed traction internationally from the mid 2000’s, though the broader concept of harm and attempts to develop indicators of harm has antecedents in the mid 1990’s (see Box 2). This movement towards focusing on harm seems to have developed alongside recognition that gambling behaviour should be considered in its broader context, and that it should be considered from a public health perspective (Korn & Shaffer, 1999; Korn, 2000). In academic circles, one of the earliest uses of the term was by Korn (2000) who argued that expanding gambling opportunities in Canada should be viewed through a public health lens so to balance the potential risks and benefits.

In Britain, the term gambling-related harm was adopted by the Responsible Gambling Strategy Board (RGSB) in 2009. The RGSB is the body responsible for providing strategic policy advice about gambling to the regulator (the GC) and the Department of Culture, Media and Sport. In their initial strategy, the RGSB made gambling-related harm as key concept stating that:



*“We aim to support international, leading research about the treatment for and prevention of gambling-related harm. By ‘gambling-related harm’ we mean the adverse financial, personal and social consequences to players, their families and wider social networks that can be caused by uncontrolled gambling.” (RGSB, 2009)*

The decision to adopt this term was based on the recognition that harm extends beyond the individual gambler but also that research strategy should consider:

*“the shorter-term harms brought about by short-term bouts of intensive gambling, which may require a different preventative approach...the Board has therefore agreed to use a broader definition of ‘gambling-related harm’ in setting its priorities.” (RGSB, 2009)*

This was, to our knowledge, the first time that gambling-related harm was defined in a British policy context and the first time this concept had been highlighted as a focus for research strategy. In 2010, the RGSB expanded this point, stating that there was a pressing need to recognise gambling-related harm as a public health issue:

*“Public health discourse differs from clinical/psychological approaches in its emphasis on the social, economic, and cultural determinants of good health and ill-health. As such, it seeks to avoid a pathologising model of the sick individual acting and experiencing harm in isolation.” (RGSB, 2010)*

Since then, the term gambling-related harm has gained increasing traction in British research and policy. Its increasing importance can be seen within the GC’s revised Licensing Conditions and Codes of Practice (LCCP), where industry are now required to:

*“make an annual financial contribution to one or more organisation(s) which between them research into the prevention and treatment of gambling-related harm, develop harm prevention approaches and identify and fund treatment to those harmed by gambling” (GC, 2015)*

In previous versions of the LCCP (2013) provisions largely referred to preventing and treating problem gamblers (in fact, in the 2013 LCCP, the term ‘harm’ did not appear at all). The new emphasis on gambling-related harm in the revised 2015 LCCP is symptomatic of a broader step change in policy and regulatory circles towards considering wider harms from gambling rather than problem individuals.

**Box 2:** “Harmful gambling” taken from the Australian Productivity Commission 1999: harm is defined by whether someone met any of the following conditions in the last year:

- gambling has made life a lot less enjoyable and feel they cannot control gambling, although they want to;
- have money arguments about gambling;
- borrow to gamble while not paying borrowings back;
- lose time from work or study due to gambling;
- feel guilty about gambling;
- borrow from loan sharks to gamble;
- fraudulently write cheques to gamble;
- believe they have a current problem;
- always spend more than they can afford;
- have often suffered from depression due to gambling;
- have often experienced adverse effects on their job due to gambling;
- have changed jobs in the last year due to gambling;
- have been sacked in the last year due to gambling;
- not had enough time to look after family’s interests due to gambling;
- have become bankrupt due to gambling;
- have experienced a relationship breakdown due to gambling;
- have obtained money illegally to gamble;
- have been in trouble with police over gambling;
- have appeared in court on a gambling-related matter;
- have seriously thought about suicide because of gambling;
- have wanted help for gambling problems; or
- have tried to get help for gambling problems in the last year.

## Stakeholder perspectives

Given the emerging policy importance of gambling-related harm as a concept, all stakeholders interviewed were asked a range of questions to explore what this term meant to them, if and how they felt it differed from problem gambling and to articulate the range of harms that they felt could be associated with gambling. These findings are summarised below.

### Defining harm

There was broad consistency between stakeholders in defining gambling-related harm and a number of themes were evident. The first theme was the belief that harm that could be experienced by individuals but also those around them, their families, friends and communities. Harm was viewed as having a “*ripple down*” [I] effect

that extends out from the individual “*like a spider’s web*” [T].

There was recognition among some that gambling-related harm had been purposively positioned as a concept to move away from conceptions of the ‘ill’ individual towards thinking about the broader impacts gambling can have:

*“it’s the importance of moving debate on from seeing harm as a systemic problem that might be classed as an addiction, put down to that person, whereas there may be something about gambling, the product or the environment, that causes people not to play properly or causes them to be harmed.”* [P]

A second theme was the view that harm related to spending too much time or too much money gambling which had an adverse effect on both the individual and/or others. In the words of one

stakeholder: *“it’s about a negative consequence experience that can be caused or exacerbated by gambling”* [P]. Related to this, some noted that this made quantifying and operationalising definitions of harm difficult because what counted as ‘too much’ was dependent on the circumstances of the individual. For these stakeholders, gambling-related harm was viewed as subjective:

*“it’s the difficulty of knowing the context of people’s lives in terms of qualifying harm; how do you know what harm looks like for an individual?”* [I]

A final theme was that gambling-related harm was thought to be a broad-based measure. It was typically viewed as including problem and pathological gamblers but extended much further beyond narrow and clinical concepts of problem gambling. For some this meant looking at the harms that could be experienced occasionally and sporadically, for others this meant viewing gambling-related harm as a concept broader than problematic gambling:

*“anyone who spent too much last night could consider themselves to be harmed by gambling, though that doesn’t make them a serious problem gambler or someone who can’t ever gamble again. Harm is a very broad brush stroke term...You can have different degrees of harm.”* [I]

Harm was described as being *“more scattergun”* [P] and not necessarily progressive.

In general, the perception was that harm extends beyond the individual to families and communities in terms of a range of negative consequences that can arise from gambling. It was also seen as nebulous concept where harm could be sporadic, temporary, severe and subjective.

### *Who experiences harm*

As noted above, there was a broad consensus that both the individual and those in their broader social network could experience harm; the belief was that you did not have to be a gambler yourself to experience harm from gambling. The individual gambler was highlighted by most as someone who experiences harm. However, family, partners and children were also cited as those who could also experience harm as a consequence of other people’s gambling behaviour, especially when it came to financial harm and debts. This was seen as something that rarely just affects the individual, *“harm echoes through and affects the family”* [L]. It was, however, felt that the gambler themselves might not be aware of the harm their gambling caused to others. As one stakeholder argued, a gambler may not realise that their *“partner is at*

home trying to pay the bills, wondering where the money has gone” [P] or what the negative consequences are for their children because:

*“children are affected by the instability and uncertainty it creates. Not knowing what parent is doing, not knowing if they are going to be present.” [A]*

Under these circumstances, it was thought that harm may be more acutely felt by the extended family than the gambler themselves:

*“harm may be more felt by those connected to the gambler as the gambler may be in denial.. and doesn't realise the harm, the anxiety to other family members... the family members are not getting any benefits from gambling, unlike the gambler.” [I]*

Harm was also seen to extend more broadly than this to include friends, work colleagues, employers and so on. It was seen as something that can *“ripple out and affect the whole social network”* [A]. One stakeholder conceptualised this as a drawstring effect:

*“lots of people are tied to each other through invisible bonds of money, and if you start reducing money, you soon see where these bonds lie - it shows up tensions in social relations.” [A]*

### *Range of harms experienced*

Stakeholders felt that a broad range of harms could be associated with gambling. In some cases these were viewed as interconnected between the individual gambler and their families. For the individual, the main harms mentioned related to money, to financial harms and debt, which were followed by general harms about putting gambling before other responsibilities.

Describing the range of harms, one stakeholder thought that it was about:

*“time spent on gambling that could have been used on other things, loss of activities, loss of variation of people's lives,[gambling] funnels it away from people's lives. But the main harm is financial, it's to do with money.” [A]*

Others described what they thought were likely psychological harms and impact on wellbeing, describing health-related harms, like anxiety or depression, and relationship problems and breakdown. As one stakeholder described *“first you think about money and finances but there's an awful lot more than just money”* [T]. This was supported by others who argued that:

*“you can still experience harm even if you can afford it... it doesn't necessarily have to be about spending beyond your means.” [I]*

The notion of gambling taking you away from other things, the activities of daily life and social experiences, was a form of harm mentioned by some stakeholders. In some cases, this view was generated through personal experience and observation. One stakeholder described their conversations with gamblers in venues:

*“they [the gambler] said they should be spending more time and money with their families. Their social lives constrict and they seemed less able to make positive social connections”.*

Stakeholders highlighted a number of harms that they felt could affect individuals, their families or both. These tended to relate to familial arguments, relationship breakdown and family strain on resources, relating to either money, time or both. Some thought that harms existed on a spectrum, for example ranging from relationship stress and arguments to relationship breakdown, and felt that most harms could be conceptualised along a spectrum of severe to less severe.

Among others affected, anxiety, stress, uncertainty, instability and neglect were key themes mentioned as potential harms which could have an impact on the health and wellbeing of these people. These were noted alongside practical harms such as how to pay bills and manage finances. One stakeholder said they viewed harm in two ways: intrinsic and extrinsic. Extrinsic harms could be things that are more visible, like relationship breakdowns or evictions, whereas intrinsic harms, like anxiety, instability or neglect, are more hidden and the gambler themselves may not be aware of these harms upon other people.

Finally, some stakeholders argued that there could be broader harms at a societal level, typically mentioning harms relating to anti-social behaviour and/or crime. The feeling that gambling could create a more general sense of worry and anxiety among communities was mentioned by one stakeholder [A], though they also stated this was difficult to pin down.

### *Gambling-related harm and problem gambling: the same or different?*

Stakeholders were asked to consider what differences, if any, there were between gambling-related harm and problem gambling. The two concepts were described by most as being quite different, this was in respect to the breadth of impacts considered, who might experience harms and recognition that harm could be episodic and short-term. On the whole stakeholders felt that gambling-related harm was a broader concept than problem gambling and that whilst problem gamblers may be experiencing harm, those experiencing harm were not always problem gamblers:

*“problem gambling relates specifically to the individual doing the gambling whereas gambling-harm can be looked at as one step removed, that is the problem gambler puts the money into the machine but the harm is caused to his family” [T]*

*“problem gambling has a narrow focus on individuals as isolated units. Ideas about problem gambling don't take as much interest in the amount of money or time spent, they tend to look more at personality or irrational cognitions. Conceptions about harm look at more abstract things that are involved in gambling itself. It's to do with the product and the environment in which it goes on.” [A]*

Others, however, felt that the concepts were rather similar and that the term gambling-related harm was problem gambling in a different guise, *“an umbrella statement that politicians like to use” [T]*. It was argued that focus on gambling-related harm had not reframed policy thinking to look beyond the individual, as focus on the individual has carried through into the harm-reduction literature:

*“it's just a temporary construction around which a group of scholars have consolidated a body of work trying to replace the idea of problem gambling with gambling-related harm.” [A]*

Some (though not all) industry stakeholders concurred and felt that gambling-related harm was a proxy for problem gambling. Interestingly, these stakeholders described problem gambling as spending too much time or money gambling, which is different from clinical definitions and has similarities to the definition of gambling-related harm given by other stakeholders. This group did, however, believe that *“the individual is the problem gambler, but the harm starts to draw in other people in” [I]*. Here, even though this group expressed problem gambling as a preferred term, their understanding of what problem gambling meant and its relationship to harm broadly reflected the views of other stakeholders.

## Evidence

As noted earlier, the concept of gambling-related harm emerged in international academic and policy literature from the turn of the 21<sup>st</sup> century onwards. However, there has been a lack of research understanding, exploring and measuring harms more broadly and the area is still in its infancy. A review of literature containing the terms gambling and harm (in the abstract or title) returned over 100 articles. However, further review showed that for roughly half, the focus of the article was not harm itself but rather the term was used as a proxy for problem gambling or to describe implications for policy around gambling-related harm.

Of the 43 articles considered for further review, there was a broad range of approaches as to how harm was defined, conceptualised and operationalised. These can be summarised into four themes:

- studies which talked about harm but offer no definition of what harm means (11 articles),
- studies which talked about similar concepts but either did not use the terms gambling related-harm or define harms more specifically (7 articles),
- studies which conflated broader harm, with harm from problem gambling and other related concepts (11 articles), and
- studies which attempted to define harm and/or offer some ways of investigating it (16 articles).

Those studies which did not define harm, tended to talk about harm in a general sense or say that certain characteristics were associated with gambling-related harms, without defining or conceptualising these harms further. This ranged from noting associations between proximity to gambling venues and expenditure levels or characteristics of certain groups and saying that this was associated with harm (e.g., Young & Tyler, 2008).

The second group of articles tended to be either qualitative reports or review articles. The single qualitative study reviewed, rightly, let participants describe their experiences without enforcing rigid concepts and definitions upon analysis. The study was of the impact of gambling among 'heavy gamblers' and highlighted themes around the impact upon children, ranging from neglect to lack of funds to feed them or provide necessities, taking time away from family life, and getting angry or stressed with children, especially when worried about money. As well as financial impacts, other consequences such as having to move home or deal with bailiffs were cited. Marital breakdown was also a key theme (Dyall, 2007). These impacts are similar to those mentioned in stakeholder interviews as gambling-related harms. Other articles talked about similar issues but referred to these as the negative consequences of gambling (Cantinotti & Ladouceur, 2008) or as unhealthy gambling (Dickson-Gillespie et al, 2008), adverse consequences (Fogarty & Young, 2008) or as community harms (Wall et al, 2010).

The third group of articles tended to focus on harms associated with problem gambling under the rubric of gambling-related harm. In some articles the term gambling-related harm was used interchangeably with gambling-related problems (Peller et al, 2008). In others, the term harm was used but what was measured were problem gambling scores or evidence relating to consequences of problem gambling (Markham, Young & Doran, 2002; Raisamo et al, 2014; Delfabbro & LeCouteur, 2004; Brown & Raeburn, 2001). Others recognised that gambling harm is poorly described and conflate harms and problems (Rintoul et al, 2013).

The final group of articles included those where an attempt to define or explain harm was made, some of which also offered ways to measure/explore this empirically. Although there were a greater number of articles in this group than the others, this was because some came from New Zealand, which includes a national definition of harm in its primary legislation, or from a group of researchers in Canada who attempted to identify harm using the Problem Gambling Severity Index.<sup>3</sup> The Canadian research team then applied this approach across a number of articles.

Within these articles, explanations of harm included the following:

*“Adolescents may experience a variety of harms in different social contexts in which the gambling is occurring, and thus, more attention should be given on assessment of all potential harms of gambling thoroughly, including less serious harms and other dimensions that are not typically part of the clinical based screens.”* (Raisamo et al, 2013)

*“Harm or distress of any kind caused or exacerbated by a person’s gambling, and includes personal, social or economic harm suffered by the person, their spouse, partner, family, whānau and wider community, or in their workplace or society at large”* (This is the national definition used in New Zealand’s 2003 Gambling Act and is used in a number of articles. See Dowdon, 2007; Walton, 2012; Tu et al, 2014; Livingstone, 2006).

*“Harmful consequences are not limited to pathological or compulsive gamblers but may also affect recreational gamblers on occasions. As such, harm minimization represents an alternative to abstinence-oriented policies. It focuses on reducing the adverse consequences among all gamblers including those who cannot cease their activity at the present time, and is compatible with an eventual goal of abstention.”* (Blaszczynski, 2003)

*“Gambling results in a range of harms, not just for individuals but for families, communities and local economies.”* (Hancock et al, 2008)

Harm is *“that which is experienced by the individual and caused to others such as family, friends, employers and others in the community.”* (Fearnley et al, 2013)

Gambling-related harm is *“any significant negative consequences which result from gambling in excess of what the consumer can afford in terms of either time or money.”* (Blaszczynski et al, 2014)

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<sup>3</sup> The Problem Gambling Severity Index is one of many survey instruments designed to measure problem gambling.



*“Harm from gambling can occur at multiple levels including the individual, family, community and society.” (Currie et al, 2009)*

With the exception of quotes from Blaszczyński, all definitions include the concept that harm extends beyond the gambler and can affect others, their families and communities. This echoes findings from stakeholder interviews. The first quote from Blaszczyński (2003) supports the notion that people who are not problem gamblers can experience harm, whereas the concept of harm extending beyond the individual is arguably implicit within the phrase ‘*any significant negative consequences*’ though overall, this definition is rather more focused on the individual than the others (Blaszczyński et al, 2014).

Finally, even though harm was more broadly defined in these studies, many relied on analysing responses to problem gambling screens to identify harm, thereby reducing the conception of harm to a narrow basis. Only a few studies from New Zealand and Finland were identified which attempted to articulate a broader range of harms and capture information about this. For example, the New Zealand Health Survey captured information about whether there had been arguments in the household about the time and/or money spent gambling and whether someone in the household had to go without something they needed because of gambling or whether bills weren't being paid because of gambling. (Tu et al, 2014; Raisamo et al, 2013).

## Summary

Among stakeholders and within the academic literature there is a broad consensus that gambling-related harms can be experienced by individuals, their families and their communities. There is general recognition that individuals can experience harm and not be problem gamblers and that some harms can be temporary and episodic. There is a recognition that the experience of harm is subjective and based on the personal circumstances of those involved.

It is also clear that the term gambling-related harm is often conflated with problem gambling or at-risk gambling and research evidence rarely reflects harm in the broadest sense of the definition. There is a lack of clarity around terminology and some people describe harm in other ways, such as adverse or negative consequences, or in the case of some stakeholders as problem gambling but describing something more akin to broader harm when probed.

The term gambling-related harm is relatively new in policy and academic circles, which partially explains the limited evidence base assessing it. Difficulties with definition are likely to exacerbate this, especially with the over-reliance of gambling research on quantitative

methods, which prefer less nuanced terms that can be measured or can be backed up with clinical assessment.

The implication for this study is that when looking at evidence relating to vulnerable persons and harm, the literature inevitably focuses on problem and at-risk gambling as a proxy for this. As such, the quick scoping reviews presented in Chapter 3 focus more on evidence relating to ‘problem’ individuals rather than broader harms or harm to others. This is because the evidence base is skewed towards this focus, and is a noted limitation of this study. However, given stakeholders views that people experiencing problems with gambling would almost certainly be experiencing harm, there is some confidence that this literature is appropriate to understanding one aspect of harm, even if it is in a more limited sense.

