



Commission on Crime
& Problem Gambling



Crime and Problem Gambling: A Research Landscape

The report of the Commission on
Crime and Problem Gambling

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Executive summary

This report reviews the relationship between crime and problem gambling. It was carried out using thematic searches and existing systematic reviews and is predominantly based on academic literature, drawing on grey literature where relevant. Despite the vast number of people who gamble regularly in the jurisdictions covered by this literature review, and the millions affected directly or indirectly by gambling addiction, there appear to be fewer than 50 peer-reviewed papers in the last 25 years which specifically address the links between problem gambling and crime (see, for example, Calado and Griffiths, 2016). Whilst the overall quantity of research is not huge, there is a consistency in findings across all jurisdictions.

A number of terms are used throughout this document to describe the issue of problem gambling. 'Problem gambling' is the most commonly used term to describe individuals who are unable to control their gambling behaviour which in turn disrupts personal, family, financial and employment relations. The term 'pathological gambling' is used to indicate where this behaviour is extreme and requires significant treatment interventions. Both problem and pathological gamblers are seen as suffering from a behavioural addiction to gambling, as defined by the American Psychiatric Association.

The following summary outlines the key findings of this body of work:

- There is a clear relationship between disordered gambling and crime, with high prevalence rates of crimes being committed by people in order to fund their gambling (Williams et al, 2005)
- A wide variety of crimes are committed as a result of gambling addiction; not just 'white collar' crimes such as theft and fraud, but also crimes that occur in public spaces such as street robbery. There is significant evidence of domestic abuse and child neglect linked to problem and pathological gambling (Breen et al, 2013; Cuadrado and Lieberman, 2011)
- There is a complex interplay of causes of crime linked with the causes of disordered gambling. Cross-addictions, mental disorders, impulse control disorders and difficult life events all may play an additional role in the causation of crime – and inhibit treatment (See for example: Lahn, 2005; Sundqvist and Rosendahl, 2019; Templer et al, 1993; Turner et al 2007)
- Certain demographics are more likely to commit crimes, in addition to having increased vulnerability to gambling addiction (Perrone et al, 2013; Turner et al, 2017)

- The more complex, prolonged and persistent the gambling problem, the more likely that a crime will be committed and, indeed, that many crimes may result (Turner et al, 2009; Perrone et al, 2013)
- There has been a growing understanding that gambling addiction is a behavioural disorder, however, little of this has been translated to sentencing; problem gambling is not considered to be a mitigating factor in sentencing in the way mental health problems or drug and alcohol addiction are (Folino and Abait, 2009)
- Whilst not always imprisoned as a direct result of problem gambling, there are extremely high rates of gambling addiction amongst prisoners. The research suggests that prisons only offer limited treatment in any of the jurisdictions covered. Research suggests that the rate of problem gambling is higher among male and female prisoners in prison, compared to the general population. Problem gambling is markedly higher amongst women than in the general population (as reported in Finnish research by Lind and Kääriäinen, 2018 and Australian research by Perrone et al, 2013)
- Research suggests that there is little treatment and support for problem gamblers in prison, however, there is evidence of resistance to undertaking treatment amongst prisoners (Lahn, 2005; Turner et al, 2017)
- There is some evidence that treatment for gambling addiction may significantly reduce recidivism; however, this finding is caveated by the fact there is a paucity of treatment for prisoners and those on probation
- Several of the studies reviewed agreed that custodial sentences, especially when no treatment is available for gambling addiction, was not a cost-effective way of avoiding further harm to the individual or society once the sentence is completed. (see for example Ledgerwood et al, 2007)
- A small number of specialised gambling courts have been established in the USA, with the aim of ensuring that gambling addicts who have committed crimes receive appropriate treatment, however, there is limited data on the success or otherwise of these initiatives (Turner et al, 2017)
- There needs to be research into the potential effect of gambling addiction treatment on the rate of recidivism, as well as more general research on how best to help vulnerable populations avoid the criminal justice system.

Scope and methodology

This review aims to survey what is currently known about the links between disordered gambling and crime to support the ongoing work of the Howard League for Penal Reform's Commission on Crime and Problem Gambling. The Commissioners come from a wide variety of backgrounds with varying levels of knowledge of criminology and gambling addiction. It aims to broaden understanding without focusing too heavily on the wider themes and issues related to crime and problem gambling.

This review does not discuss in any detail the generalities of gambling addiction and its treatment but does give more background to the disorder, where it is necessary, in order to understand its relationship to crime.

The jurisdictions covered in this review include Australasia, USA, Canada, Germany, Scandinavia and the UK. The literature search was carried out using a variety of sources including academia.com, Google Scholar and deepdyve.com. A number of extant literature reviews of the subject matter form much of the basis of these findings, together with an extensive review of the papers cited in their bibliographies. This review does not seek to provide an exhaustive list of all the relevant papers, particularly as many of them corroborate each other's findings. Rather it aims to highlight and explore the most pertinent and important issues, unravelling where possible a difficult and complex subject.

Scope

This is a review of the relevant academic literature related to the intersection between problem gambling and crime. Specifically, it explores crimes committed by problem gamblers to support their gambling, using evidence from jurisdictions where gambling is (in some form or other) legal and regulated.

This review does not include literature focussed on crimes such as money laundering and sports fixing, which are associated with gambling but not necessarily carried out by problem gamblers. Nor does it include literature regarding crimes committed by gamblers unrelated to supporting their gambling addiction, or opportunistic crime associated with casinos and other land-based venues which has not been committed by gamblers to support their addiction.

Defining ‘problem gambling’

Throughout the document, a number of terms are used to indicate the following:

- The general issue of problem gambling, also known as gambling addiction or disordered gambling
- The specific status of a group of people and the severity of their gambling addiction (problem or pathological gambling)
- The more general impact of gambling-related crime on society, broadly known as gambling-related harm or GRH.

Gambling addiction/ gambling disorder

Gambling addiction was first recognised as an impulse disorder in 1980, with its inclusion in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorder* ([APA] DSM-III) (Rosenthal, 2020).

The subsequent edition of the DSM Manual – DSM-IV, introduced the ‘Diagnostic Interview for Gambling Severity’, designed to be used in a face-to-face clinical setting. The criteria for this interview have, since then, formed the basis for more general diagnostic screening tools used by the gambling addiction research community.

Gambling addiction was then re-classified as a behavioural addiction in the most recent version of the Diagnostic Manual of Mental Disorders (American Psychiatric Association, 2013) DSM-V, and renamed ‘gambling disorder’ in acknowledgement of similarities across behavioural and substance addictions. However, because it is a behavioural addiction, identification of the problem and its severity is usually carried out using self-report screening tools. A full list and description of the most common screening tools can be found in Appendix A.

Problem gambling

The most common term currently in use for those suffering from gambling addiction/ disordered gambling is ‘problem gambler’. Whilst this does reference a specific score on various diagnostic screening tools, it is also understood to be the term most generally understood by the public and those working within the criminal justice system when talking about individuals with a gambling addiction. In this review, where a specific screening tool has been used, we indicate when a group has been specifically defined as ‘problem gamblers’ using a screening tool. In general, when directly quoting work, the author’s preferred term is used.

Pathological gambling

Strictly speaking, this term only applies to people who have scored highly on one or more of the screening tools which are based on the DSM-IV criteria for pathological gambling. However, it is also used as a general term for people with particularly severe or intractable gambling addiction even when there is no formal diagnosis using a screening tool.

Disordered gambling

This term is used generally as a less stigmatising term than ‘problem’ gambling and has increased in use since the introduction of the term ‘gambling disorder’ in DSM-V. It is used here as a general term indicating the fact that a person or group of people have this behavioural addiction.

Gambling-related harm (GRH)

New Zealand has led the way on using this public health approach to gambling addiction since the turn of the century. Langham et al (2016) explains that the New Zealand 2003 Gambling Act describes GRH as ‘any kind of harm or distress arising from, or caused or exacerbated by, a person’s gambling’. This definition includes psychological or emotional impacts of gambling, as well as more concrete forms of harm, such as financial loss. It also emphasises the multiple social scales at which harm can take place, which is more consistent with a social model of health, with four levels at which harm may occur: the individual person, family, the workplace, or in society at large (Langham et al, 2016). The UK is now catching up through a number of research initiatives led by the Gambling Commission and, most recently, the Gambling Related Harm All Party Parliamentary Group. As this review discusses, there is very little current research on the specifics of the criminal aspects of GRH and society; the focus of research continues to be the individual and his or her psychiatric imbalances.

Classifying an individual as a problem or pathological gambler

All the studies reviewed here utilise one or more screening tool to indicate whether an individual could be classified as either a ‘problem’ or ‘pathological’ gambler. There is much debate about this spectrum, how best to define it, and whether it is even a spectrum, because gambling addiction presents heterogeneously. A recent study of diagnostic screening tool concluded that ‘problem gambling symptomology appears to be multi-dimensional’ (Christensen et al, 2019). Additionally, Professor Paul Delfabbro in the 2008 Australian Gambling review opines that the term ‘pathological’ gambling is problematic in that it implies gambling is a disease or medically based

disorder with a clear pathogenesis, which has not been consistently borne out in the evidence.

It is important to note that in a vast majority of the studies reviewed either the offences, the extent of the gambling problem, or both, are almost always self-reported. This requires the interview subject to code an answer on a questionnaire or provide an answer in a face-to-face interview. This is further complicated by the fact that many gamblers have low levels of education (e.g. Abbott et al, 2005, Hing et al, 2015) and may also not have the country of study's main language as a first language (see for instance Rosenthal and Lorenz, 1992).

'Problem gambling' affects individuals in a multitude of ways. However, there is no one definitive way of measuring it. The diagnostic screening tools which do exist are open to question and interpretation (Otto et al, 2020). The variation in diagnostic screening tool or criteria used has been reported to impact upon prevalence rates. For example, Turner et al (2015) reported that a change in scoring threshold and criteria in DSM-V led to an increase in self-reporting of problem gambling (or, gambling disorder, as used in the study) among the prisoners they surveyed. In reviewing almost all the papers in this document, we should bear in mind that a range of different screening tools have been used to identify the extent of the gambling issues present in the research sample. Each tool is described in more detail in Appendix A.

General characteristics of disordered gambling

Overall, gambling addiction (as defined using one of the main problem gambling diagnostic tools) is highly correlated with other psychiatric disorders such as substance abuse disorders, anxiety disorders and personality disorders (for instance, Petry et al, 2005 and Kessler et al, 2008).