## Vulnerable people

### Policy perspectives

As with the concept of harm, the protection of vulnerable persons was given primary importance in the Gambling Act through the third licensing objective. However, as noted earlier, vulnerable people were not defined by the Act, neither was there further consideration of how those vulnerable to harm from gambling may be the same or different from vulnerable people in British society generally. In broader British policy circles, the term ‘vulnerable person’ has a distinct meaning, as set out by the Safeguarding Vulnerable Groups Act, 2006 (see Box 3).

However, looking at the Budd Report and clarifications issued by the GC, it is clear that the third licensing objective is intended to extend beyond the rather narrow meaning of the Safeguarding Act and is concerned with protecting those vulnerable to gambling-related harm.

**Box 3:** Definition of vulnerable persons from the Safeguarding Vulnerable Groups Act, 2006

A person is a vulnerable adult if he has attained the age of 18 and—

- (a) he is in residential accommodation,
- (b) he is in sheltered housing,
- (c) he receives domiciliary care,
- (d) he receives any form of health care,
- (e) he is detained in lawful custody,
- (f) he is by virtue of an order of a court under supervision by a person exercising functions for the purposes of Part 1 of the Criminal Justice and Court Services Act 2000 (c. 43),
- (g) he receives a welfare service of a prescribed description,
- (h) he receives any service or participates in any activity provided specifically for persons who fall within subsection (9),
- (i) payments are made to him (or to another on his behalf) in pursuance of arrangements under section 57 of the Health and Social Care Act 2001 (c. 15), or
- (j) he requires assistance in the conduct of his own affairs.

Protection of the vulnerable, alongside children, was a key recommendation in the Budd Report which argued that protection of the vulnerable was key reason why regulation was needed:

*“it is a legitimate role of regulation to limit the risk of problem gambling even if this means restricting the freedom of those who can gamble harmlessly.”* (DCMS, 2001)

In discussing who was ‘vulnerable’, the Budd Report stated that there was a need to:

*“identify the vulnerable or the conditions which are particularly likely to give rise to problem gambling in those who participate.”* (DCMS, 2001)

Here vulnerability was clearly defined in accordance with gambling practice and behaviours. Although the GC has not defined who they consider to be ‘vulnerable persons’, they do state that this is likely to include:

*“people who gamble more than they want to, people who gamble beyond their means, and people who may not be able to make informed or balanced decisions about gambling due to a mental impairment, alcohol or drugs.”* (GC, 2015)

This clarification includes some of the groups identified within the Budd Report as those likely to be vulnerable, such as young people, those under the influence of drugs/alcohol and those with co-existing mental health conditions. It also implicitly includes other groups highlighted by the Budd Report as potentially vulnerable under the rubric of ‘gambling beyond their means’. The Budd Report identified low income groups and those most disadvantaged and marginalised by economic change as potentially vulnerable. What the GC’s clarification excludes are social determinants of vulnerability beyond economic means based on personal or social situations, such as being an offender or having a family background of problem gambling, which were highlighted in the Budd Report.

In 2012, the RGSB went further, stressing the need for research to better identify vulnerable groups. This strategy was explicit, vulnerable persons or groups meant those most at risk of gambling-related harm. They highlighted that some groups were already ‘known’ listing correlates for problem and at-risk gambling from the BGPS and other surveys.<sup>4</sup> Homeless people, ex-service forces personnel, offenders and itinerant groups were also identified as potentially vulnerable, echoing the broader considerations made in the Budd Report.

## Stakeholder perspectives

### *Individuals and groups*

Stakeholders were asked who they thought were vulnerable people generally and who might be vulnerable to gambling-related harm. There was broad agreement between the two concepts, as one stakeholder argued *“if you are vulnerable generally then you are vulnerable to harm from gambling”* (A). However, the characteristics of those who might be vulnerable to gambling-related harm were more broad ranging than those given for vulnerable people generally. Some stakeholders thought that anyone could be vulnerable to harm from gambling that *“everyone is potentially vulnerable at some points”* (L). However, these stakeholders also recognised the need to narrow the definition:

*“anyone is a potential candidate - but I can see that you've got to try to identify other common characteristics”* (L)

*“everyone could be vulnerable as a starting point... but I acknowledge that some people and groups who may be more vulnerable, I would want to break it into 1) individual and 2) groups and communities”* (A)

*“anyone could be vulnerable but it's who is more likely to fall foul of that vulnerability.”* (L)

Focusing on who was likely to be vulnerable to gambling-related harm, three thematic groups emerged from stakeholder interviews. These were:

- 1) Those with constrained social and economic circumstances. This tended to include those living in deprived areas, those who were unemployed, those with low income but also

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<sup>4</sup> The ‘known’ vulnerable groups as articulated by the RGSB were those aged 16-24 (both men and women); Asian and Black British; those from socially deprived areas; the unemployed; heavily engaged gamblers; those with Anti-Social Personality Disorder; adolescents (especially those with Attention Deficit Hyperactivity Disorder).

those experiencing social isolation or more uncertain social circumstances, for example homeless populations, offenders and migrants.

- 2) Those with certain demographic characteristics. This included the young but also other characteristics such as gender and ethnicity – though it was broadly accepted that these characteristics may be serving as a proxy for other mechanisms. For example, older people were mentioned though the mechanisms articulated around this related to social isolation, or the experience of common life events, such as bereavement and/or having low fixed incomes.
- 3) Those who may have poorer judgement. This ranged from people with certain mental health conditions, those with learning disabilities or low educational attainment, to those with temporary impairment or longer term difficulties because of substance use/misuse.

It was clear from interviews that stakeholders believed that these three themes intersected with one another and were not mutually exclusive.

#### *Dynamic nature of vulnerability*

The broad characteristics of vulnerability articulated by stakeholders included personal, individual and social and economic determinants. It was argued that who may be vulnerable may change over time, as a reflection of broader social, economic and political changes. Some stakeholders argued that the economic crisis and the impact of austerity politics may impact on the propensity of some groups to be vulnerable to harm:

*“austerity and income inequality may be exacerbating inequalities in gambling and who is at risk, and therefore who is vulnerable....perhaps we may be seeing more of a social gradient than we were seeing previously...[this is] symptomatic of relationship of behaviour to broader economic climate.” (A)*

Others believed that vulnerability may be related to social changes in the nature and composition of inner city areas:

*“inner cities used to be white working class, gambling is an inner city activity. Now those who live in inner cities has changed... the changing profile of who lives there makes them more vulnerable as it's a function of the inner city life,” [I]*

This theme of flux and movement within populations was also mentioned by some treatment providers who noted that the nationality of migrants presenting for treatment tended to mirror different waves of migration patterns from Europe.

For others, it was related to broader cultural changes in modern society or the way that gambling is now presented and situated:

*“youth may be becoming more vulnerable because they want more instant gratification because they live in a fast paced world - this may make them more vulnerable” (I)*

*“there’s greater exposure to gambling as a society, so some people are now exposed to gambling who weren’t before.” [L]*

The normative shift in policy, positioning gambling as a leisure activity was, for some stakeholders, felt to be associated with certain groups becoming more vulnerable that they were previously: women and older people were the key groups mentioned here.

There was a broad consensus that those vulnerable to gambling-related harm may change as reflection of broader social processes. Therefore the characteristics of who is vulnerable to harm should be viewed as dynamic and open to change. This point was explicitly recognised by the RGSB in their 2012 strategy which concluded that the *“evidence needed to be kept under constant review”*.

## Summary

Vulnerable people have been singled out for special regulatory attention and protection. Although not defined in the Gambling Act, it is clear from the Budd Report and subsequent policy advice that the third licensing objective refers to protecting those vulnerable to gambling-related harm, which is qualitatively different from protecting ‘vulnerable persons’ as defined by other legislation.

There is also a belief held among stakeholders that who may be vulnerable could be related to broader social changes and processes. This implies that a local perspective to understanding the risk of harm is vitally important, as these social processes and social change may be very variable at the local level. For example, certain areas may attract new kinds of people (for example migrants), changing the profile of who may be vulnerable to harm in that area.

Most stakeholders clearly articulated the kinds of characteristics of people or groups that they felt could be vulnerable to harm. However, some noted that anyone could experience harm and, as such, a probabilistic approach was needed focusing on those more likely to experience harm or who were more susceptible to problems. This has resonance with the previous discussion about the subjective nature of harm. Here the view was that not all individuals with certain characteristics **will** experience harm, but rather **may have elevated risk** of harm, and

thus be more vulnerable. This accords with recent policy thinking from the GC, and is a key consideration for this project.

The remainder of this report therefore looks at who **may be** more vulnerable, focusing on those groups highlighted by stakeholders, and the strength of the evidence supporting this.

## Approaches to evidence

Finally, before reviewing evidence, it is important to discuss some key themes relating to evidence and how it is viewed and used in gambling policy and practice.

### Stakeholder perspectives

Issues relating to the use of evidence in gambling policy and decision making were discussed with stakeholders. Topics discussed related to the ways in which evidence was used, how it related to the terms of the Act, and what ‘counted’ as evidence.

First, some stakeholders felt that the standards of evidence generally applied to gambling policy were much more conservative, and in their opinion, unobtainable comparative to other policy areas:

*“sometimes I think that people demand standards of evidence that are almost impossible to generate because they are looking for causal connections and relationships and it's really, really hard to demonstrate. Even in medicine, it's really hard to demonstrate that A actually causes B...” (A)*

*“The holy grail is to change the discourse from 'prove it, prove it' which the smoking industry used in the 1950s to precautionary principles and trying to put in place the measures to avert risk.” (L)*

For some, this situation was exacerbated by the terms of the Act and the tension between the ‘Aim to Permit’<sup>5</sup> clause and the licensing principles.

*“the standards for gambling are even higher than for alcohol as the licensing objectives in the Gambling Act specifically refer to gambling. If you compare this with alcohol*

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<sup>5</sup> In the Gambling Act, 2005, LAs are instructed that they should aim to permit gambling in so far as doing so is reasonably consistent with the three licensing objectives.

*licensing, that just talks about crime and disorder generally, it doesn't relate that to the sale of alcohol, just says crime and disorder.” (L)*

It was felt that this created conditions where the burden of proof moved away from precautionary principles and towards a situation whereby causal proof must be demonstrated:

*“asserting the existence of vulnerable people in the area - but so what? It’s not presenting evidence that these people are being harmed - a district judge wouldn’t accept it.” (L)*

A second related theme was that what counts as evidence varies based on what you believe is trying to be proved. If you are trying to prove that opening a new gambling premise in an area will cause harm (a deterministic view of causal processes that x causes y) then the standards of evidence required are much more stringent than if you are focusing on the risk of harm (taking a more generative view of causal processes, that x may cause y depending on a, b or c circumstances).

Both views were held among stakeholders. Those who tended towards the former view, referred to this as ‘direct’ evidence and said it was very rare that this kind of evidence was ever presented. Some also noted it was very difficult to generate. Among this group, some academic studies were viewed with caution, described as ‘*too general*’ or useful in terms of “*shining a light on issues*” but unless this could be backed up with causal proof for a specific case, as anecdotal. This view was illustrated discussing the potential relationships between pay day loan shops and gambling premises and the concern that some may use money obtained on credit to gamble:

*“simply the presence and possibility of the link is anecdotal. Unless you can provide that there is a clear pattern that this is happening on a regular basis.” (L)*

These stakeholders were also more sceptical about the use of evidence generated from other jurisdictions, arguing that so many circumstances are different that this is not particularly helpful. For this group, evidence tended to count as something that was based on data, clear fact or fact-driven and subject to objective analysis.

Other stakeholders, who typically held a less deterministic view of causal process, discussed the use of broader sources of evidence, such as general research studies, academic papers and both quantitative and qualitative insight. Large gaps in evidence base were explicitly acknowledged and therefore some felt that inference and insight should be drawn together from a range of sources and methods. For example, one stakeholder spoke about the use of evidence from other jurisdictions:



*"[this] does have a place in the evidence base, but it depends what it is... You need to fine tune any piece of research depending on what it is. There will be some things that are across the board that you can transpose into Britain but when you get into the detail of particular areas and jurisdictions and regulatory regimes and the people who live and work there you probably do need to tailor a little to take into account cultural differences. But sometimes doing that is dismissed out of hand and doesn't need to be... It can be used as a way of discounting evidence that isn't as appealing." (A)*

This group felt that hierarchies of evidence existed and that this resulted in difficulties in terms of broadening understanding. For some this bias was driven by those wanting 'statistical proof' and the "power of numbers in policy circles" (A)

*"there is an inherent bias for quantitative over qualitative - the bigger the sample the more it's trusted. ...It's very easy to flippantly dismiss a qual study as 'only' 50 people. ...good evidence is probably a mix of both." (P)*

Finally, it was broadly acknowledged by most stakeholders that there was a lack of evidence on which to rely. It was noted that large scale surveys deliver broad statistical overviews, but to date have given very little meaningful insight around harm. This lack of understanding was felt to relate to two aspects, first that harm is very often hidden, making it difficult to observe and understand and second, there is no strategic policy directed at exploring or evidencing harm, meaning there was little impetus for this evidence base to develop in Great Britain.

## Implications for this study

These contrasting views of the nature of evidence and how it is used when aiming to mitigate harm are important. Recent policy changes announced by the GC represent a move away from more deterministic approaches of understanding behaviour and outcomes towards more probabilistic approaches, where the risk of certain outcomes occurring is of central importance. This signals a change in thinking about how evidence is used and what it is intended to prove.

It means thinking more specifically about the various contexts and mechanisms that could combine to generate different outcomes. Attention to context links strongly with the GC's new focus on local risk assessment and understanding local issues when making decisions. It also means moving away from thinking that evidence should prove that if 'I do X, the outcome will be Y' towards thinking that if 'I do X there is a risk of Y because of a, b or c', where evidence is used to assess the potential risk and is combined with knowledge about local contexts.

One stakeholder argued that this requires changing ways of thinking about evidence, how it is used and assessing evidence in a more probabilistic way, using a framework of logical inference instead to consider how plausible or coherent the evidence is. This perspective has been supported more broadly in epidemiology, which has cited the over-reliance on statistical proof that often hinders effective decision making:

*“Regulators often fail to act because we have not yet statistically “proven” an association between an exposure and a disease, even when there is enough evidence to strongly suspect a causal relationship...If we can escape from the false dichotomy of “proven vs. not proven,” facilitated by the non-existent bright line implied by statistical hypothesis testing and by the notion that causality can be definitively inferred from a list of criteria, then we can make decisions based on what we do know rather than what we don’t.” (Philips & Goodman, 2004)*

Drawing on this perspective, a framework of logical inference has been used in this report when reviewing and evaluating the evidence relating to gambling-related harm and vulnerable people. Drawing on the work of Bradford-Hill (1965), this includes the following:

- 1) Is the relationship plausible; does it make sense?
- 2) Is the relationship coherent with existing knowledge?
- 3) Is the relationship consistent over space and time? If not, what are the contextual factors that explain why not?
- 4) How strong is the relationship? As Bradford-Hill described, the stronger the better in terms of potentially identifying casual associations.
- 5) What are the alternative explanations?
- 6) Is there analogous evidence from similar policy areas?

Consistent with a reorientation in how we think about and use evidence, we believe this provides a useful framework against which to evaluate the state of current knowledge about the relationship between gambling and vulnerable groups. This logic framework has been used in the following quick scoping reviews, to which this report now turns.

# 3 Identifying vulnerable people: findings from a quick scoping review

## Introduction

This chapter provides an overview of the evidence relating to groups of people that stakeholders identified as potentially vulnerable to gambling-related harm. For each group or characteristic, stakeholder perspectives are discussed first, followed by issues relating to definitions or context. Evidence is then reviewed, drawing on the logic framework outlined in the previous chapter, followed by a summary.

There are some key terms and limitations which apply to the following sections:

- First, some stakeholders felt that anyone could be vulnerable to harm but understood that when looking at risk you have to try to identify those who are potentially more at risk than others. Therefore, in the discussion that follows we are not suggesting that everyone with this characteristic is vulnerable to harm, rather that they may be at increased risk of harm.
- Second, who is vulnerable is likely to vary and shift according to broader socio-economic changes. Therefore, the characteristics described by stakeholders are based on current understanding but should be updated and reviewed as society changes.
- Third, a concept used in the following discussion is that of the ‘harm paradox’. The harm paradox is a concept from public health used when certain groups show higher risk of harm or health problems despite having overall lower engagement in or consumption of risk behaviours. It has been commonly used to describe socio-economic inequalities in alcohol consumption, whereby those from more socially deprived backgrounds are either less likely to consume alcohol or consume similar amounts to more affluent counterparts but are more likely to experience alcohol-related harm (as measured by alcohol-related mortality and hospital admissions) (Smith & Foster, 2014). The harm paradox is useful in highlighting groups or characteristics of groups who may be at greater risk of harm.
- Finally, the topics included in the scoping review were generated from stakeholder interviews. These interviews focused on understanding vulnerability in the context of the development of local area profiles. The characteristics cited by stakeholders focused more on demographic, social and economic vulnerabilities and less on psychological vulnerabilities. As this report is intended to help LAs, industry and regulators identify local risks, it focuses on aspects where local area knowledge and insight is more likely to

be available and does not consider psychological traits in-depth. We do not claim that this report is a comprehensive review of all potential characteristics of vulnerability but rather reviews characteristics of most relevance to local area risk profiles, as articulated by a diverse range of key stakeholders.

## Scoping review: overview of methods

The type of evidence review used in this study was a quick scoping review (QSR). This was chosen primarily for practical reasons; LAs are revising their Statements of Licensing Policy in summer 2015 ahead of implementation in January 2016. This includes outlining their approach to local area profiles, which has to be subject to public consultation. For this project to be useful to LAs, results needed to be available by early summer 2015. Therefore, a QSR method was chosen.

QSRs are a methodology recommended by the Government Social Research Office. They are used to quickly determine the range of studies that are available on a specific topic and produce a broad 'map' of the existing literature. As they are conducted under short time frames, they are typically constrained by search strategy (using fewer bibliographic sources), availability of sources (typically focusing on those that are available electronically) and/or question (focusing on a limited range of issues). The main constraints for this study were:

- 1) limiting searches to key words in the title or abstract of the article/report,
- 2) limiting the number of databases searched (three in total) and,
- 3) for broader topic areas, focusing on existing research reviews and synthesis.

These constraints mean that QSRs may not identify all pertinent literature. Whilst this may have implications for the conclusions derived from these reviews, we consider this potential limitation to be less pertinent for this study. For many topics considered, there was a paucity of literature available and for these areas we are confident that we identified and considered most relevant studies. For broader topic areas, we focused on identifying studies from Britain and in some cases conducted new analysis of British data to provide this evidence. Whilst some international studies may have been overlooked by the QSR methodology, we are again confident that we have included evidence from the most relevant British-based literature.