In 2005, Petry et al reviewed co-morbidity among Americans between DSM-IV-defined pathological gambling and other psychiatric disorders. They reported that, among pathological gamblers: 73.2 per cent had an alcohol use disorder; 38.1 per cent had a drug use disorder; 60.4 per cent had nicotine dependence; 49.6 per cent had a mood disorder; 41.3 per cent had an anxiety disorder; and 60.8 per cent had a personality disorder. These authors also found a correlation between these co-morbidities and pathological gambling was stronger in women compared to men.

Researching pathways to gambling, the US National Co-Morbidity Survey Replication in 2008 showed that 96 per cent of people identified as having pathological gambling symptoms also had lifetime histories of at least one other psychiatric disorder, with the other disorder preceding gambling disorder in 75 per cent of cases (Kessler et al, 2008).

Limitations

The literature reviewed revealed the following limitations:

- A limited, homogenous sample of gamblers is used. This is because almost all of the papers base their findings on two groups: gamblers in treatment or in Gamblers Anonymous (those who have sought treatment following acute/severe addiction) or gamblers in prison (either gamblers who have committed crimes, or prisoners who have developed a gambling addiction in prison)
- There is a lack of understanding of cultural specifics for BAME groups. General prevalence studies across the globe repeatedly show that BAME groups are more at risk of developing a gambling addiction. Many of the studies quoted here showed an over-representation of BAME gamblers amongst in-treatment or incarcerated groups, but there is very little exploration of the reasons for this, or of the nature of crime and problem gambling in BAME communities
- There is a lack of reliability of diagnostic tools, as discussed in the above section on scope and methodology
- Cross addictions and co-morbidities – gambling addiction in its more severe forms, rarely presents itself as a stand-alone condition. Much of the research reviewed here documents the co-morbidities, and papers such as Kessler et al, (2008) attempt to ascertain which is the preceding condition. However, this suggests that someone who commits a crime and is identified as being a problem gambler, will have other factors which may also have contributed to the crime
- Self-reporting of crimes – problem gambling is not reported as being a motivating factor in an offence in any jurisdiction. Few papers attempt to link a court case to the defendant's gambling addiction following an offence being committed. Therefore, any links between a person's disordered gambling and offences committed will only be discovered if they admit to crimes in treatment or admit to gambling addiction when in prison
- Complex relationship between criminality and gambling – it is not always easy to identify a crime as being directly linked to an episode of gambling addiction, when gambling (either legal, illegal or private) is part of an individual's lifestyle
- Limited scope of research angles – many papers are written by psychiatric or addiction specialists. A limited number of papers come from a social sciences background.

Prevalence of crime attributable to problem gambling

There is insufficient evidence to determine the actual number of offences committed in any jurisdiction, as a result of gambling addiction. Gamblers may admit to offences when questioned about their offending history during screening and treatment, but this data is not kept widely or consistently. Data regarding theft and fraud cases in court is recorded, but gambling-related motivation or background is not. Indeed, the literature surveyed suggested the relationship may not be simply cause-and-effect. Instead issues such as co-morbidities and other aspects of a defendant's lifestyle should also be considered, for instance: psychiatric disorders (Kessler et al, 2008, Turner et al, 2017) or co-addictions (Petry et al, 2005).

There is some evidence about why gamblers commit crime. Rosenthal and Lorenz's theory (outlined in their 1992 paper 'The Pathological Gambler as Criminal Offender') is still favoured. Their description of the stages of pathological gambling is summarised as follows:

- **Winning:** Men begin to (and continue to) gamble because they gain recognition for their early successes (unlike women, who less commonly experience a 'winning phase'). As a larger proportion of an individual's self-esteem is derived from gambling, they begin to wager bigger stakes. Both the winnings themselves, and fantasies of winning, are attractive
- **Losing:** When a gambler begins to chase losses, previous gambling strategies are abandoned. He or she gambles alone. Only the most urgent debts are paid. Lying about gambling becomes more frequent. They use their own and their families' money, deplete savings, take out loans and exhaust all legitimate sources
- **Desperation:** There is a 'crossing of the line' – he or she starts doing things that were previously unimaginable. Once the 'line' is crossed, it becomes easier to continue with such behaviour. The offence is rationalised as a short-term loan, with the intention to repay it immediately after a win. The gambler still believes he or she is one winning streak away from resolving all financial problems
- **Giving up:** Some gamblers realise they cannot get even, and will never catch up, and they no longer care. In the last two phases, depression and attempted suicide are likely. There is also the possibility of getting caught or imprisoned.

Much of the detailed research on the prevalence of crime amongst gamblers has taken place with two communities: gamblers who have presented for treatment, and within incarcerated populations. Therefore, it is suggested that, understanding of overall prevalence is limited as these two groups are the most likely to have committed one or more offences, and they are likely to be serious crimes that carry a prison sentence. The suggestion is that there is a significant amount of unreported and undetected crime by problem gamblers. It may be that such crime remains unreported as it is perpetrated on family, friends and employers who do not wish to report the offence. However, numerous studies show that disordered gambling is clearly linked to a wide range of crimes and has a significant impact on individuals, families, cultural groups, employers and society at large (see for instance Abbott et al, 2005; Perrone et al, 2013).

Prevalence rate: general population

There are few published peer-reviewed studies on the rates of crime perpetrated by gamblers in general. Abbott et al (2005) reported that in New Zealand 10 per cent of pathological gamblers said their gambling led to problems with the police. An Australian national prevalence survey (Productivity Commission, 1999) reported that 11 per cent of pathological gamblers reported engaging in gambling-related illegal activity. In addition, this document also reported that 3 per cent reported court appearances for gambling-related charges.

Prevalence rate of crimes amongst treatment-seeking gamblers

The prevalence rate of crime amongst gamblers often becomes apparent during treatment. This may relate to an increased sense of desperation following the committal of an offence, and thus a drive to seek treatment. This is illustrated by the prevalence rate of illegal acts committed by gamblers who present for treatment or attend Gamblers Anonymous meetings. This sample of results shows that a consistent rate of around two thirds of gamblers in treatment have committed an offence (see for instance Blaszczynski and McConaghy 1994).

Prevalence rate in arrestees

Cuadrado and Lieberman (2011) interviewed arrestees at a range of intake/booking centres in Florida reporting that 'The importance of identifying problem gamblers amongst arrestees takes on special significance when we consider the possibility that it could enable the means for intervention and diversion that may ultimately reduce crime recidivism due to gambling'. This study reported that 32 per cent of arrestees had ever experienced problem gambling during

their lifetimes, and of these, 17.4 per cent had likely current gambling problems using the Lie/Bet screening tool. This represents just over 19 per cent of all male arrestees and a little under 10 per cent of all female arrestees.

Prevalence rate of problem/pathological gambling in incarcerated populations

In 2005 Williams et al undertook a systematic review of international studies focusing on prevalence rates of problem gamblers among prisoners. They concluded that approximately one third of prisoners were problem or pathological gamblers and that a significant percentage of problem/pathological gamblers committed crimes to support their gambling, ranging between 11 per cent and 100 per cent, with the average being 50 per cent. In a more recent systematic review, Banks et al (2019) noted that prevalence rates in the studies they surveyed ranged from 5.9 to 73 per cent, clearly representing huge variation and making it difficult to draw conclusions (they note that this variation could be due to factors including the use of different screening tools, different time frames etc).

The prevalence of problem gambling among incarcerated populations is internationally recognised as being higher than that of the general population. Anderson's 1999 study at four American prisons used SOGS to screen 233 male prisoners. It found that 35 per cent had 'some problem with gambling', and that 38 per cent were likely pathological gamblers, according to the SOGS screening tool. The study also found that higher SOGS scores were also correlated with wider contextual emotional and financial problems. Lind et al (2019) found prevalence rates of 16.3 per cent for possible problem gambling in their study of two Finnish prisons, (noting that 'problem gambling is five to ten times higher in the adult correctional population than in the general population') supporting the findings of previous studies in other jurisdictions.

The following table provides further analysis from different jurisdictions:

Jurisdiction	Population	Prevalence	Source
Australia	Australian Capital Territory corrections facilities	34 per cent reported as problem gamblers, of which 15.7 per cent classed as 'severe'	Lahn and Grabosky, 2003
England	One male prison, one female prison	Using PGSI, a prevalence of 27.8 per cent was reported amongst the male sample, and 18.1 per cent amongst the female sample	May-Chahal et al, 2012
England and Scotland	Prison and electronic tag	Using PGSI, reported as 12 per cent problem gamblers (compared to 0.7 per cent of the UK population)	May-Chahal et al, 2016
USA (Nevada)	Medium security prison	Using SOGS, 23 per cent reported some experience of problem gambling, and 26 per cent were classed as being likely 'pathological'	Templer, Kaiser and Siscoe 1993

Correlating crime and gambling

The links between crime and gambling are complex. A gambler may commit a crime based on multiple factors:

- they may be desperate to fund their gambling;
- gambling is one aspect of their criminal activities; or
- they may have other cross-addictions that require funds.

Mestre-Bach et al's 2018 study of treatment seeking gamblers with a history of offending in Spain explored the behavioural links between problem gambling and the committal of crime. They noted shared behaviours of urgency, impulsivity and risk-taking behaviour.

A gambler might also commit an offence that is not motivated by gambling.

A significant proportion of this research literature is based on incarcerated populations; therefore, it is often unclear whether the offences committed by problem gamblers were directly linked to their addiction. Indeed, as Perrone et al point out in their 2013 Australian study, the prisoner may not recognise the link between their gambling and the offence committed. In their qualitative interviews, some prisoners reported that they only realised the nature of their gambling addiction after several convictions and jail terms (Perrone et al, 2013).

Whilst gamblers may not directly link their sentence to their gambling, they may well have previously committed such crimes. May-Chahal et al's 2015 study of two English prisons (one male one female) found that 5.4 per cent of male and 3 per cent of female prisoners believed that their current sentence was linked to gambling. However, a larger proportion (13.4 per cent of men and 7.2 per cent of women) admitted to having ever committed an offence in order to finance gambling or pay off debts. The researchers concluded 'From this data we would estimate that at least 5 per cent of offending could be reduced if gambling problems were effectively addressed' (May-Chahal et al, 2015).

A Canadian study of 250 male prisoners found that 17 of the sample consistently scored in the pathological range on measures of gambling pathology (a range including screening tool SOGS, and diagnostic criteria DSM-IV) (Turner et al, 2007). Of the 17 prisoners, ten reported that their criminal activity was the direct result of gambling debts. In addition, one third of the sub-clinical problem gamblers reported that they committed the offence because of their gambling. A further finding was that one third of the sub-clinical group and nearly a quarter of those without a gambling problem

believed that crime encouraged gambling because it was part of their criminal lifestyle and provided ready cash with which to gamble. Forty-two percent of the sample reported gambling in prison (Turner et al, 2007). Finnish prison workers surveyed by Castrén et al (2019) reported that gambling-related crime was most often reported to have been motivated by the need to finance gambling or to pay off gambling debts.