All evidence reviewed was subject to an assessment of quality. With regards to quantitative studies, this included (where appropriate) review of the sample design, analytical methods used and appropriateness of conclusions given the study design. Where possible, evidence from gold

standard survey vehicles was preferred.<sup>6</sup> For some topics only a small number of studies were identified. In these cases, those of lesser quality were included in the reviews but the potential limitations of these studies have been noted in the commentary. Some quantitative studies were specifically excluded from the QSR. These were studies conducted using purposive sampling methods with non-representative population groups.<sup>7</sup>

For qualitative studies, similar assessments were made about the design, methods and appropriateness of conclusions drawn. Best practice was considered to be studies which mapped the range and diversity of opinion on a given topic and where results were appropriately analysed (thematically, not numerically).

In this review, equal weight is given to evidence from quantitative and qualitative studies, providing both meet minimum quality standards. However, in this report there is a greater focus on quantitative studies as this is the main research method used in gambling studies to date.

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<sup>6</sup> The Health Survey for England, The Scottish Health Survey, The British Gambling Prevalence Survey and the Adults Psychiatric Morbidity Survey all have National Statistic status, a sign of scientific merit and rigour, demonstrating that these studies meet the Government's Code of Practice for Official Statistics.

<sup>7</sup> Much gambling research has been generated by conducting research with college students, where credit is exchanged for participation. The extent to which findings from these studies can be extrapolated to other populations groups is unclear and therefore studies of this kind were generally excluded from the QSR.

## Evidence review – who are vulnerable groups?

### Young people

#### *Stakeholder perspectives*

Most stakeholders thought that younger people could be vulnerable to harm. Definitions of younger people ranged from very young children through to those in their mid-twenties, including students. Among children, harm was seen to function in two ways. A child could experience harm from direct engagement with gambling or a child could experience harm because of parental gambling problems.

With regards to the former, it was generally felt that children could be vulnerable as they don't have the skills and experiences to make informed decisions and thus could experience difficulties more easily if they gambled. One stakeholder thought that children's vulnerability extended beyond these considerations. This participant felt that gambling is naturally interesting to children because of its overlap with play, meaning that children are more likely to be interested in gambling at a much younger age than for other risk taking behaviours.

Some stakeholders argued that there was a likely inherent vulnerability for those reaching the legal age to gamble as they now would be able to legally engage but may not have the same level of resilience as older adults. Others, however, thought that interest in gambling was part of the developmental process, part of the age of experimentation. Teenage years were seen as pivotal among some stakeholders, with one stating:

*“if they [teenagers] don't feel supported, they don't have good communication skills, if they are a bit of a loner, it can create a predisposition [to gamble] as they tend to look for ways to escape.” [T]*

All stakeholders thought that children could be vulnerable to harm as a result of their parents' gambling actions. Children not having what they needed financially, having less time/attention from parents, or living in households with high levels of stress and anxiety due to gambling problems were seen as some of the harms that these children could experience.

#### *Definitions/context*

The Gambling Act's third licensing objective states that children should be protected from being harmed or exploited by gambling. It is explicitly recognised that children are a vulnerable group. The legal age for most gambling products in Great Britain is 18, with the exception of lotteries,

scratchcards and football pools which is 16. There are also some gambling machines (Category D) which have no age limit and it is legal for anyone of any age to play them. For the purpose of this review young people is taken to mean anyone up to the age of 24, reflecting the range of ages mentioned by stakeholders.

### *Evidence*

There is a wealth of research evidence exploring gambling behaviours among youth. In Great Britain, national studies were conducted in 1996, 1997, 1999, 2005 and 2009, with monitoring data about underage participation collected yearly by the GC. These studies, conducted among school pupils aged 12-15, have typically shown that gambling is a popular activity despite legal age restrictions on most commercial forms of gambling. In 2009, 21% of pupils had gambled in the week prior to interview (Ipsos, 2009).

These large-scale national studies also assessed the experience of gambling problems, using a problem gambling screen adapted from the one used for adults (called the DSM-IV-J-MR).<sup>8</sup> In 2009, rates of problem gambling among youth in Britain were estimated to be 2% (Ipsos, 2009). Whilst not directly comparable, this rate is similar to problem gambling rates reported among other young people, being 2.1% for those aged 16-24 and higher than rates reported for other adults (Wardle et al, 2011). This pattern has been replicated in studies of youth gambling worldwide.

Nevertheless, it is clear that not all youth engage in gambling. Forrest and McHale (2011) conducted extensive analysis of the 2009 British Survey of Children, the National Lottery and Gambling. They identified that boys, Asians, those with parents with permissive views of gambling or who themselves gambled, those without siblings, those in the care of a guardian, cigarette smokers and children with higher levels of income had elevated risk of gambling problems (Forrest & McHale, 2011).

The British Gambling Prevalence Survey (BGPS) and health survey series<sup>9</sup> have also shown that those aged 16-24 have elevated rates of problem gambling compared with other adults (Wardle

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<sup>8</sup> This was developed in the 1990s though there are concerns about whether these screens are appropriate for use among adolescents, especially as they have not been clinically validated among adolescents. There is recognition that youth may experience a different range of impacts and harms as a result of gambling to adults. As Volberg et al (2010) note, there is a lack of consensus about what constitutes problems among adolescents which has yet to be resolved. However, in the absence of other measurement instruments, screening instruments adapted from those which measure problems among adults have been routinely used internationally to capture rates of problematic gambling among youth.

<sup>9</sup> In 2012, questions about gambling were included in the Health Survey for England and the Scottish Health Survey for the first time. These studies are called the health survey series in this report.

et al, 2011; Wardle et al, 2014). This is despite the fact that rates of past year gambling are typically lower among this age group than other adults (with the exception of those aged 75 and over). This means that those aged 16-24 who do gamble are more likely to experience problems than gamblers of other ages. However, in the QSR no British-based analysis was identified that examined how the experience of gambling problems varies among those aged 16-24, with the exception that rates are higher among men than women.<sup>10</sup>

Internationally, understanding of gambling behaviour among youth is generally recognised to be under-developed comparative to, say, alcohol studies (Blinn-Pike et al, 2010). Despite this, evidence relating to youth gambling has been synthesised on a number of occasions (Blinn-Pike et al, 2010; Valentine, 2008; Volberg et al, 2010) and common themes identified (see Box 4).

**Box 4:** Key themes from gambling research literature about gambling and youth: reproduced from Blinn-Pike et al (2010)

1. Gambling is more popular among males
2. Problem gamblers are greater risk-takers
3. Adolescent rates of problem gamblers are 2–4 times higher than those of adults
4. Adolescent problem gamblers have lower self-esteem compared to other adolescents
5. Adolescent problem gamblers have higher rates of depression than both adolescent social gamblers and non-gamblers
6. Adolescent problem gamblers dissociate more frequently while gambling than adolescents who gamble infrequently
7. Adolescents between 14 and 17 with serious gambling problems are at greater risk for suicide ideation and suicide attempts
8. Adolescent problem gamblers are at increased risk for other addictions, including substance abuse
9. Adolescent problem gamblers score higher on excitability, extroversion and anxiety and lower on conformity and self-discipline
10. Adolescent problem gamblers have poor coping skills
11. Adolescent problem gamblers report beginning gambling at younger ages as compared to peers without gambling problems
12. Adolescents move quickly from social to problem gamblers
13. Adolescent problem gamblers are more involved in delinquency and crime and are more likely to have disrupted family relationships and poorer academic records
14. Adolescent problem gamblers often replace quality friendships and relationships with associations with gambling associates
15. Adolescent problem gamblers often fail to be referred to or seek treatment
16. Adolescent gambling is an international problem.

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<sup>10</sup> Base sizes from the BGPS and/or health survey series have not been large enough to examine patterns of behaviour within this age group specifically.



A notable limitation of many studies of youth gambling behaviour is that they tend to focus on problem gambling and pathologise behaviour. There is very limited evidence about the experience of broader gambling-related harms among youth. One study identified in the QSR addressed this issue specifically, stating:

*"adolescents may experience a variety of harms in different social contexts in which the gambling is occurring, and thus, more attention should be given on assessment of all potential harms of gambling thoroughly, including less serious harms and other dimensions that are not typically part of the clinical based screens"* (Raisamo et al, 2013).

To do this, these authors developed survey questions about a range of harms and collected data on them among youth (aged 12-18) in Finland. The harms measured were: conflict with parents, conflict with friends, disruption to school work, feeling guilty, skipping school/work, non-payment of debts and stealing money to gamble. Estimates of harm ranged from 6% (for debt and money problems) to 17% for feeling guilty about gambling (Raisamo et al, 2013). The authors concluded that type of gambling-related harms that adolescents experience relates more to social problems and disruptions to daily life (in terms of school, work and social commitments) than issues about money. Experience of this broader range of harms among youth in Britain has yet to be explored.

### *Summary*

Children were explicitly identified as being vulnerable to harm in the Gambling Act, 2005. There is strong evidence, consistent between jurisdictions, that children, adolescents and young adults are vulnerable to the experience of gambling problems or at risk of experiencing gambling problems. Rates of problem gambling among young people who gamble are higher than older adults. This is consistent with the harm paradox, whereby these age groups are less likely to gamble generally but those that do are more likely to experience difficulties with their behaviour. The harm paradox is evident among males and females alike, something that is often missed as comparisons tend to focus on men versus women.

There is limited understanding as to why this pattern occurs, broader experiences of harm and, among 'emerging adults', how behaviours vary for people with different backgrounds and characteristics. Youth should be considered a vulnerable group because of the greater likelihood of problems if they engage, but further research is needed to explore how this varies between and within groups. Attention is given to one subset of youth in the next section, students.

## Students

### *Stakeholder perspectives*

Nearly all stakeholders highlighted youth as a vulnerable group, with youth including children, adolescents and young adults. Within this, some stakeholders thought students could be vulnerable to harm. A combination of leaving home, stress of being in new environments, having fixed incomes as well as sudden increases in access to money through student loans and/or financial worries were seen as contributing factors underpinning this vulnerability.

For some, students were considered to be at higher risk than other younger people because they could legally access gambling, whereas younger people are (largely) legally prohibited from commercial forms of gambling. Foreign students were also seen as a potentially at risk group. This was viewed as related to their migrant status (see discussion about migrants later in the chapter), especially if students were coming from countries where gambling was not as accessible or available as in Britain.

### *Definitions/context*

Students have been highlighted as at risk group in many public health areas. Termed ‘emerging adults’, student status is viewed as a time of heightened risk taking, identity exploration, instability and potentially isolation where there are fewer parental and social controls (Arnett, 2004; 2008). This group have been the focus of attention for engagement in other risk behaviours, such as alcohol consumption, drug use, and risky sexual behaviour. Therefore students have been given attention in the gambling literature because of potential clustering of risk behaviours as well as attendant issues relating to their ‘emerging adult’ status.

Students in higher education were seen by some stakeholders as a group whose vulnerability to harm may be increasing. This was in the context of greater changes to student finances with higher rates of tuition fees introduced in 2012, rising rents and greater uncertainty around job markets post-graduation. Data from the latest Student Income and Expenditure Survey shows that in 2011/12 first year students saw a real terms decrease in income, coupled with an 18% increase in housing costs. The authors concluded that:

*“the overall impact on students’ financial position was to increase the level of predicted student (net) debt among first year students”* (Pollard et al, 2013).

Stakeholders felt that this combination of factors could create contextual circumstances where students who gambled were at greater risk of harm than previously, as they may be facing greater financial strain generally.

## Evidence

There is very little evidence about students' experience of gambling in a British context. Writing in 2008, Moodie stated that "*the lack of research [into British] student gambling was mystifying*". Little has changed and aside from Moodie's study of gambling behaviours among Scottish college students, no other British studies looking at this were identified. Moodie's study identified that 3.9% of college students were probable pathological gamblers and a further 4% were problem gamblers. These figures are typically higher than those reported among similar age groups interviewed through household surveys. However, comparisons should be treated with caution due to different ways of measuring problem gambling and uncertainty about the extent to which these results can be extrapolated to the broader student population.

The BGPS/health survey series gives very little additional insight. These are both household based surveys and thus exclude those living in institutions, like student halls of residence. Whilst some students living in private rental accommodation, or living at home with parents, are included, results cannot be extrapolated to all students.

Nevertheless, these studies show that those aged 18-21 in full time education tended to gamble less than those aged 18-21 who were not in full time education. Rates of problem gambling were 0.6% among young people in full time education and 3.3% for non-students; these differences were not statistically significant and rates of at-risk gambling were similar (20.6% vs 19.9%).<sup>11</sup> Therefore, evidence from this skewed group of students shows that whilst they are less likely to gamble, those that do experience a similar range of problems to other young people of a similar age. This evidence does not discount the theory that students could be a vulnerable group but rather highlights the need for this to be better explored.

A final UK-based study was identified conducted by the organisation 'Save the Student' which provides money advice and support to students. In 2013, their annual survey of student finances found that 20% of students had turned to gambling to make money.<sup>12</sup> This is perhaps unsurprising as this organisation publicises gambling, specifically matched betting, as its number one way for students to make additional cash.

Looking at evidence from further afield, there is a wealth of international evidence exploring gambling behaviour among students in higher education. This is largely because much research has been conducted using college students as a sample, trading participation for credits (Disley et al, 2013). There are fewer studies which look at the experience of harmful gambling

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<sup>11</sup> These estimates are based on new statistical analysis of the BGPS 2010 survey conducted for this report. See Appendix A.

<sup>12</sup> The question wording used was "Have you ever gambled to try and make money (rather than for fun)?"

consequences. Most research focusing on the gambling behaviour of students has been conducted in North America and comparisons should be made with care due to the different nature and structure of higher education between Britain and these countries. These studies tend to show elevated rates of problem gambling among college students comparative to adult rates generally, though it is not always clear if these rates are elevated comparative to the same age group who are not in higher education (Shaffer et al, 1999; Blinn–Pike et al, 2007; Nowak & Aloe, 2014). One study did not find elevated rates of problem or pathological gambling among college students (Shaffer et al, 2005). The conclusion Shaffer et al (2005) drew from this was that *“most adverse effects of student gambling remain sub-clinical”*. This suggests that some students may experience harm even if this does not reach clinical levels of gambling problems.

### *Summary*

Students were highlighted by some stakeholders as being potentially vulnerable to harm from gambling. There is very limited British evidence to assess this as it has not been a focus of enquiry. Only one British study was identified in the QSR. This showed elevated rates of problem gambling among students in Scotland. Evidence from the BGPS showed students who are not living in institutions display similar levels of risk and problem gambling to those of the same age who are not in higher education. This suggests that students should be considered as vulnerable as others of the same age, though based on the evidence available to date, it cannot be concluded that they are more so. Further investigation is needed to explore whether gambling harms are increasing among this group, particularly relating to changes in student finances, cost of living and job prospects.

## Mental health

### *Stakeholder perspectives*

Those with poor mental health were identified by nearly all stakeholders as a potentially vulnerable group. One stakeholder described vulnerability as a *“temporary or permanent inability to appreciate what is best for you”* (A) and therefore they thought that people suffering mental incapacities, be it temporary or permanent, would be vulnerable.

Stakeholders described a range of mental health problems that they felt could indicate enhanced vulnerability. This ranged from those with psychological conditions such as paranoid schizophrenia, personality and bi-polar disorders to those with common mental disorders, such as depression, anxiety and Obsessive Compulsive Disorder to those with other substance

abuse/misuse conditions. Some stakeholders discussed how those with a history of trauma could also be vulnerable to gambling-related harm, using gambling as a way of escape.

Stakeholders, however, highlighted the complexity of some of these relationships and how difficult it is to untangle cause and effect. This was particularly true when considering the relationship between anxiety and/or depression and gambling. One stakeholder succinctly summarised their view of this:

*“those experiencing psychological difficulties are vulnerable to gambling, but whilst this association is known, it's not clear whether this [psychological difficulties] is caused by the gambling or whether it's a precursor to the gambling. The assumption is that it's a bit of both and so far as it's a bit of both, then it implies that those with psychological difficulties are more at risk.” (A)*

Another stakeholder illustrated the same point, talking about the reciprocal relationship between gambling and depression:

*“it's a bit chicken and egg, it depends...sometimes in the gambler's head it [gambling] takes them away from the bad stuff, from the depression and feeling awful...but only for a very short period of time and then they are back to where they started so it can become very difficult to figure out where does it start...so the activity to relieve that feeling is actually creating that feeling.” (T)*

Some stakeholders felt the relationship between gambling and some mental disorders were related to the way that people with mental health problems are treated by society. This was also combined with the attractiveness of the gambling environment. It was felt that people with mental health problems can be bullied or generally ostracised by society or are those who:

*“are on the margins of society and find a place within the betting shop or the arcades...and they do tend to gravitate towards these places so they are pretty vulnerable.” (T)*

Here it was felt that people with mental health problems can be attracted to gambling as a 'safe' place to go to be around others whilst not having to engage with others directly. It was also felt that these people could get validation from the gambling activity. For these stakeholders, the relationship between mental health problems and vulnerability to gambling harm was about more than people simply having diminished capacity to make informed decisions about play.

Finally, some stakeholders argued that broader societal changes could mean that those with mental health problems may be more vulnerable than previously. This was in the context of

British austerity politics, cuts to mental health services and generally the experience of living through recession creating stressful economic conditions for some, which are known to be related to mental health problems.

### *Definitions/context*

The range of mental health problems described by stakeholders can be categorised into four broad types: common mental disorders, psychosis, substance abuse/misuse and other conditions.

Common mental disorders (CMDs) are mental conditions that cause marked emotional distress and interfere with daily function, but do not usually affect insight or cognition (McManus et al, 2009). They comprise different types of depression and anxiety and include General Anxiety Disorder, Mixed Anxiety and Depressive Disorder, Phobias, Obsessive Compulsive Disorder and Panic Disorders.

Psychoses are disorders that produce disturbances in thinking and perception severe enough to distort perception of reality. The main types are Schizophrenia and Affective Psychosis, such as Bi-Polar Disorder (McManus et al, 2009).

There is a range of different terminology used to describe substance abuse/misuse. For alcohol, the following tend to be used for public health monitoring purposes: hazardous and harmful alcohol consumption. Hazardous drinking is a pattern of alcohol consumption carrying risks of physical and psychological harm to the individual. Harmful drinking denotes the most hazardous use of alcohol which is likely to damage health.

One possible outcome of harmful drinking is alcohol dependence, a cluster of behavioural, cognitive, and physiological phenomena that typically includes a strong desire to consume alcohol, and difficulties in controlling drinking (McManus et al, 2009). With regard to drug misuse, this has been defined as the use of a substance for purposes not consistent with legal or medical guidelines. In a small proportion of users, this may lead to drug dependence, which like alcohol dependence, is a cluster of behavioural, cognitive, and physiological phenomena, such as a sense of need or dependence, impaired capacity to control substance-taking behaviour and persistent use despite evidence of harm (McManus et al, 2009).