As most research studies rely on self-reported evidence, it may not provide the most reliable measure of gambling related offending. Qualitative interviews, rather than questionnaires, seem to provide more clarity about the relationship between gambling addiction and why someone committed a crime. Qualitative studies also show that a wide range of crimes were committed where the motivation is connected to gambling, but not necessarily with a clear direction of travel. For example, a gambler could report that:

‘I needed money to gamble so I committed my crime, but I also used money from other crimes to gamble’ or

‘I committed my crime because I was caught in a cycle of gambling, drinking and bad decisions’.

Gambling is often just one part of a ‘chaotic, disordered lifestyle’ (Lahn, 2005).

Types and frequency of crime

The literature reviewed suggested a correlation between the severity of an individual's gambling disorder and a greater likelihood of offending and reoffending.

In prison studies, as reviewed by Ledgerwood et al (2007), whilst severe problem gamblers might make up less than 10 per cent of the prison population, they will have committed up to 20 per cent of the total number of crimes. Whilst only a small proportion of those in treatment may have committed serious or violent crimes, those who admitted to theft or larceny further reported committing numerous offences (Ledgerwood et al, 2007).

A German study compared crimes committed by problem gamblers and 'regular' gamblers. It found that those suffering from disordered gambling committed income-producing crimes such as stealing from family or embezzlement at 10 to 20 times the rate of non-problem gamblers. Furthermore, 38 per cent of the problem gamblers in the study admitted to committing embezzlement offences on at least one occasion. However, both sets of gamblers admitted to stealing from their employer at a far more similar rate (16 per cent of non-problem gamblers, 23 per cent of problem gamblers). This might suggest that stealing from one's employer is seen as a 'lesser' crime (Meyer and Stadler, 1999).

There has been anecdotal evidence that, as with substance addictions, the partners of gambling addicts will commit crimes in order to raise money for their daily needs or to try and pay off gambling debts. However, no peer-reviewed research has been found to corroborate this. There is qualitative evidence from Australia that the children of gambling addicts will steal food or commit other petty crimes as a result of their parents' gambling expenditure (Breen et al, 2013).

Providing a consistent description of the types of crimes committed across all the jurisdictions reviewed is not possible, as legal frameworks vary. However, there was consistency in that non-violent acquisitive crime was the most common form of offending due to gambling. The research suggested it was less common for violent crimes to be committed in order to fund gambling and it tended to be more strongly associated with an individual's lifestyle than with a gambling addiction.

Turner et al's (2009) Canadian study found a significant relationship between the number of income-generating offences committed and the severity of problem gambling. The most common income producing offence was theft (55.5 per cent), followed by possession of property obtained by crime (45.3 per cent), breaking and entering (32.4 per cent), robbery (32.4 per cent),

fraud (19.9 per cent), trafficking (18.7 per cent), and forgery (6.6 per cent). This study reported that most pathological gamblers and one third of problem gamblers reported being caught in a cycle of gambling, debt, and crime. The authors concluded that effective treatment of gambling addiction will help to break the cycle and reduce overall levels of offending (Turner et al, 2009).

Ledgerwood et al (2007) surveyed gamblers in treatment in the community for their addiction in Connecticut (USA) and found that gambling-related illegal behaviour was common in the sample, with 27.3 per cent of participants reporting at least one gambling-related illegal act in the year before entering treatment. Illegal behaviour reported included fraudulent financial dealings (such as writing bad checks), theft, unauthorised use of a credit card, forgery or embezzlement.

In an Australian study, Perrone et al (2013) found that recidivism rates among prisoners who had committed gambling related offences (as reported by the prisoners themselves) was 1.5 times higher than that of non-gambling related offences. 75 per cent of prisoners in their survey who had committed crimes related to gambling had served at least one custodial or community-based sentence prior to their current term of imprisonment.

There are several studies from across the globe which show a direct link between problem gambling and Intimate Partner Violence (IPV). Recent research from the UK by Roberts et al (2020) reviewed gamblers in treatment and found that '20.1 per cent of clients reported any IPV in the past year; 12.3 per cent reported perpetration and 14.1 per cent reported victimisation in the past year'. Roberts et al further reported that 'These figures were substantially higher than estimates from the Crime Survey for England and Wales (CSEW) which suggested that 7.5 per cent of women and 4.5 per cent of men experienced any type of domestic abuse (IPV) in 2017 (Office for National Statistics, 2018)'. Moreover, they explained that '... the measurement of IPV is more comprehensive in the CSEW, and includes controlling, coercive or threatening behaviour, and violence or abuse between intimate partners or family members regardless of gender or sexuality. This encompasses not only physical violence, but also psychological, sexual, financial, and emotional abuse.' (Roberts et al, 2020)

Gamblers and the criminal justice system

Much of the literature reviewed here is based on research conducted with gamblers who are at a particular stage in the criminal justice system – either arrestees, those serving custodial sentences, those with electronic tags and those on probation. Once again, the results of the research are not straightforward. Key questions remain unanswered, including: the extent to which gambling is at the heart of criminal activity; the pathways into gambling-related crime; the availability, take-up and benefits (to the individual and their support network) of treatment for gambling addiction in the criminal justice system.