Finally, a range of other conditions were also cited by stakeholders. These included the experience of trauma, Attention Deficit Hyperactivity Disorder (ADHD) and personality disorders. ADHD is a widely recognised complex developmental disorder in childhood that can persist into adulthood and cause impairment (McManus et al, 2009). Personality disorders are longstanding, ingrained distortions of personality that interfere with the ability to make and

sustain relationships. Anti-Social Personality Disorder and Borderline Personality Disorder are two types with particular public and mental health policy relevance (McManus et al, 2009). The experience of a traumatic event is distinct from and more severe than stressful life events. A traumatic event is where individuals experience, witness or are confronted with life endangerment, death or serious injury or threat to self or close others (McManus et al, 2009).

### *Evidence*

As seen in the section above, there is a broad range of conditions to consider when looking at the relationship between mental health and gambling. Because of this breadth, it was not possible to fully review all literature relating to each individual condition. Evidence was preferred where it was UK based or where studies focused on the general population and compared the experiences of those with and without certain mental health conditions.

As noted by Petry et al (2005), most information about the co-occurrence of mental health problems and gambling behaviour has been generated from studies of people presenting for treatment. However, as only a small minority of those with gambling problems seek treatment, the extent to which results can be extrapolated to all gamblers is unclear. It may be that the existence of multiple mental health conditions means that these people are more likely to seek treatment than others.

Comparative to North America, there is a dearth of British evidence about the relationship between gambling and mental health. In 2007, gambling behaviour was included in the English Adult Psychiatric Morbidity Survey (APMS), which produces National Statistics on the prevalence of mental ill health in England. Yet to date, in depth analysis of the relationship between gambling behaviour and the full range of conditions captured by APMS 2007 has not been undertaken. The only analysis published in the main study report was a set of correlation coefficients showing the likelihood of two conditions being experienced by the same person. This is different to looking at the risk of gambling harms or problems among certain population groups.

New analysis produced for this report shows that higher rates of problem gambling are found among those with the following conditions (see Appendix A for tables):

- Mixed Anxiety and Depressive Disorder
- General Anxiety Disorder
- Phobia
- Obsessive Compulsive Disorder
- Panic Disorders

- Eating Disorders
- Probable psychosis<sup>13</sup>
- ADHD
- Post-Traumatic Stress Disorder
- Harmful and hazardous levels of alcohol consumption
- Drug dependency

Problem gambling prevalence rates varied from 6% among those with probable psychosis to 1.5% among those with Mixed Anxiety and Depressive Disorder. This latter estimate is over twice the level of problem gambling among the general population (0.7%). Whilst Anti-Social Personality Disorders, Borderline Personality Disorders and Autism were captured in APMS, sample sizes were not large enough to include in analysis. Problem gambling rates did not vary based on whether participants had experienced depressive episodes or were current smokers.

The patterns noted above persisted when age, sex, ethnicity, income and multiple deprivation were taken into account. Logistic regression models showed elevated odds of problem gambling among those who had any one of the conditions listed above (see Appendix A). The greatest odds of being a problem gambler were observed among those with probable psychosis and phobias (the odds of being a problem gambler being 8 times higher among people with these conditions than without them) followed by Panic Disorder (odds being 6 times higher) and General Anxiety Disorder (odds being 5 times higher).

Results also showed that the prevalence of at-risk gambling<sup>14</sup> was also higher among those with each of the conditions listed above (See Figure 1).

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<sup>13</sup> In APMS, a diagnosis of 'probable psychosis' was given for a positive (Schedule for Clinical Assessment in Neuropsychiatry (SCAN) interview (phase 2 interviews), or where no SCAN was conducted if two or more psychosis screening criteria were endorsed in the phase 1 interview.

<sup>14</sup> In APMS, at-risk gambling was those with a DSM-IV score of 1-2 and problem gambling those with a score of 3 or more. See McManus et al, 2009 for further details.



**Figure 1** Prevalence of at-risk and problem gambling by mental health conditions

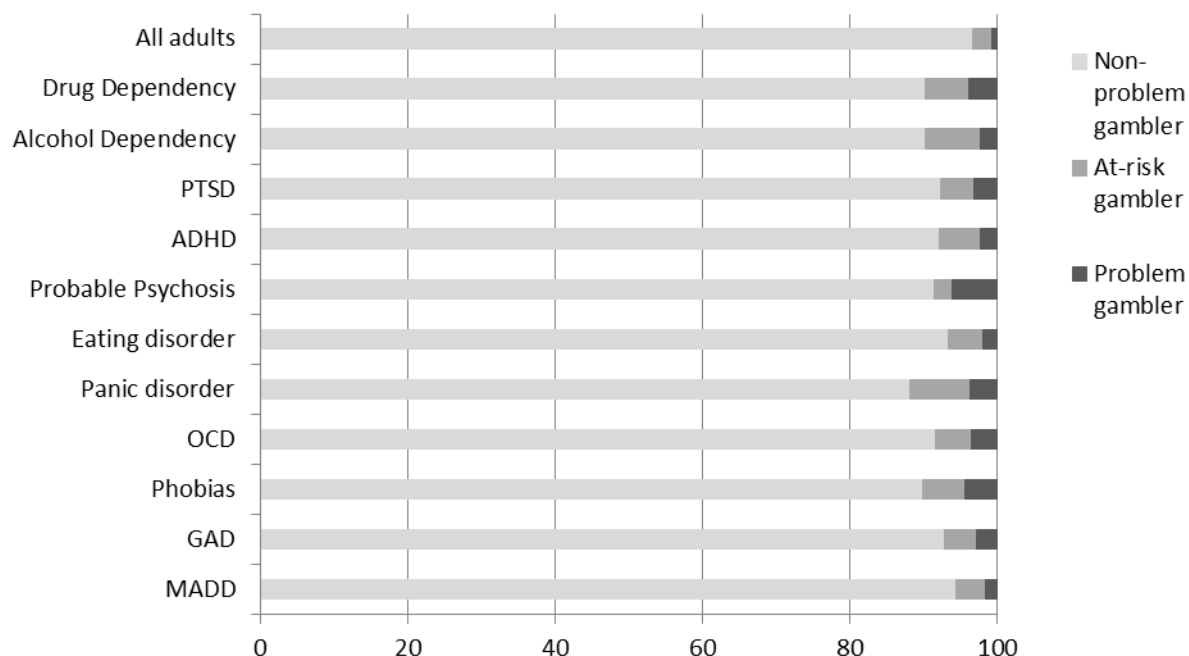


Figure 1 shows that for people with the conditions listed above, a significantly higher proportion were either at-risk or problem gamblers than all adults generally.<sup>15</sup> Among the general population, only 3% of adults were categorised as at-risk or problem gamblers. Yet for those with the conditions shown in Figure 1, rates were typically double that and for those with a drug or alcohol dependency, phobias or panic disorders around one in ten (10%) were at-risk or problem gamblers.

These patterns are notable as past year gambling participation was broadly similar among those with and without the conditions listed above. This was with the exception of those with phobias and probable psychosis who were far less likely to gamble than those without these conditions. This means that those with these conditions who do gamble experience far greater risk of problems, a clear example of the harm paradox. Current cigarette smokers and those with hazardous or dependent levels of alcohol consumption were more likely to gamble in the past year, though differences in problem gambling prevalence rates were not attributable to this. Looking at past year gamblers only (i.e., taking greater propensity to gamble into account) those with alcohol dependency had higher rates of problem gambling than those with no alcohol consumption problems. This means that people who have alcohol dependency

<sup>15</sup> In this analysis, problem gambling was defined as having a score of 3 or more on the DSM-IV screening questions and 'at-risk' a score of 1-2, meaning that these people experienced some difficulties but were below the threshold for problem gambling. See Shaffer et al, 1997.

problems and gamble are more likely to experience problems than gamblers who do not consume alcohol or do not consume alcohol to harmful levels.

A potential explanation for this was given in Reith and Dobbie's (2011) qualitative examination of gambling careers, where one participant explained the effect that alcohol had on their gambling behaviour:

*"when you're drunk all that [studying form] goes out the window, your only mind-set is to try and win money as quick as possible. The drink clouds your judgement ... when you're drunk you can't stop and just say right I'm happy with that win I'll take that I'll put that in my back pocket, it doesn't really happen"* (Reith & Dobbie, 2011).

Other research has also shown a relationship between gambling problems and alcohol consumption more generally. The BGPS series highlighted that the prevalence of problem gambling was higher among those who consumed the most alcohol on the heaviest drinking day in the past seven days (Wardle et al, 2007). A similar finding was noted by Plant et al (2005) in their (British based) examination of the relationship of multiple risk taking behaviours.

Of course, what Figure 1 also shows is that not everyone with these conditions experiences a problem with their gambling, and that not everyone gambles. Looking at problem gamblers and at-risk gamblers specifically, 69% of problem gamblers experienced at least one of these conditions (including depressive episodes and personality disorders) and 47% of those who were at-risk experienced the same.<sup>16</sup> Therefore, whilst the majority of people with certain mental health problems may not experience problems with gambling, the majority of problem gamblers experience other mental health problems.

These findings, presented here for the first time, are similar to those found in other jurisdictions. In America, analysis of the National Epidemiological Study of Alcohol and Related Conditions (NESARC) showed that drug use disorder, alcohol use disorder, mood, personality and anxiety disorders were related to pathological gambling,<sup>17</sup> with the odds of being a pathological gambler being higher among people with these disorders. The authors concluded that the *"evidence for the relationship between substance use disorders and pathological gambling was unequivocal"* (Petry et al, 2005). However, they acknowledged that there was

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<sup>16</sup> Being a current smoker was excluded from this analysis.

<sup>17</sup> This study differs from APMS in two ways. First, it uses the diagnostic term pathological gambling, given when a score of 5 or more is attained when answering the DSM-IV screen. The APMS analysis uses a threshold of 3 or more to represent problem gambling as this is commonly used in gambling policy in Great Britain. Second, NEARC measured lifetime pathological gambling rates. That is, whether a respondent had ever experienced a range of difficulties. APMS measures current rates of problem gambling, that is problems experienced in the past 12 months.

less information available about other psychological disorders and that some of the relationships observed could be related to diagnostic overlap.

Since Petry et al's 2005 study, others have analysed this relationship further. Similar results were found in a Canadian study, which showed that those with mood and anxiety disorders or substance misuse/abuse disorders were more likely to be at-risk or problem gamblers (el-Guebaly et al, 2006).

In 2008, Kessler et al analysed age of onset to attempt to unpick the temporal sequencing of disorders. They concluded that most co-morbid anxiety, depressive disorders and alcohol and drug abuse began at an earlier age than pathological gambling, with 74% of pathological gambling cases occurring subsequent to the onset of other disorders. However, they also noted that this was not universal and that *"some mental disorders might be a risk factor for pathological gambling and others a consequence"*. Pathological gamblers have periods of abstinence and relapse and problems persist over a long time frame, making sorting out the temporal sequencing of events difficult (Kessler et al, 2008).

A limitation of Kessler et al's (2008) study was their reliance on retrospective self-report of age of onset for each condition. A further study (Chou & Afifi, 2011) attempted to address this by analysing data from a follow-up study to NESARC 2005.<sup>18</sup> In the follow-up study, data about a variety of mental health issues were collected so investigators could see who now experienced certain conditions which they had not previously. Chou and Afifi (2011) demonstrated that pathological gambling was associated with the subsequent experience of mood disorders, PTSD, General Anxiety Disorder and substance abuse/misuse. However, because pathological gambling was not asked about in the second study, they were unable to look at what prior conditions may be associated with later onset of gambling problems. They concluded that there were likely reciprocal and cyclical relationships between gambling and other psychiatric disorders.

### Summary

There is a consistent body of evidence from Britain and North American demonstrating a strong association between gambling problems and many mental health conditions. This suggests that those with Common Mental Disorders, substance use/abuse problems, psychoses and other conditions like PTSD have higher rates of problem or at-risk gambling than those without these conditions.

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<sup>18</sup> A follow-up study is a study where the same people are interviewed again at a later date. Changes in circumstances are then analysed and investigators can start to determine the sequence of events.

However, the temporal sequencing and the specific mechanisms that underlie this relationship are uncertain. Here the comments made by one stakeholder seem appropriate and are worth repeating:

*“it's not clear whether this [psychological difficulties] is caused by the gambling or whether it's a precursor to the gambling. The assumption is that it's a bit of both and so far as it's a bit of both, then implies that those with psychological difficulties are more at risk.” (A)*

This is supported by current theory about the routes into problem gambling. The ‘pathways model’ put forward by Blaszczynski and Nower (2002) shows three different pathways into problem gambling, two of which differ based on whether psychopathology pre-existed gambling or whether it was a consequence of gambling engagement.

Finally, evidence relating to alcohol consumption and its relationship with gambling highlights the range of theories that might explain this relationship. For example, in the short term it is recognised that alcohol has a disinhibiting effect and, based on the evidence provided by Reith and Dobbie (2011), may impair judgement if gamblers engage when under the influence of alcohol.

However, this is just one theory. For some the relationship may be explained by a more general propensity to seek different sensations expressed through engagement in gambling and consumption of alcohol. For others, gambling and use of other substances may mask other problems. In short, it is unlikely that there is a single explanation for the relationship and we should allow for a plurality of theories.

Little work has been undertaken exploring this more broadly. Given the current state of the evidence base, we can conclude that those with mental health problems are potentially vulnerable to gambling problems, and whilst little is known about why this relationship exists, it is unlikely to be solely related to impaired judgement capacities.

## Learning disabilities/difficulties

### *Stakeholder perspectives*

Many stakeholders felt that those with learning problems may be more vulnerable to harm. This was described as ‘people who might not understand gambling’, ‘people who aren’t good with numbers’, those with a ‘learning difficulty’ or with low levels of education. It was felt that these groups might not be able to understand how gambling works, especially the role of chance or odds and probabilities. It was argued that this lack of understanding may make them

more vulnerable to harm as they may have less ability to make informed choices about their gambling behaviour and/or to understand the consequences of their actions.

### *Definitions/context*

There are a plethora of terms used to describe learning problems. Over time, these have ranged from learning disabilities, intellectual disabilities, learning difficulties, special educational needs, mentally handicapped and so on. The variance in nomenclature was reflected in the way stakeholders described this potential vulnerability, suggesting a range of potential issues among those with 'learning difficulties' to those who don't understand odds or probabilities. In British policy, learning disability is described by the Department of Health as:

- a significantly reduced ability to understand new or complex information or to learn new skills,
- a reduced ability to cope independently, or
- an impairment that started before adulthood, with a lasting effect on development.

Learning disabilities exist upon a continuum of severity. This continuum, as described by the British Institute for Learning Disabilities (BILD), ranges from mild, where people may need some support to understand abstract or complex ideas or in completing forms and budgeting but who often live independently, to profound where people have a profound intellectual disability, requiring extensive support and care (BILD, 2011; Mansell, 2010).

Although used interchangeably, learning disability is viewed as different to learning difficulties. In educational policy, the term 'learning difficulty' is used to describe those with specific learning difficulties but who do not have impaired intellectual functioning (for example dyslexia or dyscalculia, a difficulty understanding arithmetic). The Special Educational Needs and Disability Code of Practice also presents learning difficulties on a spectrum from moderate to profound (DFE/DH, 2015).

In interviews with stakeholders it was clear that those with learning disabilities and, to a lesser extent, learning difficulties were considered potentially vulnerable groups. Those with low levels of educational attainment were also considered potentially vulnerable.

### *Evidence*

Looking first at the relationship between learning disabilities and/or difficulties and gambling behaviour, there is a paucity of evidence. No British-based studies were identified examining

this. A small body of research from Ontario, Canada was identified which examined the relationship between 'learning disabilities' and gambling behaviour among adolescents.

Of the four studies identified, all used a similar methodology of administering surveys to pupils in school-based settings. Two of the four studies used participant self-report to identify those who had been diagnosed with a 'learning disability'. This included those with a reading or learning disability or dyslexia. The other two studies identified those with 'learning disorders' as those with individualised educational plans in place because of problems with reading and/or numeracy. Compared with British policy definitions, these studies focus more on 'learning difficulties' than disabilities. For clarity, this term is used in the following sections.

These four studies provided inconsistent results about the relationship between gambling behaviour and learning difficulties among adolescents. McNamara et al (2008) did not find a statistically significant difference in gambling participation between those with learning difficulties, those with learning difficulties and comorbid ADHD, and those with no learning difficulties. However, in a subsequent study, McNamara and Willoughby (2010) noted that participation in gambling was higher among those with learning difficulties than those without learning difficulties. The purpose of these two studies was to examine engagement in a range of risk taking behaviour among those with learning difficulties. As such, only participation in gambling was measured and not the experience of gambling problems.

The other two studies both found that the prevalence of gambling problems was significantly higher among boys with learning difficulties than boys without learning difficulties. However, there was no association between gambling problems and learning difficulties among girls (Parker et al, 2013; Taylor et al, 2014). Taylor et al (2014) also showed the boys with learning difficulties had more erroneous beliefs about gambling than those without learning difficulties.

No evidence about the relationship between learning difficulties/disabilities and gambling among adults was found in the QSR, though some surveys have shown a relationship by which those with lower levels of educational attainment have greater odds of problem gambling (Wardle et al, 2007; Sproston et al, 2000). The mechanisms underpinning this association are uncertain and it may be that that low levels of educational attainment is, to some extent, acting as a proxy for learning difficulties. This remains to be explored.

Thinking about the broader relationship between gambling and intellectual functioning, one British study analysed evidence from APMS 2007 and demonstrated a strong relationship between problem gambling and low verbal IQ scores. This association persisted even when a range of other factors were taken into account (such as mental health, substance use, impulsivity and socio-demographic characteristics). However, there was no relationship evident between low verbal IQ scores and non-problem gambling. The authors concluded that:

*“The lack of similar associations in people with non-problem gambling may point towards general cognitive abilities being a predictor of individuals at a higher risk of making a transition to problem gambling” (Rai et al, 2014).*

A similar finding was evident among youth, Emond et al (2011) found that among 17 year olds, the odds of being a regular gambler and of being a problem gambler were higher among those with low IQ scores (measured when the child was 7.5). Emond et al (2011) noted that the relationship between low IQ and regular gambling was partially explained by socio-demographic and economic features but that the relationship between problem gambling remained significant even when these factors were taken into account. The QSR also identified one further study from Canada (Hodgins et al, 2012) where low IQ was positively associated with higher frequency gambling.

Finally, the relationship between educational attainment and gambling behaviour was assessed in the BGPS/health survey series. This shows mixed results. In 2010 and 2012, problem gambling rates did not vary by level of educational attainment. However, in the BGPS 2010, the odds of being a low risk gambler were 1.5 times higher among those with no educational qualifications than those educated to degree level or higher. Earlier studies in the BGPS series (1999 and 2007) showed that those who were educated to A-Level equivalent or lower had higher rates of problem gambling than those who were educated to degree level.

### *Summary*

Stakeholders interviewed felt that those with learning difficulties could be at risk of experiencing harm and thus constitute a vulnerable group. This concern was typically based upon the notion that gambling should involve informed consumers, making informed choices to engage in gambling (Light, 2007). Those with diminished capacity to make these informed choices were therefore viewed as a vulnerable group. Viewing those with learning difficulties/disabilities as vulnerable is consistent with policy framing and GC advice. It is also consistent with the two British studies showing that those with lower IQ have a greater risk of gambling problems.

Thinking about learning difficulties/disabilities more specifically, there has been very little empirical investigation of this and the research that has been conducted focuses on the experience of adolescents in Canada. Three of the four studies reviewed showed a relationship between gambling behaviour and learning difficulties, though in some cases this was only evident for boys. These studies also discussed inconclusive findings of other studies examining the relationship between those with learning difficulties and engagement in other risk-taking behaviours. However, they have usefully highlighted a potential relationship between learning

difficulties among adolescent boys and the experience of gambling problems in a Canadian context.

Among adults, there is very little evidence available about the relationship between learning difficulties and gambling behaviour. However, varying evidence of a relationship between low level of educational qualifications (even after age has been controlled for) and gambling problems suggests this warrants further consideration. Further examination is needed of the relationship between learning difficulties/disabilities and gambling behaviour in adulthood, for which educational attainment may serve as a proxy.

## Immigrants

### *Stakeholder perspectives*

Some stakeholders felt that immigrants could be vulnerable to harm. In general, stakeholders were referring to first generation immigrants who had recently come to Great Britain. Some described witnessing increased numbers of Eastern Europeans in gambling establishments and that these groups were increasingly seeking treatment for problems.

Stakeholders felt that the social and economic circumstances of these migrants meant they may have heightened vulnerability to harm. For example, one stakeholder described how some recent immigrants may have poor social networks and/or little social support, be socially isolated, have limited financial resources which may contribute to increased vulnerability from harm. Other stakeholders felt that some migrants may come from cultures where gambling availability was not as widespread as in Great Britain and this may impact on their risk of harm.

### *Definitions/context*

When considering issues about migrants there is a natural overlap with ethnicity and ethnic cultures. In this section, migrant status is taken to mean first-generation migrants who have recently entered Britain. We acknowledge there is an artificial distinction between migrant status and ethnicity.

When reviewing evidence about gambling behaviour among migrants, it is very important to consider contextual issues. Data from other jurisdictions may be less appropriate because of the different national and ethnic profiles of migrants and their circumstances upon entering each host country. Therefore, in this section, evidence from Britain and the EU is given preference over evidence from other jurisdictions.



## *Evidence*

There has been very little examination of migrants' gambling behaviour and no British studies were found in the QSR. Two studies conducted in Norway and Denmark respectively found that immigrant status (measured by birth outside the resident country) was associated with being an at-risk gambler. In Norway, those born in non-western countries had greater odds of being an at-risk gambler than 'ethnic' Norwegians (Lund, 2007). In the Danish study, similar patterns were found, though this study only looked at whether people born within Denmark or elsewhere and thus did not make the distinction between western and non-western immigrants (Lyk-Jensen, 2010).

A study in Spain compared the experiences of immigrants who sought treatment with native Spanish treatment seekers. Whilst this study found there were more similarities than differences between them, the authors argued that immigration from Asia had an incrementally important relationship with pathological gambling (Penelo et al, 2012). A final study compared gambling behaviour between native Germans and immigrants using semi-structured interviews. This revealed that acculturative stress was associated with reasons for gambling among migrants (Jacoby et al, 2013).

A study of the experiences of Asian immigrants in New Zealand highlighted how processes of acculturation (that is the meeting of two cultures) can lead to high levels of stress and 'culture shock' when settling into a new country. In-depth exploration of this and its relationship to gambling behaviour among Asian immigrants suggested that these groups were more vulnerable to harm due to a range of contexts and processes. Asian immigrants described using gambling as a way to relieve stress but also gambling because it was a place where they could be with others from their community.

This linked both to themes of social isolation, where the casino offered a safe place for Asians to be around other Asians and for them to meet. As with other groups, financial insecurity and the hope of winning money were also key motivators to gamble and gamble excessively. Immigrants in this study also described differences in culture towards gambling, with gambling in New Zealand being legal and heavily advertised, something they were not used to (Sobrun-Maharaj et al, 2013). Cultural contexts can affect gambling behaviour (MacMillan, 1996; Okuda et al, 2009) and it is plausible that for some immigrants processes of acculturation heighten vulnerability to gambling-related harm.

Finally, in America, a study found that whilst immigrant status was associated with problem gambling, it varied by generation. Those who were first generation immigrants were less likely to be gamblers or problem gamblers than native born Americans whilst those who were second

or third generation migrants were more likely to be problem gamblers than first generation migrants (Wilson et al, 2015).

### *Summary*

With the exception of the American study, this evidence shows broadly consistent results. The few European studies identified suggest that non-native birth was associated with greater probability of at-risk or problem gambling, though what underpins this observation is unknown. As suggested by stakeholders, it is possible that other ethnic, cultural or resources differences are driving this association. Indeed the authors of the American study concluded that:

*“inter- and intra-generational dynamics relat[ing] to gender, age of arrival and duration in the United States, and world region from which participants emigrated”* (Wilson et al, 2015) were important factors for further consideration.

These are likely to be important considerations when examining this issue in Great Britain also. Sobrun-Maharaj et al’s (2013) study of the experiences of Asian migrants in New Zealand highlighted a range of mechanisms through which migrants may be more vulnerable to harm. However, with all of these studies it is not clear the extent to which findings are transferable to Great Britain. Great Britain has a particularly diverse immigrant population and it is likely that processes and consequences of acculturation vary for different groups.

In summary, there is limited evidence that some immigrants may represent a vulnerable group though, to our knowledge, this has not been explored in a British context. Whilst immigrant status may serve as a proxy for potential vulnerability, it is likely that a range of complex mechanisms and processes underpin this which requires further exploration.

## **Ethnicity**

### *Stakeholder perspectives*

Some stakeholders highlighted that people from certain minority ethnic groups (MEGs) could be more vulnerable to harm. This extended beyond considerations of immigrant status as some stakeholders discussed the cultural preferences of certain ethnic groups for gambling. An industry participant described gambling among some MEGs, in their view, as ‘endemic’ and how gambling was strongly related to culture. The most often cited MEG was Chinese. This may be a reflection of the London-centric focus of stakeholders interviewed and, in part, because there is

a currently a high-profile local community campaign against the opening of another bookmaker in London's Chinatown.

However, cultural preferences and predilections were not the only reasons given as to why certain MEGs should be considered vulnerable. Themes relating to the conditions and experiences of people from these communities were also mentioned. This ranged from type of employment, including low pay, shift work, to the types of urban areas in which many MEGs are based, being areas of greater deprivation. Therefore, MEG status was viewed by some as the visible trait of vulnerability but that underlying circumstances were the contributing factors.

### *Definitions/context*

When thinking about ethnicity and vulnerability to harm, there is clear overlap with considerations of migrant status and the two themes should be considered in parallel. When reviewing evidence about the relationship between ethnicity and gambling behaviour, jurisdictional differences and contexts need to be taken into account.

For example, there is an emerging body of research in New Zealand about the gambling experience of Maori populations. Whilst Maori are a MEG in New Zealand, they are an indigenous population group displaced by Caucasian settlers. Their experiences of displacement, domination and discrimination, along with different cultural practices, are likely to vary to MEG groups in Great Britain who have been established through varying historical waves of immigration. Historical reasons for how and why certain groups came to be present in different countries, and their subsequent experiences, could affect comparisons and should be borne in mind when reviewing research evidence.

### *Evidence*

The 2007 and 2010 BGPS and more recent 2012 health surveys have shown a consistent relationship between problem gambling and at-risk gambling and ethnicity. In all studies, problem gambling prevalence rates were higher among those from non-White ethnic backgrounds. Regression models also showed that the odds of being a problem or at-risk gambler were higher among those from Asian/Asian British backgrounds or Black/Black British backgrounds.

Forrest and Wardle (2011) explored gambling participation among South Asian adults and children, using the BGPS data. They noted the presence of the harm paradox in these findings, where both adults and children of Asian backgrounds were far less likely to gamble than their White British counterparts, yet those that did were more likely to experience problems. These relationships were evident even when other socio-economic factors were taken into account, for example income, socio-economic status and deprivation, leading Forrest and Wardle to conclude that being “*Asian appears to be an independent risk factor [for gambling problems] for both adults and children*”. Looking at evidence from the BGPS and health surveys series, similar conclusions can be made about those who are Black/Black British.

These results suggest the presence of other cultural and contextual effects underpinning this relationship. Religion and religious adherence is often cited as a potential explanation, as some religions, like Islam, explicitly forbid gambling. However, analysis of the combined 2012 English and Scottish Health Surveys showed that ethnic status was independently associated with both problem gambling and non-gambling even when religious status was taken into account. This suggests a broader set of processes and mechanisms influence this association.

Similar findings have been reported in the USA and New Zealand. In America, lifetime rates of problem gambling were higher among Native Americans/Asians and Black groups than White, though not significantly higher among Hispanic groups. The authors suggested that alongside socio-economic differences, cultural differences and different belief systems attached to gambling could play a role in understanding this. They also pointed to post-immigration stress and adjustment as an explanatory factor (Alegria et al, 2009). In New Zealand, the harm paradox was evident with Asian and Pacific groups being far less likely to gamble but problem gambling rates being significantly higher than those of European backgrounds. The experience of broader gambling harms<sup>19</sup> was also significantly higher among Pacific groups (Walker et al, 2012; HSC, 2012).

Stakeholders identified Chinese communities as vulnerable to harm. There are no current British-based estimates of the prevalence of gambling problems among Chinese communities. This is because sample sizes from the BGPS and health surveys series are too small to identify those of Chinese origin for analysis, and, our knowledge no bespoke studies have been conducted. The best estimates remain those from a study conducted in 1996 of a representative sample of British casino patrons. This study concluded that problem gambling estimates were three times higher among Chinese casino patrons than those from other ethnic groups. This suggests that even when propensity to engage in casino gambling is taken into

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<sup>19</sup> This was measured through two questions about whether the respondent had experienced arguments about the time and/or money spent gambling and whether someone in the household had to go without something that they needed because someone was gambling too much.

account (in this study by sampling casino patrons) those of Chinese origin had elevated rates of problematic gambling (Fisher, 2000).

Further research into casino gambling behaviour among Chinese was conducted in 2006/07. This anthropological study concluded that whilst cultural practice and setting played a part in shaping Chinese gambling behaviour, other important factors were the material setting and structure of people's lives. Seeing gambling as being '*in the blood*' of Chinese people was viewed as dismissing the role of broad structural factors shaping behaviour, including that of corporate practice and the distribution of gambling opportunities (Loussouarn, 2011). Brief mention of these issues is given by Chan (2000) in her review of experiences of Chinese migrant women in Manchester, citing that irregular working hours and shift patterns among restaurant workers meant that gambling in casinos was one of very few forms of leisure/entertainment available to male Chinese workers (Chan, 2000). Here it is not just an ingrained Chinese culture of gambling that shapes participation but also patterns of employment and more limited leisure opportunities.

These themes have been discussed in an expanding body of literature in Australia, investigating the experience of gambling among Chinese groups. A critical review of the literature concluded that despite different methodological approaches, problem gambling rates among Chinese in Australia are higher than those of Caucasians. This review also cited emerging themes from qualitative research relating to migrant status as factors which underpinned Chinese communities' propensity to gamble. These included poor social support and casinos functioning as a place where Chinese could meet and be with other Chinese, stress and financial insecurity, with gambling being seen as a means to escape and differences in access, availability and state promotion of gambling (Loo, Raylu & Oei, 2008; Scull & Woolcock, 2005).

Finally, some studies have emphasised high reticence among Chinese communities to access help for gambling problems. Explanations given relate to different cultural understanding and suspicion of western medicine but also shame and stigma attached to admitting problems (Chan, 2000). Papineau (2005) stated that in the People's Republic of China gambling is viewed as synonymous with greed and individualism. Depending on the extent to which these values are imported into migrant communities, this may affect willingness to admit to gambling problems.

### *Summary*

There is consistent evidence that those from Asian or Black backgrounds are more vulnerable to gambling problems and there is clear evidence of the harm paradox at work in these associations.

Like many other areas, the mechanisms underpinning these associations are little explored and are likely to be varied, ranging from religious adherence, cultural beliefs and practices, the economic structure and material setting of people's lives and jurisdictional differences in the provision of gambling. In this way, ethnic status may be a visible marker of vulnerability which masks a range of other processes.

Although Chinese were singled out for specific attention by stakeholders, there is very little British evidence which considers this. However, earlier findings from studies in the mid 1990's and anthropological insight from Chinese casino patrons, along with supporting evidence from other jurisdictions, like Australia, suggests that Chinese should also be considered a vulnerable group. Indeed, suggestions that those from Chinese groups are less likely to seek help because of culturally-associated fears of stigma and shame suggest that this group may be even more vulnerable to harm than Caucasians. This remains to be investigated.

## Homeless people

### *Stakeholder perspectives*

Some stakeholders felt that homeless people may be vulnerable to gambling-related harm. For one stakeholder this related to broader issues of social isolation, whereby they felt people who were potentially vulnerable to harm were those who had few opportunities to make an investment, either financially or socially, and used gambling to fill this gap. Another stakeholder argued that, in their opinion, if a homeless person was going into a gambling establishment then they should not be allowed to gamble because they lacked the resources to do so and thereby had greater risk of harm.

### *Definitions/context*

In Great Britain, there is a legal definition of homelessness which is enshrined in the Housing Act (1996). Under these provisions, a person is legally defined as homeless if:

- they have no accommodation which they are entitled to occupy,
- the accommodation they are entitled to is of such poor quality they cannot reasonably occupy it,
- they have been illegally evicted or,
- they are in accommodation which they have no legal right to occupy.

Therefore, homelessness does not simply refer to being without shelter or sleeping rough, there is a broader range of circumstances under which someone may be homeless (for example, squatters) and people can move in and out of homelessness. In Britain in 2012/2013, it was estimated that there were around 53,000 homeless households<sup>20</sup> and a further 2,700 rough sleepers (DCLG 2015; DCLG 2014).

### *Evidence*

There is a growing body of evidence highlighting a strong relationship between gambling problems and homelessness. A number of studies, despite differences in sampling approaches, ways of measuring gambling problems and cultural contexts, have demonstrated higher rates of problem gambling among homeless population groups. This pattern has been observed among homeless people in Westminster, London; homeless attending substance treatment clinics in Boston, Massachusetts; among homeless people in St Louis, Miss; in homeless shelters in Toronto and finally through comparisons between those visiting health care clinics (for homeless and non-homeless populations) in Albuquerque, New Mexico.

In all of these studies, the rates of problem gambling observed among homeless populations were substantially higher than general population estimates. For example, Sharman et al (2014) estimated that 11% of homeless<sup>21</sup> interviewed in Westminster were problem gamblers, compared with problem gambling prevalence rates of 0.4% among adults living in private households.<sup>22</sup> A further 11% were at-risk of gambling related harm.

With the exception of Heffron et al (1997), these studies have all sampled homeless people from those accessing services and so have been able to provide estimates of problem gambling among these sub-groups but have not explored problem gambling as a predictor of homelessness. Two studies have, however, analysed data from general population samples which included information about those who had and had not experienced homelessness.

The first study analysed administrative data of US veterans and, after controlling for other confounding factors, found that problem gambling status was the second most important predictor of homelessness among this group (Edens et al, 2011). The second study analysed data from a longitudinal survey of adolescents who had self-reported experience of homelessness. This study did not find an association between gambling behaviour and

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<sup>20</sup> A homeless household is one which is deemed eligible for assistance from their local authority, is unintentionally homeless or falling within a priority need group.

<sup>21</sup> This study focused on those presenting at shelters for homeless people so represents a conservative definition of homelessness.

<sup>22</sup> This comparison was made using data from the combined Health Surveys 2012 report. See Wardle et al, 2014

experience of homelessness (Shelton et al, 2009). However, the measure of gambling behaviour used in analysis was whether gambling had caused serious or repeated problems with family or friends. This is just one aspect of harmful gambling behaviour and it may be that other harms, like financial difficulties, are associated with homelessness.

Finally, a couple of in-depth qualitative investigations of the relationship between gambling and homelessness have been conducted, mainly in Australia (Rota-barterlink & Lipmann, 2007; Holdsworth et al, 2011). These studies have highlighted two main processes underpinning the relationship between homelessness and gambling.

The first is that gambling contributes to homelessness through a number of complex pathways. These include gambling placing strain on financial resources leading to inability to pay rent/mortgages and putting strain on relationships, with relationship breakdown being associated with homelessness. These pathways also include a range of intersecting structural and individual features such as disadvantage, poverty, social isolation, mental health and substance abuse issues.

The second process is continued gambling among homeless population groups for a range of reasons. Holdsworth et al (2011) argued that housing-related stress increases vulnerability for gambling harm by creating instability, insecurity and the corrosion of health and wellbeing. In their study there was evidence of people using gambling to '*ease the conditions*' of being homeless. This included gambling as a method to relieve the types of stress described above and gambling because it provided hope and escape from the realities of their lives.

There were also practical reasons: the gambling venues gave homeless people somewhere to go. Venues provided warmth, shelter, were a safe place to be and were a place for homeless people to connect with others, a way for them to be part of a community and so to relieve social isolation (Rota-barterlink & Lipmann, 2007; Holdsworth et al, 2011). Griffiths (2014) has noted that similar processes may be evident in England and one stakeholder commented that they had witnessed this first hand, with homeless people being tolerated in certain gambling venues.

### *Summary*

There is a small but growing body of research highlighting the association between homelessness and gambling. The relationship is complex and is likely to work in both directions, with gambling contributing towards the determinants of homelessness and housing instability for some and/or being "*a way of negating some the negative experiences of [homelessness]*" (Holdsworth et al, 2011) for others. Statistical analysis conducted to date sheds little insight on



these processes. Many of the North American studies cited measured lifetime rather than current problem meaning it is not certain from these studies that gambling problems and homelessness were concurrent. However, given the growing body of evidence across space and time demonstrating the strength of the relationship, and in the absence of further information about the processes underpinning this, homeless populations should be viewed as a vulnerable population group.