Sentencing

Sentencing practices have been researched in various jurisdictions. Australian researcher Professor Alex Blaszczynski has argued that sentences for problem gamblers should be community based rather than custodial, considering the frequent success of gambling addiction treatment (Blaszczynski and McConaghy, 1994). Furthermore, Smith et al (2003) note that in Canada, treatment is preferred over incarceration as gambling is ubiquitous in prison – a custodial sentence could thus exacerbate a gambling addiction. Smith and Simpson (2014) highlight that, problem gambling is used as a defence in Canadian criminal trials and is accepted as a mitigating factor. Brooks and Blaszczynski (2011) found that problem gambling was also used by defence teams in England and Wales. However, here, problem gambling is not recognised as a mitigating factor, and a full and therapeutic understanding of the condition is frustrated by the fabrication of problem gambling as an excuse or justification to aid their defence. Brooks and Blaszczynski (2011) further suggest that judicial assessment of problem gambling is complicated by psychiatric definitions. Pathological gambling is defined by DSM-IV as an impulse control disorder but does not distinguish between an inability versus an unwillingness to self-regulate, an important consideration in sentencing. Folino and Abait's (2009) review, focussed on papers written in English and Spanish on this subject, speaks to this complexity and concludes with the recommendation that judges need to '...facilitate treatment without exempting responsibility'.

Specialist gambling courts

Based on the success of specialist drug treatment courts, the US states of New York and Nevada set up gambling courts at the turn of the century (Moss, 2016). Whilst these courts were locally celebrated, there is limited evaluation and their use has been discontinued. Some of the reasons suggested included: the political landscape seeking a tough response to crime; a treatment court was not seen as an adequate response to more serious offences such as fraud and embezzlement; and problematic identification of potential relapse after sentencing (Turner et al 2017).

Prison settings

There is little evidence regarding treatment facilities in prisons.

Where treatment and rehabilitation has been considered, the evidence is not strong in terms of the efficacy of treatment engagement and breaking the cycle of recidivism. Abbott et al (2005) argue that whilst a small number of problem gamblers in New Zealand were responsible for a disproportionate number of total offences, treatment 'could have a significant impact on recidivism' (Abbott et al, 2005).

Similarly, a 2009 Canadian study (Turner et al, 2009) recommended that:

'The higher rate of prior offences amongst severe problem gamblers and the number of people who report gambling in prison, suggests that prison does not end the cycle of gambling debt and crime. The results suggest a significant need to provide treatment services for this population'.

An American study (Ledgerwood et al, 2007) has examined the role that committing crime plays in predicting treatment outcomes among treatment-seeking pathological gamblers. This may be due to the assessment that the treatment method is unsuitable for such 'inveterate and highly disturbed' gamblers. The longitudinal surveys of pathological gamblers with gambling-related criminal offences during treatment that they never achieved a period when the mean number of gambling addiction symptoms scored below five (the number of symptoms generally accepted as the SOGS cut off for a classification of problem gambling).

Studies which report low rates of treatment amongst prisoners often do not explain if this is due to a lack of availability or their lack of willingness. Sakurai and Smith (2003) reported in their Australian research that there was a reluctance to seek treatment: 'The majority of convicted offenders in the study voluntarily sought some kind of professional assistance for the gambling problem only after they had been charged with gambling-related crimes,

despite a large number having long-term gambling problems'. Australian researchers Lahn and Grabosky reported that in Canberra: 'gambling problems among offenders need to be identified in the correctional system, as most will not identify themselves as having a problem and most will not seek help on their own.' (Lahn and Grabosky, 2003). While Turner et al (2017) noted in one of their case studies in Ontario that 'people who admitted to having a gambling problem opened themselves up to potential ridicule or exploitation by other inmates.' Furthermore, they argue that awareness and understanding of problem gambling in the criminal justice system is low, and that 'clients will not want additional conditions on their parole.' (ibid.)

Castrén et al (2019) conducted a study with prison workers in two Finnish prisons. They found that 'professionals working in prisons are well aware of gambling problems and recognise the need for support, but there is no systematic framework for the identification of individuals with possible problem gambling and a shortage of supportive resources for their treatment.'

Williams et al (2005) noted that treatment for gambling would likely reduce criminal recidivism but not eliminate it, because of additional vulnerabilities and co-morbidities. They explained that 'there are many cases where problem/pathological gambling has no direct relationship to offending. Some individuals [have] an extensive pattern of anti-social behaviour proper to becoming a problem gambler... for other individuals, problem gambling and criminal offending are part of a general pattern of impulse-control problems.'

Amongst the prison population, gamblers were more likely to be younger, less well educated, and from BAME backgrounds (Abbott et al, 2005). One Australian prison survey found that all the Vietnamese respondents in the study were classified as problem gamblers following PGSI screening (Perrone et al, 2013). In another Australian study, Riley et al (2018) noted that problem gambling is particularly prevalent in the aboriginal community, but that little data is available regarding problem gambling among aboriginal prisoners. The intersection between problem gambling and crime in this community has not been explored.

Characteristics of disordered gamblers who commit crimes

Women and gambling-related crime

The prevalence of problem gambling among women in the criminal justice system is striking. Lind and Kääriäinen (2018) found that women who are arrested are as likely to have gambling problems as men. Perrone et al's 2013 study found that 47.6 per cent of females in their sample of arrestees versus 31.6 per cent of males were classified as problem gamblers using PGSI.