## Constrained economic circumstances

### *Stakeholder perspectives*

Most stakeholders felt that those with more constrained economic circumstances could be considered vulnerable people generally and vulnerable to gambling harm. Those with low incomes and/or those who were unemployed or with unstable employment were seen as potentially vulnerable. This tended to be based on a definition of harm as spending more money than you were able to afford which meant you had to go without other things.

However, the concept of the 'poor' being a group vulnerable to harm was contested among some stakeholders. There was concern that defining 'the poor' as a vulnerable group harked back to a moral agenda by which the '*chattering classes*' tried to control and regulate what working class people should and should not do. Others felt the concentration on the poor was '*offensive*' (L) saying it was akin to the dialogue in the twentieth century when people would say "*oh, the poor, they smoke and drink themselves to death*" (L). Another stakeholder felt that increased vulnerability among lower income groups was related to their increased engagement in gambling generally.<sup>23</sup>

Among these stakeholders it was felt that broader societal and contextual factors should be considered rather than focus on low income alone. It was suggested by one stakeholder that focus should be on those experiencing financial difficulties, rather than low incomes *per se*.

For some, the relationship between economic circumstances and gambling extended beyond a simple relationship between money, resources and gambling. Unemployment, for example, was seen as a stressor which could make problems more likely. In this way, employment circumstances were related to the experience of broader difficulties, as one stakeholder described "*there's lots of literature associating unemployment with psychological difficulty and showing that it's causal*" (A) meaning that those who were unemployed may be more vulnerable for a range of reasons, not just because they had less money to spare.

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<sup>23</sup> This assertion can be tested by comparing problem gambling and at-risk rates conditional on being a gambler (Forrest & McHale, 2011).

## *Definitions/context*

Interviews with stakeholders highlighted a range of economic issues for consideration – these included terms like poverty, poor, low income, under-employed. Defining more clearly what is meant by some of these terms is important. For example, when thinking about low income, how low is low? Defining poverty is also complex. This can be considered in both an absolute and relative way. Relative poverty has been defined as where *“resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities”* (Townsend, 1979).

This clearly highlights contextual understandings of poverty whereby the relative threshold is set in comparison to ordinary living patterns and customs of people within a jurisdiction. As one stakeholder noted:

*“what makes someone vulnerable is not just a person's make-up but what society tells them to be. If a society tells you that you should aspire to be being rich, then it makes you more vulnerable to taking risks towards those goals.”* (A)

At a more practical level, searching for evidence about the relationship between income and gambling should take into account a number of key points.

First, in policy circles, it is broadly accepted that measures of household income should be the focus of analysis. This means looking at equivalised household income, a measure of income that takes into account the size and composition of the household so that incomes of all households can be compared on an equal basis. For example, an individual earning £25,000 a year living alone has relatively different income levels to someone earning the same amount but who also supporting a partner and children. For this reason, focus in the QSR was given to evidence that compared equivalised household incomes.

Second is consideration of what counts as low. In Britain, poverty is typically described as a household income that is below 60% of the median income level (Child Poverty Act, 2010). As an example, if median household income were £25,000 then the poverty threshold would be any household with an income of less than £15,000. Because of this clear policy definition, evidence presented also focuses on this threshold. In British-based studies, household income is typically analysed in quintiles and behaviours among people in the lowest income group compared with those in the highest income group. Looking at the combined health survey data (Wardle et al, 2014), shows that focus on those in the lowest income quintile is a good proxy for those households living in relative poverty. In this dataset, households with income 60% below the median were those with an income of £14,819 or lower. Households in the lowest income quintile were those with an income of less than £13,057 per year.

Finally, stakeholders also spoke about those in financial difficulties. This is independent of income as people at all levels of income can have problems with their finances. It is recognised that the experience of financial difficulties and debt can be a temporary, transient situation, with people employing a range of ways to manage their difficult circumstances. As Barnard et al (2013) state, the term 'debt' itself needs careful articulation and should be considered alongside broader narratives around financial management to understand how financial 'debt' is experienced and managed. There have, however, been very few studies which examine this broader articulation. Therefore, the QSR included evidence relating to the experience of different kinds of indebtedness and gambling behaviour, with indebtedness broadly defined as use of credit, pay day loans, borrowing from family or friends or defaulting on bills.

## *Evidence*

### *Household income/relative poverty*

British-based evidence about the relationship between household income and gambling behaviour is mixed. Generally studies like the BGPS series have shown that those from low income households are less likely to gamble overall. Unlike other groups, where this can largely be attributable to differences in the popularity of the National Lottery, this is not the case with low income households. Those from low income households generally had lower participation rates in other (non-lottery) forms of gambling than those from higher income households. Exceptions were bingo and scratchcards, where those from low income households were more likely to engage (Wardle et al, 2011).

Evidence about relationship between income and at-risk or problem gambling rates, however, is mixed. The 2007 BGPS showed no significant differences between the lowest and highest income households in term of problem gambling prevalence (0.9% vs 0.4%) though this may be because the study was underpowered to detect differences at this level (Wardle et al, 2007). The BGPS 2010 did show that rates of problem and at-risk gambling were higher among the lowest income households, yet this finding was not replicated in the combined health surveys study even though income was associated with problem gambling in the regression models (Wardle et al, 2011; Wardle et al 2014).

Reed's analysis of the Living Costs and Food Survey (2011) further highlighted the complex relationship between household income and gambling. Analysing data from 2008/2009 he showed that households with the lowest income were less likely to gamble than those with higher incomes. However, those from low income households who did gamble spent a higher proportion of their total income on gambling, showing that when they do engage they engage more heavily than their higher income counterparts. He also analysed the profile of households

with the heaviest engagement in gambling and found that they were roughly equally spread across the income distribution, though they were less likely to come from the lowest income households. He concluded that:

*“heavy gambling activity is not the exclusive preserve of the rich, but involves a significant number of households on middle and low incomes” (Reed, 2011).*

### ***Financial difficulties and debt***

As noted above, financial difficulties and debt are not static and are likely linked and mediated through a range of processes including access to formal and informal sources of credit, financial management, personal control and income. Given the mixed relationship evident between gambling and household income, it is worth considering the broader relationship between financial difficulties and gambling behaviour. Evidence from the BGPS 2010 showed that both at-risk gambling and problem gambling rates were significantly higher among those who had money problems in the past month. In fact, the problem gambling prevalence rate of 6.1% among those with severe money problems was the highest figure seen among all socio-economic characteristics considered (Wardle et al, 2011).

The 2007 APMS survey also highlighted a strong relationship between the experience of debt and problem gambling. Overall, 8% of English adults experienced some form of debt, among problem gamblers it was 38% (Barnard et al, 2013). Two studies have used the APMS results to explore this relationship further.

The first specifically looked at the relationship between gambling, debt and financial management among people with a range of gambling behaviour, who were followed up from the original APMS study (Barnard et al, 2013). This qualitative investigation revealed a complex relationship between financial management and gambling expenditure. Some gamblers displayed controlled approaches to financial management generally but uncontrolled approaches to gambling. Some had chaotic approaches to both whilst others had controlled approaches to both or controlled approaches to gambling expenditure but uncontrolled approaches to broader financial management. This highlighted the non-linear relationship between financial management and gambling behaviours. It also highlighted a group of people who have very good financial management systems and strategies generally, but who have chaotic spending patterns when they gamble. Their uncontrolled gambling behaviour was not due to deficient financial skills but due to their interaction and relationship with gambling itself.

This study also traced pathways into debt among gamblers and highlighted the credit environment as an important factor. Here, easy access to credit facilitated the gambling

behaviour of some and the authors noted examples of where access to expensive credit (via payday lenders) was used almost instantaneously to gamble. Informal credit through friends and family also influenced ability to gamble.

The second study (Meltzer et al, 2012) analysed APMS 2007 data to explore the relationship between debt and common mental disorder. As noted by Meltzer et al (2012), financial stressors such as unemployment, benefit cuts, real term wage decreases and pension cuts are all financial stressors that can be related to common mental disorders and the experience of debt. Findings from this study showed that being in debt and having an addictive disorder, such as problem gambling, were related to the experience of common mental disorders.

This highlights the complex relationship between financial stressors, gambling and other mental health conditions. Focusing on the relationship between depression and debt, Meltzer et al (2012) noted that a dual set of mechanisms are likely to occur: people with debt maybe more likely to experience mental health problems but those with mental health problems may be more likely to experience debt. This study showed that gambling behaviour was also involved in this relationship.

The APMS 2007 survey also included questions about access to credit. To our knowledge, the relationship of this to gambling behaviour has not previously been published.<sup>24</sup> Questions asked whether participants had sold anything to a pawnbroker, taken a loan with a money lender, bought goods on a hire purchase scheme or borrowed from family or friends. Overall, 3% of adults in England had borrowed money from one of these sources. Among problem gamblers rates were over double with 7% having borrowed money. Taking age, sex and ethnicity into account, taking a loan from a money lender or pawning goods was significantly associated with at-risk and problem gambling, the odds of being an at-risk/problem gambler being 2.1 times higher among those who borrowed money from these sources.

This relationship between gambling expenditure and credit was supported by analysis from Brown et al (2011). They analysed the Expenditure and Food Survey and showed that making current credit repayments was associated with a 5 percentage point increase in probability of being a gambler. They also noted that the level of credit repayments made was positively associated with a higher probability of increased gambling expenditure. Their analysis did not show any variations in patterns by household income, meaning the increased probability of gambling among those with credit repayments was evident among lower and higher income households alike. The authors concluded that:

*“while richer households may be able to better protect themselves against financial uncertainty, those in poorer households are less able to do so. Given the current unease*

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<sup>24</sup> The section that follows is based on new analysis conducted for this report, see Appendix A for tables.

*amongst policy makers regarding the levels of secured and unsecured debt at the household level, the similar attitude to financial risk-taking in terms of their [low income households'] propensity to gamble for given levels of indebtedness may be a cause for concern" (Brown et al, 2011).*

### **Unemployment**

In Reith and Dobbie's (2013) qualitative investigation of change in gambling behaviour over time, they noted that:

*"employment patterns were more unstable and insecure among those whose behaviour progressed or was non-linear, with periods of unemployment and frequent changes of job common" (Reith & Dobbie, 2013).*

This describes a group of gamblers who either experienced increasing problems with their gambling over time or those whose difficulties fluctuated. Reith and Dobbie also noted that:

*"employment patterns were more stable among those whose behaviour was consistent or reduced, with fewer periods of unemployment and a tendency towards long-term employment in the same job" (Reith & Dobbie, 2013).*

This means that where gambling behaviours did not change or people experienced fewer difficulties over time, there was a relationship with more stable employment.

Evidence from cross sectional surveys also highlights an association between employment and problem gambling, with those who are unemployed typically having higher rates of at-risk and problem gambling than those who are in paid employment. In the BGPS 2010, 13.6% of people who were unemployed were categorised as at-risk gamblers compared with 7.5% for those in paid employment. A further 3.3% were problem gamblers, compared with 0.9% of those in paid employment (Wardle et al, 2011). Similar patterns were evident in the more recent health surveys series. Whilst this does not look at movement over time, it does highlight that those who are unemployed may be more vulnerable to experiencing difficulties with their gambling.

These studies also showed that those who were unemployed were less likely than those in paid employment to gamble generally (in the combined health surveys report 59% of those who were unemployed and 71% of those who were employed had gambled in the past year). However, this hides a broader pattern by which those who were unemployed were far more likely to take part in certain activities (such as sports betting, playing slot machines, playing machines in a bookmakers and casino table games) and gambled more frequently than their counterparts in paid employment (Wardle et al, 2011).

Therefore, certain activity preferences and frequency of engagement are likely to combine to produce greater risk of problems among unemployed people. In a study of those holding loyalty cards for one of three major bookmakers, unemployed men specifically emerged as a key risk group. As with the other studies, this group had elevated rates of problem gambling and unemployed men had odds of being a problem gambler that were four times higher than those in paid employment (Wardle et al, 2014).

### *Summary*

The evidence relating to household income and gambling harms is mixed, showing that generally those of lower income are less likely to gamble but those that do spend a higher proportion of their income on gambling. This was highlighted as a concern given the (likely) lesser ability of lower income households to protect themselves from financial instability (Brown et al, 2011). However, as stakeholders noted, there is some unease about labelling all low income households as vulnerable as income, gambling, debt and money management are likely to interact to shape outcomes. However, in the absence of more detailed insight about financial management and debt, low income – particularly those defined as being in poverty - may serve as a reasonable proxy for vulnerability.

Focusing on debt and access to credit, there is a small but interesting body of research highlighting the relationship between debt and gambling, with those in debt and those using money lenders and/or pawnbrokers being more likely to be problem or at-risk gamblers. Meltzer et al (2012) highlighted the further complex relationship between debt, addictive behaviours and common mental disorders, showing how financial difficulties can be associated with multiple health conditions. The reciprocal relationship between financial difficulties and health problems was noted but this highlights a potential vulnerability to harm.

Looking specifically at groups who may experience financial problems, the relationship between unemployment and problem gambling has been highlighted in other international studies (see for example Castren et al, 2013). As stakeholders noted, the relationship between unemployment and gambling difficulties is likely to be more complex than these people having limited access to resources. Unemployment is related to the experience of psychological difficulties which may mediate this relationship. More work is needed to build on the insights of Reith and Dobbie (2013) about the relationship of employment instability to gambling careers. However, there is a consistent body of evidence showing that, for whatever reason, those who are unemployed and who gamble are more likely to experience adverse outcomes from their gambling than those in paid employment.

## Multiple deprivation

### *Stakeholder perspectives*

Some stakeholders felt those living in deprived areas were potentially more likely to be vulnerable people generally and more vulnerable to gambling-related harm. Among these stakeholders there was a sense that where you lived, your communities, your local culture and access to services mattered. This was interwoven with views about area-based poverty and also pre-existing supply of gambling opportunities. One stakeholder described this as those:

*“who live in poverty and impoverished areas where there are lots of gambling opportunities and there are areas where gambling shops cluster, with pawn brokers and pubs, and people who live in those areas are most vulnerable.” (A)*

### *Definitions/context*

In policy terms, it is recognised that deprivation is multifaceted and is not just about poverty and income. In England, deprivation is measured using the Index of Multiple Deprivation (IMD). The Department of Communities and Local Government is clear, this is a measure of deprivation not affluence (DCLG, 2011). In policy terms deprivation means:

*“a broad range of issues and refers to unmet needs caused by a lack of resources of all kinds, not just financial” (DCLG, 2011).*

In analysis, the most commonly used tool is IMD. This brings together several different domains of deprivation: income; employment; health; disability; education, skills and training; barriers to housing and services; living environment and crime. These domains can be analysed separately or can be combined together into a single index of deprivation. Similar indices are available for Scotland and Wales, though because of different geographies and ways of calculating deprivation, they cannot be combined across the whole of Great Britain.

In addition to IMD, some types of deprivation can be measured in other ways. For example, in 2004, the Department of Health announced the identification of Spearhead Primary Care Trusts (PCTs). These were the 88 PCTs identified as the most health deprived in England. Health deprivation was measured across five areas:

- male life expectancy at birth,
- female life expectancy at birth,
- cancer mortality rate in under 75s,
- Cardio Vascular Disease mortality rate in under 75s and,



- Index of Multiple Deprivation 2004 (Local Authority Summary), average score.

By identifying Spearhead PCT areas, the aim was to create strategies to help tackle inequalities in health outcomes and behaviours by targeting resources in areas where it was needed most.

Finally, drawing on evidence from public health, there is a broad acceptance that where people live matters to health. In 2010, the Marmot Review<sup>25</sup> stated that:

*“inequalities in health arise because of inequalities in society – in the conditions in which people are born, grow, live, work, and age”* and that tackling these inequalities was a matter of social justice (DH, 2010).

The RGSB increasingly advocates that a public health approach be taken to understanding gambling behaviour. Following the recommendations of the Marmot Review, this suggests a focus on inequalities in behaviour, the conditions of people’s lives (including where they live) and the impact of gambling on wellbeing more broadly.

## **Evidence**

British-based evidence relating to gambling and deprivation has tended to focus on two themes. The first is the relationship between deprivation and gambling behaviour, the second is the distribution of gambling opportunities and deprivation.

Looking at relationships between gambling behaviour and deprivation first, the BGPS, the English and Scottish health surveys and APMS 2007 provide some broadly consistent evidence. The first pattern is that those living in the most deprived areas are either less likely or are just as likely to gamble as those living in the least deprived areas. The most recent survey evidence from the health survey series saw no differences in participation by deprivation once age was taken into account (Wardle, 2013; Wardle & Seabury, 2013). According to Orford et al (2010) this masks a pattern where those in deprived areas who do gamble do so more frequently than gamblers in less deprived areas.

These studies also tended to show significant variations in the prevalence of at-risk or problem gambling by deprivation. In the BGPS 2010, problem gambling prevalence rates were higher among those living in more deprived areas. At-risk gambling rates were also higher among those living the most deprived areas (9%) than those in the least deprived areas (5%) (Wardle et

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<sup>25</sup> The report “Fair Society, Health Lives” is known as the Marmot Review. It is the culmination of an independent review chaired by Professor Sir Michael Marmot into evidence-based strategies for reducing health inequalities in England. This review was commissioned by the Department of Health.

al, 2011). This is supported by the APMS 2007 survey whereby problem gambling rates were 1.3% among those in most deprived areas and 0.4% for those in least deprived areas.

This demonstrates that whilst gambling participation by deprivation may be similar, those living in deprived areas who gamble are more likely to experience problems (in the APMS survey, problem gambling rates conditional on being a gambler were 2% for those living in the most deprived areas and 0.6% for those in least deprived areas).<sup>26</sup>

The Scottish Health Survey also showed a strong relationship with deprivation (measured by the Carstairs Index). Those living in the most deprived areas in Scotland were 6.9 times more likely to be a problem gambler than those living in the least deprived areas (Wardle, 2013). Finally, in the Health Survey for England moderate risk/problem gambling rates did not vary by deprivation but there was a significant association with Spearhead PCT status. Those living in Spearhead PCTs were 1.9 times more likely to be a problem/at-risk gambler than those who did not (Wardle & Seabury, 2013). The authors concluded that:

*“It appears, on this evidence, that whilst those who live in deprived areas may be no more likely to gamble than others, those who do are at greater risk of experiencing some problems with their behaviour. This has the potential to contribute further to health inequalities already known to exist in these [Spearhead PCT] areas”* (Wardle & Seabury, 2013).

Finally, similar results were found among a survey of people who played machines in bookmakers and held a loyalty card holder for one of three bookmakers (Wardle et al, 2014). This study showed that whilst the number of gambling activities undertaken did not vary by deprivation, those living in more deprived areas had higher rates of problem gambling than those living in less deprived areas (Wardle et al, 2014). This study concluded that even though loyalty card holders come from:

*“more economically constrained backgrounds than machine players as a whole, there is a distinct social gradient evident within this group. [Loyalty card customers] who have low incomes, live in deprived areas, and are economically inactive gamble on machines more frequently and are more likely to experience gambling problems”* (Wardle et al, 2014).

In Britain, there has been some consideration of the distribution of gambling venues and area characteristics, including deprivation. These studies have focused on the distribution of machines (Wardle et al, 2013) and the distribution of bookmakers (Astbury & Thurstain-Goodwin, 2015). The first study looked at the distribution of all types of gambling machines in

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<sup>26</sup> This is based on new analysis conducted for this report, see Appendix A for tables.

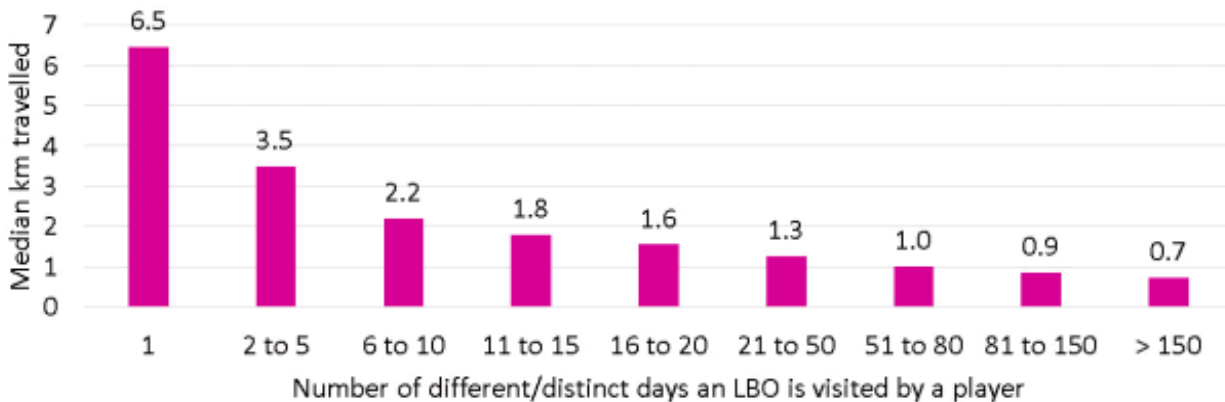
Great Britain and identified areas of high density machines. These high density machine zones had higher deprivation scores than other areas. Likewise similar analysis was conducted looking at the profile of areas where Licensed Bookmakers Offices (LBOs) were located. Analysis also showed that areas with LBOs had higher deprivation scores than areas either with no LBO or in urban areas generally.

These two studies showed the unequal distribution of machines and LBOs in Great Britain, being disproportionately placed in areas of greater deprivation. Furthermore, Astbury & Thurstain-Goodwin (2015) also highlighted how LBOs, typically, serve local markets, with the most regular customers residing locally to the LBO in which they gamble. Using data from loyalty card records, they compared where someone lives with location of the LBOs in which they gambled and concluded that:

*“an estimated 8% of loyalty card players sampled live within 400m of an LBO where they have played a machine, nationally. 23% live within 1km, and 46% live within 3km, suggesting quite local choices being made and a typical pattern of accessibility to goods and services”* (Astbury & Thurstain-Goodwin, 2015).

Figure 2, reproduced from Astbury & Thurstain-Goodwin (2015), shows that those people who played machines on 80 or more different days between September 2013 and June 2014 had a median distance travelled from their home to the LBO of less than one kilometre. This indicates that more regular users of machines in LBOs are more likely to be local to the area. This study also concluded that machine players were more likely to live in neighbourhoods with significantly higher deprivation levels than either the national average or the average for urban areas.

Figure 2      Median distance travelled to LBO by frequency of visit



However, not all deprived areas had LBOs and both Wardle et al (2013) and Astbury and Thurstain-Goodwin (2015) have highlighted a range of mechanisms likely to be associated with this. For example, areas of greater deprivation are likely to have cheaper rents, some may have greater footfall being on high street locations, and also serve a population more traditionally interested in the products that LBOs offer.

Similar patterns have been identified in other jurisdictions, such as Canada and New Zealand. In Canada, two studies reported a positive relationship between access to video lottery terminals (gambling machines) and areas of increased socio-economic disadvantage (Robitaille & Herjean, 2008; Gilliland & Ross, 2005). In New Zealand, a recent assessment of increases in gambling-related harms during the financial crisis concluded that this increase was disproportionately higher among those in deprived areas (Tu et al, 2014). The authors concluded that poorer financial resilience, combined with financial stressors and an unequal distribution of gambling opportunities, with gambling being more available in deprived areas, were likely explanations for this result.

### *Summary*

Evidence from a range of surveys has shown that those living in more deprived areas, measured either through IMD or other indicators like Spearhead PCT, are more likely to experience problems with their gambling behaviour. This is despite having roughly similar levels of past year gambling participation to those who live in less deprived areas. According to Orford et al (2010), one explanation for this might be that those living in deprived areas who gamble do so more often than others. Looking at the distribution of machines and LBOs, there is clear and consistent evidence of a spatial skew, whereby high density machine zones or areas with LBOs are more deprived than others. Whilst a range of reasons may explain this distribution, the unequal pattern remains.

As with other public health areas there is evidence that, when it comes to gambling-related problems, local areas and communities matter as there are inequalities in outcomes by area deprivation in Britain. This is observed in other jurisdictions and so is consistent across time and space, though the mechanisms underpinning this relationship need further consideration.

## Other groups/people

### *Stakeholder perspectives*

There were some groups/people that one or two stakeholders mentioned as being potentially vulnerable to gambling-related harm. These were:

- women,
- older people,
- prisoners/those on probation,
- existing problem gamblers and,
- those with certain psychological or personality traits.

With regard to women, there was disagreement among stakeholders as to whether this group were vulnerable to harm or not. Those arguing in favour did so because they believed women were increasingly accessing gambling in greater numbers. In their minds, this made women today more vulnerable to harm than previously. In this way, their 'vulnerability' was defined as a consequence of the changing role of gambling in society, where women were encouraged to take part in gambling activity. Others, however, did not think that women were more vulnerable than other groups and felt uncomfortable labelling a broad cross section of society as vulnerable.

Stakeholders who mentioned older people drew on similar logic to those for women, arguing that changes in the way that gambling was provided in Britain meant that older people may be more vulnerable to gambling as a function of increased participation. Some also noted that older people are more likely to be on fixed incomes and may have less resilience to financial difficulties.

Some stakeholders argued that prisoners and those on probation could be especially vulnerable to gambling harm. It was argued that this was because of the gambling culture that exists within prisons which may last beyond custodial sentences and impact on those on probation.

One stakeholder (and one of the peer reviewers) felt that those who are existing problem gamblers could also be considered vulnerable to harm. This was because some people could currently be experiencing acute harms because of their ongoing problems and/or could be vulnerable to experiencing harm at a future point because of the dynamic way gambling problems can fluctuate over time.

Finally, one groups of stakeholders (industry) thought that those with certain personality types could be vulnerable. This was viewed as just one aspect of vulnerability, alongside cultural explanations, factors relating to resources and those relating to life event and transitions.

A key theme cutting across the articulation of women, older people and prisoners as vulnerable was that of social isolation. When asked to describe what they thought made these groups vulnerable, stakeholders described a range of socially isolated individuals. This included the single mother looking for a distraction from the pressures of family life, or engaging in online gambling as a way to connect with others; older people who were lonely or had experienced bereavement, and those on probation who may experience difficulties reintegrating into society, with gambling offering a way to be with others. In this way, it was not necessarily the characteristic of the group (women, older people, prisoners) who were perceived as vulnerable but rather their life experiences, events and transitions that contributed towards vulnerability.

### *Definitions/context*

With regards to women and older people, there was a view that these groups were gambling more and therefore more likely to be vulnerable to harm. With regards to women, this followed the concept of the ‘feminisation’ of gambling put forward by the Australian Productivity Commission (APA, 1999). This posits that more women gambling means more women experiencing problems. It sees a fairly linear relationship between gambling participation and the experience of harm. It does not consider the broader range of context and mechanisms that could mediate this relationship. Stakeholders articulated similar views with respect to older people.

Some stakeholders described those on probation or prisoners as vulnerable to harm. Probation can mean two different circumstances, either those with a commuted custodial sentence or those released from a custodial sentence. Stakeholders were thinking about the latter.

With regards to problem gamblers, it is increasingly recognised that behaviours can be very variable over time and that stasis is not the norm (Reith & Dobbie, 2013). Problem gamblers who seek treatment often ‘relapse’ and can move in and out of problem gambling experience. This dynamic movement in behaviour and fluidity of gambling patterns needs to be recognised as problem gamblers are not necessarily a clearly identifiable or stable group. This point is often missed. Broad stability in overall problem gambling prevalence rates (Wardle et al, 2014) can mask movement in and out of problems over time among different people.

Finally, there has been great deal of research that focuses on the links of certain personality traits with gambling behaviour. This tends to either focus on the relationship between the individual and the activity during the gambling experience or on the personality traits of problem gamblers. Because of the wide body of research undertaken in this area, this report focuses on summarising findings from previous reviews and meta-analysis.

## *Evidence*

### ***Women***

Internationally, there is limited evidence supporting ‘feminisation’ of gambling. Studies in Sweden and the USA have found little support that either more women are now gambling than previously and that more women are now experiencing problems (Svensson et al, 2011; Volberg, 2003). Detailed analysis of this in Britain (using the BGPS series) concluded that there are some changes in gambling behaviour but outcomes differ for different age cohorts of women (Wardle, 2015). Among older women, aged 55 and over, there was a clear pattern of increasing gambling engagement. However, there was no evidence of them experiencing greater problems than previously.

Among younger women, aged 16-24, there was also evidence of increased engagement in gambling. Specifically, those aged 16-21 started to gamble at a much younger age than older age cohorts and there was some evidence of increasing problems. It was speculated that those aged 16-21, as the generation growing up in the aftermath of the Gambling Act 2005 and who were ‘digital natives’, may be more influenced by these changes than earlier cohorts of the same age (Wardle, 2015).

Commensurate with the views of some stakeholders, other evidence has highlighted that some groups of women do indeed use internet gambling to escape from problems and to connect with others and this could be problematic for some (Corney & Davis, 2010).

### ***Older people***

There is limited evidence about the gambling experiences of older people in Britain. The BGPS series has consistently shown that older people (aged 65 and over) have lower gambling participation rates and tend to take part in fewer activities than their younger counterparts, though they do gamble more regularly on the activities they engage with (Wardle et al, 2011). Rates of at-risk and problem gambling are lower among this age group also. Evidence among women, showed that those aged 55 and over had the greatest increases in gambling participation between 1999 and 2010 though there was no commensurate increase in gambling problems (Wardle, 2015).

Internationally, there is a small but emerging evidence base about the gambling experiences of older adults. A recent systematic review documented the inconsistencies in the evidence base relating to older adults experiences of gambling, though typically showed that rates of gambling among older people were lower than younger people (Tse et al, 2012). This overview highlighted both negative and positive consequences of gambling in older age. For example,

some studies showed the older adults gambled because of a desire to be with other people. The authors suggested:

*“that gambling may offer a form of natural social support for older adults and that social isolation or loneliness may make older adults vulnerable to higher levels of participation in gambling” (Tse et al, 2012).*

The authors also highlighted:

*“that most of the studies on older adults’ gambling mainly examine adverse health consequences of gambling and associated risk factors. This skewed view may be limited in its ability to suggest meaningful protective factors within the context of productive aging” (Tse et al, 2012).*

In short, there is a need to better explore the why older people gamble, under what circumstances and how and why behaviours and outcomes vary for different groups of people.

### ***Prisoners/probation***

With regard to prisoners there is a small but growing body of international evidence showing that rates of problem gambling among incarcerated populations are significantly higher than those of other adults. Exploratory evidence from pilot studies in England showed that 10% of male prisoners and 6% of female prisoners reported being problem gamblers prior to incarceration. A further 37% of male and 23% of female prisoners were identified as at-risk gamblers prior to their prison sentence. These rates are significantly higher than those observed for adults in the general population (May-Chahal et al, 2012). International studies have reported similar findings, a prevalence survey of prisoners in Hamburg found that 7% of pre-trial detainees screened positively for gambling problems (Zurhold et al, 2014). In New Zealand, 16% of recently sentenced inmates were identified as probable pathological gamblers in the six months prior to imprisonment (Abbott et al, 2005) whereas in Canada, 27% of offenders in one institution reported some degree of problem with gambling (Turner et al, 2008).

These studies have tended to focus on the prevalence of problem gambling prior to imprisonment, rather than problems experienced whilst in prison. One Canadian study specifically looked at this, showing that half of those who had problems with gambling prior to incarceration continued to gamble and experience problems whilst in prison (Turner et al, 2013). As McEvoy and Spirgen (2012) note, there is lack of research on prisoners’ experience of gambling whilst incarcerated, how this is organised, and the risks associated with it.



Their exploratory study of inmates in Ohio demonstrated that gambling was a normative way of prison life, with many engaging and continuing to engage in gambling. This highlights a dual relationship between incarcerated populations and gambling. Problem gambling rates are elevated among those who subsequently go to prison, but gambling is also an endemic part of prison life that may encourage some problem gamblers to continue to engage or promote gambling among those who previously did not gamble.

One stakeholder felt that those on parole or probation could be especially vulnerable because of these dual processes. This was because they may have had problems previously and not received help, or because of the gambling culture within prisons created problems. Once out of prison, it was argued that this group may be socially excluded and stigmatised, have low incomes and look to gambling to relieve such stressors.

There is very little empirical evidence examining this. May-Chahal et al (2012) cite a study by Ricketts et al (2000) showing that of offenders on probation in South Yorkshire, 4.2% were problem gamblers. This was the only citation identified in the QSR looking at the experiences of gambling among those on probation. However, as early as 1988, this was identified as an issue with Bisset and Crate-Lionel (1988) reporting their efforts at Glen Parva (England) Youth Correctional Facility to engage parole officers in issues relating to problem gambling among youth.

### ***Problem gamblers/those seeking treatment***

With regard to problem gamblers, our literature search focused on the experiences of those receiving treatment. It was taken as given that those currently experiencing problems would also be experiencing harm and therefore should be considered vulnerable. To extend this, we sought to examine the extent to which those who were seeking help for gambling problems could also be considered a vulnerable group.

A few international studies have examined the experiences of those in treatment and their outcomes post-treatment. These studies looked at experiences of 'recovery' and 'relapse' either during or after treatment. No studies were identified that looked at these issues among those receiving treatment in Britain.

Before considering what the evidence says, it is worth noting that there are various perspectives about what 'recovery' from problem gambling and 'relapse' means (Ledgerwood & Petry, 2006). Nower and Blaszczynski (2008) specifically recognised this complexity and argued that the concept of recovery was imprecise. They argued that recovery should be viewed as any kind of movement along a spectrum of improvement.

This highlights that recovery from problem gambling is not, in the views of some, synonymous with abstinence from gambling. Approaches to treatment vary from total abstinence to allowing the gambler to re-engage in a controlled way. Processes of ‘natural recovery’ have also been noted, whereby the gambler is able to change and moderate their own behaviour without need for outside assistance. Whilst there is some literature on the success (or otherwise) of treatment, what is largely missing from the studies identified is clear articulation of intended treatment outcomes, making synthesis of this evidence base difficult (Ledgerwood & Petry, 2006). Furthermore, concepts of ‘relapse’ have been borrowed from substance use literature and it is not clear that ‘relapse’ has the same meaning in the context of gambling treatment. However, in the absence of a broader evidence base, the literature on gambling treatment and ‘relapse’ has been reviewed.

This small body of evidence shows high rates of ‘relapse’ among those receiving treatment. Few studies have attempted to quantify rates of ‘relapse’ and most are based on small samples making estimation potentially unreliable. A common theme, however, is that despite differences in the definition of ‘relapse’ and study methodologies, most participants experienced some form of ‘relapse’ after treatment (Oaks et al, 2012). In one study, the ‘relapse’ rate was as high as 92% (Hodgins & el-Guebaly, 2004). Ledgerwood & Petry (2006) have noted the lack of empirical base upon which to assess rates of ‘relapse’ but also highlighted parallels with alcohol and drug treatment and argued that the evidence available to date is consistent with broader knowledge from these areas.

A few studies have examined reasons for ‘relapse’ among problem gamblers and have highlighted the *“complex interplay between factors integral to predicting a relapse event”* (Smith et al, 2015) or stated that:

*“relapse is a complex, non-linear process involving factors that together can increase a gambler’s vulnerability to relapse”* (Oaks et al, 2012).

Reasons given for ‘relapse’ ranged from a variety of individual, personal and environmental features which interacted with each other. The urge to gamble has been highlighted as particularly important by a few studies, with the urge being triggered either internally (for example, through depression or mood variance) or externally (for example, as a response to gambling-related cues) (Smith et al, 2015).

Oaks et al (2012) conducted qualitative interviews with problem gamblers to examine their reasons for ‘relapse’. Along with negative states and emotions, financial difficulties and boredom, environmental triggers such as gambling accessibility and visual gambling cues (ranging from advertising to the venues themselves) were highlighted as factors which push people towards ‘relapse’. This is supported by work from Hodgins and el-Guebaly (2004) who

argued that social and situational cues in the environment were part of the explanation for 'relapse' (alongside others). Smith et al (2015) and Oei & Gordon (2008) discussed the relevance of gambling urges as an explanatory factor in 'relapse', with gambling urges being associated with both relapse and continuation of gambling. Finally, a longitudinal study of gambling behaviour among men, where data was collected and compared over 10 years, found that the strongest predictor of past year gambling problems was a history of past gambling problems, demonstrating the potentially recurring nature of gambling problems for some (Scherrer et al, 2007).

### ***Personality traits/cognitive distortions***

A few studies have examined the strength of evidence between certain personality traits and problem gambling. First, Johansson et al (2009) conducted a critical literature review looking at the factors associated with problematic gambling, including cognitive distortions. In this review risk factors with three or more empirically validated studies were deemed to be well established. Cognitive distortions, which included erroneous perceptions of gambling and illusion of control, were classified as well established risk factors for problem gambling. Odlaug & Chamberlain (2014), in a selective literature review of personality dimensions and problem gambling, noted that personality traits, such as impulsivity, were associated with gambling problems. However, in relation to impulsivity they also stated:

*“our understanding of the association between impulsivity and the development and maintenance of GD [gambling disorder]... is further complicated by research involving self-reported impulsivity, gender, environmental factors (such as socioeconomic status), and age of onset of gambling problems” (Odlaug & Chamberlain, 2014).*

In a broader review, Odlaug et al (2013) highlighted evidence showing that impulsivity is a key personality trait of pathological gamblers but also stated this could be mediated through a variety of other factors. They also noted that pathological gamblers experience a range of other personality disorders. Different types of impulsivity were considered by MacLaren et al (2011) in a meta-analysis. These were negative urgency (rash and emotionally motivated action); low premeditation (action without consideration of consequences); low perseverance (quick extinction of non-rewarded behaviour) and excitement seeking (action that results in sensory stimulation or arousal). They concluded that negative urgency and low premeditation were elevated among problem gamblers but that low perseverance and excitement seeking were not.