Lesieur's renowned 1988 study 'The Female Pathological Gambler' found that two thirds of the women interviewed eventually resorted to illegal activities to replenish funds. These women had 'chaotic and troublesome lives'. This study also revealed that 62 per cent of his sample reported past or current relationships with men who were themselves pathological gamblers, alcoholics or drug addicts, and that 29 per cent had abusive husbands.

It is important to note that various studies demonstrate the specifics of female problem and pathological gambling behaviour (Carneiro et al, 2019; Boughton and Falenchuck, 2007, Hing et al, 2015). One example is Thomas and Moore's 2001 study of Australian poker machine players which demonstrated that women who scored higher on measures of anxiety, depression, loneliness and boredom, also scored significantly higher scores on their measure of problem gambling.

Complex relationship between problem gambling and mental health

It may not be surprising that there are apparently elevated levels of mental health disorders among problem gamblers given that much of the research was conducted with gamblers either in treatment or who were incarcerated. This review does not seek to try and disaggregate the specifics of pathological gambling from the other mental health issues: that would require a meta-analysis of the data and would not necessarily provide additional insight. The research suggests that the most common co-occurring disorders are impulse control disorders and anti-social personality disorder. However, the direction of cause-and-effect is unclear. As Turner et al (2017) conclude in their Canadian study, further knowledge and understanding of the comorbidity rates between problem gambling and mental disorders is important to inform understanding of the aetiology of problem gambling and the heterogeneity of problem gamblers.

Research does draw out some mental health issues for problem gamblers in the criminal justice system:

- Lind and Kääriäinen (2018) found that a higher score on the MADR-5 depression screen was associated with self-reported problem gambling related cheating or stealing
- Templer et al (1993) found that the population of pathological gamblers admitted to a Nevada medium security prison also had significant positive correlations with depression, psychopathic deviate, psychasthenia, paranoia, and schizophrenia.

Sundqvist and Rosendahl (2019) suggest gendered pathways into gambling addiction via anxiety and depression. Women with anxiety or depression prior to the onset of gambling constituted a risk factor for developing a gambling addiction amongst women, but not men. Furthermore, anxiety and depression presaged problem gambling for women, but not for men. This study notes that no further evidence has been gathered on how these pathways may impact on the different trajectories of criminal activity for women and men.

Cross-addictions

The prevalence of cross-addictions to drugs, alcohol or other dependencies is magnified amongst those problem gamblers who have committed crimes. A study in Nevada, for example, showed that whilst problem gamblers were more likely to have substance abuse and dependence problems than low-risk gamblers, dual disordered arrestees were more likely to report having committed assaults, thefts and drug sales in the past year (McCorkle, 2002).

In Australia, Marshall et al (1997) found that amongst a population of 103 newly imprisoned men, 34 per cent scored as problem gamblers using SOGS. Of these men, 62 per cent were likely substance abusers and 38 per cent displayed symptoms of alcoholism (their findings were also assessed in Williams et al 2005 review). A more recent Australian study by Perrone et al (2013) found that those who consumed illegal substances at heavy or excessive levels were more likely to be problem and moderate risk gamblers (67.4 per cent). The reverse was true for non or low risk gamblers, who in the 12 months before their imprisonment reported no, or occasional drug use.

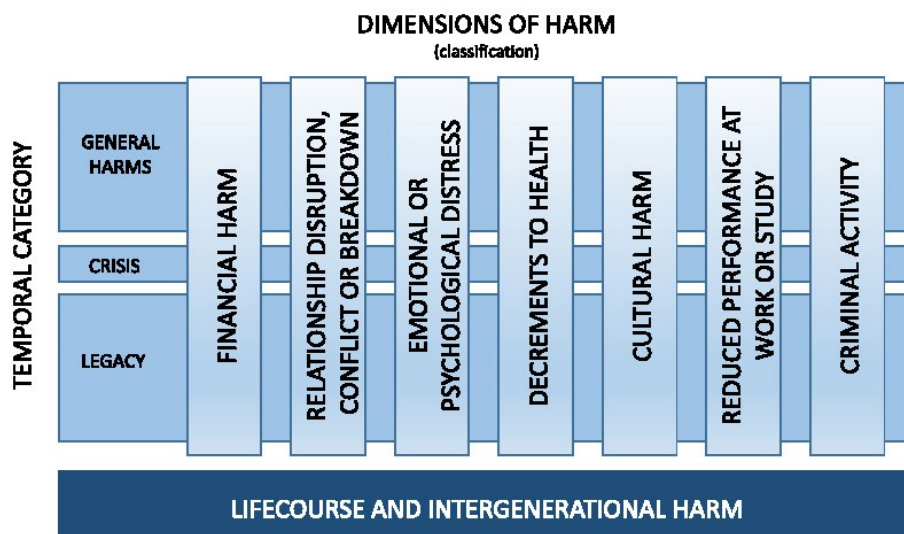
Overall, substance abuse and mental health disorders were almost always more marked in gamblers who went on to commit property crimes such as theft or embezzlement. Demographically, people who were younger, less well educated and/or had lower incomes were found to be more likely to turn to crime (Hing et al, 2015). There was also evidence that, if a person perceived their situation as hopeless or uncontrollable, they were more likely to commit crimes to try and repay gambling debts (Ledgerwood et al, 2007).