## *Summary*

In summary, there is little evidence that women as a whole represent a group vulnerable to the experience of gambling-related harm, though there is some emerging evidence that the younger females may be experiencing gambling differently to older cohorts. There is some plausible evidence that certain groups of women may be using some forms of gambling to relieve stress and make social connections, the broader impact of this should be monitored.

Evidence about older people is mixed, though theories about social isolation and the intersection with life events are plausible. However, some researchers note that gambling could be a social benefit to some older people. If so, the circumstances under which this holds true need investigating. Finally, there is some evidence that prison populations are vulnerable to gambling problems, both pre-dating incarceration and whilst imprisoned. There is a single British study suggesting that those on probation continue to be vulnerable to gambling problems, and reasoning given by stakeholders as to why this is seems plausible.

With regards to problem gamblers, it seems self-evident that those who are currently experiencing problems will be vulnerable to harm. Indeed all stakeholders felt that problem gamblers would be experiencing harm to some degree, whether they recognise this or not. Literature relating to a further group of problem gamblers, those in treatment or post treatment, was also considered. Although the evidence base is slim and fraught with definition difficulties, findings suggest a high degree of 'relapse' post-treatment with reasons for relapse including environmental cues alongside other individual and personal explanations. This is consistent with knowledge from alcohol and drug studies where the evidence base is more advanced.

Finally, there is a strong body of evidence highlighting the relationship between various personality traits, such as cognitive distortions or impulsivity, with problem gambling. However, little research has been conducted to explore the complex interaction of personality traits with other factors and their combined influence on the experience of broader gambling harms. Certain personality traits and/or cognitive distortions are just one potential aspect of vulnerability which is likely to intersect and be mediated by a range of other factors.

## 4 Key themes

### Policy context

- In Great Britain, there is a changing gambling policy and regulatory environment which has increased focus on risk. This new focus has been written into the Gambling Commission's updated Licensing Conditions and Codes of Practice and is highlighted in their advice to Local Authorities, stressing the need to build local area profiles into their Statements of Licensing Policy.
- Understanding local risk, local profiles and local circumstances and, based on this knowledge, taking appropriate steps to mitigate risk, are key components of this approach to regulation.
- Policy is also becoming more focused on understanding and mitigating gambling-related harm, rather than focusing on problem gambling alone. Other jurisdictions are taking similar approaches, though the research world has been slow to adopt this broader focus.
- Under the terms of the Gambling Act 2005, children and vulnerable people were singled out for special regulatory attention. Academics have supported focus on understanding the impact of gambling upon vulnerable groups. However, who is vulnerable, why and under what circumstances, has been subject to little investigation.

### This study

- Through consultation interviews with key stakeholders and review of research literature, this study aimed to explore and document the range of characteristics that suggest that someone may be vulnerable to harm from gambling.
- Given increasing policy emphasis on risk, harm and vulnerability, this study also sought to understand how different stakeholders define these terms, particularly in relation to the development of local risk profiles, and to briefly consider issues relating to standards of evidence.

### What is harm?

- Among stakeholders, there was a broad consensus that gambling-related harm meant adverse consequences arising from someone's gambling engagement that could affect the individual, their family, friends, broader social network or community.

- It was felt that these consequences could be short-lived or exist over a broader time frame. A person did not have to gamble themselves to be harmed by gambling. Harms could range in severity, for example ranging from arguments with partners to relationship breakdown.
- Most stakeholders argued that people did not have to be problem gamblers to experience harm, though stakeholders felt that most problem gamblers would experience some kind of harm.
- Harm was typically felt to arise when someone spent too much time or too much money gambling.
- Stakeholders also argued that the experience of gambling-related harm is subjective, as the range and depth of harmful consequences depends on the personal circumstances of the individual and those around them. This makes predicting who will experience harm challenging. As such, taking a probabilistic approach, thinking about who is **more likely** to experience harm given what we know about them, was recommended.

## Who is vulnerable to gambling-related harm?

- Some stakeholders felt that anyone could be vulnerable to gambling-related harm and that vulnerability was also subjective as it depended on a range of other circumstances.
- With the growing focus on risk assessment, it was recognised by stakeholders that identifying which groups might be considered more vulnerable or more susceptible was useful.
- Stakeholders identified youth, students, those with mental health problems, substance use/misuse issues, learning difficulties, certain ethnic groups, migrants, the homeless, those with constrained economic circumstances or living in deprived areas, prisoners, older people, those with certain personality traits and women as potentially vulnerable to harm. Problem gamblers were considered vulnerable as they were already experiencing harm.
- There is good evidence to support youth, those with substance abuse/misuse/excessive alcohol consumption, poorer mental health, those living in deprived areas, from certain ethnic groups, those with low IQs, those with certain personality traits and those who are unemployed as being potentially more vulnerable to harm.
- The evidence base was skewed towards comparisons of gambling, and problem gambling, prevalence rates by these characteristics and there was very little insight explaining the resulting associations. This likely masks some important and reciprocal relationships. For example, looking at mental health and gambling harm, it was uncertain whether gambling caused mental health problems or mental health problems

caused gambling harm. In reality, the relationship is likely to be much more fluid. As one stakeholder argued, it's likely to be a bit of both and insofar as that is true, then these groups should be considered potentially vulnerable.

- There is a smaller but emerging evidence base suggesting that homeless people, those experiencing financial difficulties and debt, and some youth with learning difficulties/disabilities may be also be vulnerable groups.
- There is some evidence to suggest that problem gamblers seeking treatment or who are attempting to overcome their problems are vulnerable to harm, for example through relapse. There is a small evidence base suggesting that a range of reasons contribute to relapse, including personal, social and environmental factors. This is consistent with evidence from similar areas, like alcohol or drug problems.
- Patterns of evidence relating to students, low educational attainment and low income were inconsistent, though the latter may serve as a proxy for financial difficulties which cannot be so easily identified at a local level. Evidence relating to migrants was sparse, though the rationale for viewing this group as vulnerable was plausible.

## Important considerations

- When thinking about who may be vulnerable to gambling harm, a probabilistic approach needs to be taken. The personal circumstances of each individual are not known. Therefore, broader generalisations have to be made. The groups listed above do not mean that everyone with those characteristics **will** experience harm rather that based on these characteristics there is an increased risk that they **may** experience harm. This is the central tenet of a risk-based approach to policy and regulation.
- Who is vulnerable and why is likely to vary based on broader political, social and economic changes. For example, students may become more vulnerable now than in the past because of changes to their financial circumstances. This needs to be considered and reviewed.
- There are likely to be a number of cross cutting themes which help explain why some groups are vulnerable to harm. Social isolation was one theme that emerged from stakeholder interviews and applied to many of the groups mentioned (prisoners, homeless, older people, certain groups of women).
- We should not think about groups of vulnerable people as silos. There are likely to be multiple and complex risk factors for harm. For example, youths who are doing badly at school, have learning difficulties, who live in more deprived areas or in households with relative poverty may be more at risk of gambling harms because of the existence of

these multiple risk factors. This has been little explored in gambling research. A growing focus on multiple risk factors would mirror a similar focus in other public health areas.

- If thinking is to focus on risk and therefore which groups are potentially more vulnerable, there is a need to consider what 'more' means and who is being compared. In some cases, vulnerability is defined in contrast to other groups (older vs younger; more vs less deprived). However, vulnerability can also be defined in comparison to previous behaviour (i.e., are women more vulnerable now than previously?). Both methods of comparison are valid, with the latter helping to identify where broader shifts and changes may be occurring.

## Limitations

- This review is constrained by existing evidence. A solid evidential base looking at broader gambling-related harms has yet to be developed. Therefore, evidence from the scoping reviews relies on studies looking at problem and at-risk gambling. This is not the same as gambling-related harm and therefore some groups or themes may have been missed.
- Because of the evidential focus on problem and at-risk gambling, this review is skewed towards looking at the characteristics of individuals who may experience harm, rather than the families and friends of those who may also be affected. As the evidence base relating to harm develops, the findings in this report should be reviewed, as should the groups identified as vulnerable to harm, though this study brings together the key themes for the first time in a single report that is accessible by all.
- This study used a quick scoping review methodology. There may be other evidence that was not identified in our quick scoping searches. This report is intended to highlight and map the range of studies on each area and to identify some broad themes; it does not claim to be comprehensive, though we are confident we have considered most relevant British-based studies.

## Next steps

- The next steps for this project are to take the main findings from this report and to identify relevant local level data relating to the characteristics of potentially vulnerable people identified. Using this data, we will then explore visualising places where the potential for gambling-related harm is greater based on the profile of the local area.



- Specifically, this means taking those characteristics shown to have strong evidential support and/or strong logical inference and exploring what kinds of data exist to show whether these types of people are present in a local area or not.
- Once data has been reviewed, we will then explore how to model this data at low level geographies. The resulting model will be based on those characteristics with an evidence base to support inclusion **and** which have good quality local data.
- Because of the focus on research evidence on gambling problems, we recognise that our models are likely to show those vulnerable to problems rather than harms in the broader sense. However, since this is the first time this has been attempted in Great Britain, we consider this to be a useful and valid starting point, though we would recommend that the models are revisited if and when more evidence becomes available.
- This next phase of our research is due to be published in summer 2015. This work will highlight the technical and practical challenges of producing local area risk profiles and discuss other relevant issues when thinking about local risks to gambling-related harm.

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## Appendix A: New analysis for this report – tables

Table A1      Prevalence of past year gambling and problem gambling, by mental health and substance use					
Source: Adult Psychiatric Morbidity Survey 2007					
Condition	Past year gambling prevalence	Problem gambling prevalence	Odds ratio (OR) of being a problem gambler*	Confidence interval for OR (lower)	Confidence interval for OR (lower)
	%	%	OR		
All adults	66	0.7			
Mixed anxiety and depressive disorder	65	1.5	2.6	1.0	2.0
General anxiety disorder	61	2.8	5.5	2.1	14.5
Depressive episodes	61	1.8	2.6	0.8	8.9
Phobias	56	4.4	8.2	2.5	27.6
Obsessive Compulsive Disorder	58	3.5	5.3	1.3	22.0
Panic disorder	71	3.7	6.0	1.4	25.1
Eating disorder	68	1.9	4.7	1.7	12.8
Probable psychosis	43	6.0	8.0	1.1	61.5
Attention Deficit Hyperactivity Disorder:					
Score 0 to 1	66	0.4	1		
Score 2 to 3	65	0.9	2.3	1.0	5.5
Score 4 or more	67	2.2	5.0	2.0	12.4
Post-Traumatic Stress Disorder	66	3.1	4.6	1.4	14.7
Current cigarette smoker	71	1.2	0.6	0.3	1.3
Alcohol consumption:					
Non-hazardous alcohol consumption	64	0.5	1		
Hazardous but not dependent	74	1.3	1.9	0.7	5.5
Alcohol dependent	76	2.2	3.2	1.3	7.8
Drug dependent	70	3.8	4.4	1.6	12.1

\*The regression models run included each condition separately with age, sex, income and deprivation also entered into the models as controls.

Table A2		Prevalence of problem and at-risk gambling, by sources of credit and debt		
Source: Adult Psychiatric Morbidity Survey 2007				
Sources of credit and debt	Non-problem gambling	At-risk gambling	Problem gambling	
	%	%	%	
All adults	96.8	2.5	0.7	
Borrowed from money lender or pawn broker	93.5	5.0	1.5	
Borrowed money from friends	91.6	5.2	3.2	
Borrowed money from family	92.7	5.6	1.7	
Borrowed money from any source	93.4	5.0	1.6	

Table A3	Odds ratio of problem gambling by borrowing from money lender or pawn broker		
Source: Adult Psychiatric Morbidity Survey 2007			
	Odds ratio*	Confidence interval (lower)	Confidence interval (upper)
Did not borrow money	1		
Borrowed from money lender and/or pawn broker	2.2	1.1	4.6

\*Regression models included age, sex and income as controls

Table A4	Problem and at-risk gambling among those aged 18-21 by student status		
	Source: British Gambling Prevalence Survey 2010		
	Aged 16-24 and in full time education	Aged 16-24 and not in full time education	All aged 16-24
	%	%	%
Problem gambler according to the DSM-IV or the PGSI	0.6	3.3	1.9
At-risk gambler according to the PGSI	20.6	19.9	20.3

\*Regression models included age, sex and income as controls

## Appendix B: Quick scoping review procedures

A number of quick scoping reviews were undertaken for this report. These included searches for literature relating to:

- Gambling and harm
- Gambling and vulnerable people/adults
- Gambling and young people/adults/youth/adolescents
- Gambling and students
- Gambling and deprivation
- Gambling and income
- Gambling and unemployment
- Gambling and mental health
- Gambling and alcohol/drugs/substance use
- Gambling and migrants/immigrant
- Gambling and learning disabilities/difficulties/IQ
- Gambling and ethnicity/Asian British/Chinese
- Gambling and homeless

A quick scoping review aims to broadly map the available literature on a topic but is produced under constrained circumstances. Given time and resource constraints, the following restrictions apply to the search strategy used for this project:

- 1) A limited number of databases were searched: these were PubMed, Google Scholar and the University of Glasgow's Advance Serial Solution search database.
- 2) The searches were limited to look for evidence where the terms appeared in the title or abstract of the article only.
- 3) A limited number of search iterations using related terms were made.

Therefore, it is acknowledged that the evidence reviews presented here may not be comprehensive and may have missed some literature. In order to make the number of articles reviewed more manageable, an order of preference was applied to the resultant searches:

- a) Those that were based on evidence generated from the UK were all reviewed
- b) Those that were recent systematic reviews (i.e. from 2005 onwards) of literature were reviewed
- c) Those that were empirical evidence from other Western countries were shortlisted and the abstract reviewed to assess potential contribution.

With regards to C, those studies which presented empirical evidence (either quantitative or qualitative) using sound and appropriate methods (i.e., random probability sampling with good base sizes) were shortlisted for further review. A number of studies were rejected because they used purposive sampling methods or had sample sizes too small for meaningful statistical inference (for a discussion of the importance of this, see Disley et al, 2011). Some qualitative studies were rejected because they reported findings numerically rather than thematically.

In some cases, there was a breadth of literature available (such as gambling and youth) and therefore the evidence presented in this report discusses results from a and b only. In others, such as the literature around gambling and homeless people, evidence from all three shortlisting strategies is presented. This was to attempt to make the process more manageable within the time available for this project (approximately 10 weeks). We acknowledge this means there may be some gaps in this review.

## Appendix C: Consultation interviews

Consultation interviews were conducted with the following stakeholder groups:

- Academics
- Industry
- Treatment providers
- Policy makers
- Legal professionals

Two formats of interviews were used, either one to one semi-structured interviews or semi-structured workshops. For both, the same content was covered (see Appendix D for the example topic guide). All interviews/workshops were conducted between March 2015 and May 2015.

For both interviews and workshops, the procedure was the same – the purpose and background of the project was explained along with the format of the session. It was explained that all interviews were confidential and results would not be reported in a way that could identify individuals. Permission was asked to record each session and once permission was granted the interview began. One to one interviews lasted between 30 minutes to 1 hour on average, whereas workshops lasted between 1 hour to 1 hour and 45 mins.

The table below shows the number of participants within each stakeholder group by format type.

Stakeholder group	One to One interviews	Workshops
Academic	4	
Policy	4	
Industry		3 (14 participants)
Treatment		2 (10 participants)
Legal	6	

Interviews were not transcribed but notes and quotes from interviews entered directly into the data management system. Data management was undertaken using Framework (Ritchie & Lewis, 2003), a systematic approach to qualitative data management that was developed by NatCen Social Research and is widely used in social policy research. Framework is a matrix



approach where data is summarised into cells with the row representing an individual case and a column representing a common theme across the data set. The advantage of this approach is that it facilitates the analysis of different aspects of an individual's views as well as enabling analysis of particular themes across different cases. It is this thematic analysis which is presented in this report.

## Appendix D: Topic guide

### Topic guide for Gambling Vulnerability Index consultation

17.03.2015

#### Introduction

Introduce myself and purpose of the study:

- Looking at the evidence base about the relationship between gambling-related harm and vulnerable population groups
- Aims to look at areas where more vulnerable people may be and to display them visually - this is regardless of whether gambling venues currently exist in those areas.
- But recognise there is a need for more clarity around who and what we mean
- Therefore consulting key stakeholders to understand more about what they think gambling-related harm means, for whom and under what circumstances. Also gain insight into who stakeholders think might be vulnerable to harm and what they are basing this opinion on.
- Seeking to explore differences between stakeholder groups to look for points of agreement and points of disagreement.

#### Practicalities:

- Consent to participate
- Assurance of confidentiality
- Consent to record
- Should take about 20-30 mins

#### Gambling related-harm

- Ask what the term gambling-related harm means to the stakeholder? *Probe: What else?*
- How does this differ from problem gambling?
- Do these differences matter? In what way?
- What different types of harms arise from gambling?
- *Probe: Why do you think that?*
- Who do these different harms effect?
- How might 'harms' vary from person to person?
- Over what time frame might harm be experienced?
- What are they basing these thoughts on? What evidence?

#### Vulnerable people

- What does the term 'vulnerable people' mean to the stakeholder? What types of groups do they think about?

*Think in a generic sense first*

- Who might be vulnerable to gambling-harm? Which groups specifically?
- *Probe: Why?*
- Is this different to groups who are vulnerable to gambling problems?
- Which groups do you think are **most** vulnerable to harm?
- *Probe: Why is that? What evidence is this based on?*
- How do you think the characteristics of who is vulnerable have changed over the last 10 years?
- How would you identify vulnerability and what measures might you use to protect people?

### **Evidence and legislation**

- When it comes to licensing/policy decisions, what counts as evidence?
- In what ways is evidence used?
- Is there a hierarchy of evidence? Is this right?
- If there is a conflict between the aim to permit and protection of vulnerable people, which takes precedence? Which should take precedence and why? Under what circumstances?

### **Anything else?**

- Anything else they would like to add on this topic?

### **End**

- Thanks for participation
- Reassure about confidentiality



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