Gambling related harm

Where ‘problem gambling’ focusses on the individual gambler and their psychiatric well-being, the concept of ‘gambling-related harm’ (GRH) takes a far wider view of the impact disordered gambling has on the individual, those close to them and society at large. It is becoming the de facto way of approaching the individual and social costs of gambling addiction. In the UK, the Gambling Commission has recently defined it as follows: ‘gambling-related harms are the adverse impacts from gambling on the health and wellbeing of individuals, families, communities and society.’ (Wardle et al, 2018)

At this time, there is little direct formal research on the criminological aspects of GRH. However, there are a number of studies (see for example Browne et al in their work on GRH in Victoria, Australia in 2016) which touch on the illegal acts which form one of the seven key aspects of GRH. Whilst there is no internationally agreed definition of GRH, Langham et al’s 2016 study provides a basis for considering the impact of gambling-related crime in its widest sense.

Langham et al (2016) produced the following framework to aid in the understanding of gambling related harm:



These dimensions show clearly that harm has a temporal aspect. Initial harms could encompass theft against family, for example, resolved outside of the criminal justice system. Small scale thefts could escalate, leading to involvement with the criminal justice system. This can have a significant legacy effect in the form of a criminal record and its concomitant impact on employment and education.

In the UK, the Department of Culture, Media and Sport announced last year that Public Health England is to conduct an evidence review of the health aspects of gambling-related harm to inform action on prevention and treatment.

To fulfil this commitment, two complementary evidence reviews are being undertaken:

1. The National Institute of Health Research (NIHR) has commissioned a research unit at Sheffield University to review the effectiveness of national and international policies and interventions to reduce gambling-related harms
2. Public Health England will carry out a broader evidence review on the prevalence of gambling and associated health harms and their social and economic burden.

The diagnostic screening tools which have been discussed at length in this review have limited use when attempting to measure wider impacts of gambling, as their aim is to find behaviours which indicate that an individual is at risk of experiencing harm. Williams and Volberg (2010) have developed the PPGM – Problem and Pathological Gambling Measure – to overcome the restrictions of DSM-IV based screening tools when measuring more general harms.

However, this in turn has been questioned by other academics such as Professor Paul Delfabbro, who has queried the approach of asking gamblers direct questions about the ‘harm’ they are experiencing, and advocating instead for a better understanding of the opportunity costs that low-risk gamblers are prepared to trade off in order to spend disposable income on gambling (Delfabbro and King, 2019).

Appendix A: Screening tools

Listed here in approximate order of popularity. All are based in some form or other on criteria in DSM-3 or DSM-4.

PGSI: The Problem Gambling Severity Index

This is the most commonly used screening tool in recent years. It is made up of nine questions with a range of answers: 'never/rarely/sometimes/often/always'. Some regard this tool as problematic, for example a Swedish study found: 'Several answers to the PGSI items contained ambiguities and misinterpretations, making it difficult to assess to what extent their answers actually indicated any problematic gambling over time.' (Samuelsson et al, 2019).

The PGSI screening tool asks the following questions:
Thinking about the last 12 months...

1. Have you bet more than you could really afford to lose?
2. Still thinking about the last 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement?
3. When you gambled, did you go back another day to try to win back the money you lost?
4. Have you borrowed money or sold anything to get money to gamble?
5. Have you felt that you might have a problem with gambling?
6. Has gambling caused you any health problems, including stress or anxiety?
7. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
8. Has your gambling caused any financial problems for you or your household?
9. Have you felt guilty about the way you gamble or what happens when you gamble?

Answers: Never / Sometimes / Most of the time / Almost always

Note: this screening tool is readily available online. The version replicated here is taken from the Gambling Commission's explanation of screening tools, available here: <https://www.gamblingcommission.gov.uk/news-action-and-statistics/Statistics-and-research/Problem-gambling-screens.aspx>

CPGI: Canadian Problem Gambling Index

The (CPGI) was the result of a collaborative, three-year research venture (1997–2000) managed by the Canadian Centre on Substance Abuse (CCSA) and funded by the Canadian provinces. The goal was to develop a new,

more meaningful measure of problem gambling for use in general population surveys in Canada, reflecting a more holistic view of gambling within a social and community context. It assesses two domains of problem gambling: problem gambling behaviour, and the consequences of that behaviour for the individual or others. McCready and Aldaf (2006) provide the following explanation:

The CPGI is comprised of 31 items within three sections: Gambling Involvement, Problem Gambling Assessment, and Problem Gambling Correlates. Involvement: Twenty-two (22) items provide indicators of gambling involvement: types of gambling activity, frequency of play, duration of play and spending on gambling. Assessment: The problem gambling assessment section consists of twelve (12) items. Nine (9) of these comprise the Problem Gambling Severity Index (PGSI) and include four (4) behaviours and five (5) consequences. The PGSI can be scored to describe the prevalence rate of problem gambling in a population. The PGSI categorizes survey respondents into five groups: nongamblers, non-problem gamblers, low risk gamblers, moderate risk gamblers, and problem gamblers. Correlates: The correlates of problem gambling consist of fifteen (15) items that can be used to develop profiles of different types of gamblers and problem gamblers. The last 11 items are demographic questions that bring the total number of questions to 42.

SOGS: The South Oaks Gambling Score

This was developed in 1987 by Lesieur and Blume. It is a 20-item questionnaire based on DSM-III criteria for pathological gambling. It may be self-administered or administered by nonprofessional or professional interviewers (Lesieur and Blume, 1987). SOGS classifies individuals into one of three categories: non-problem gambler, problem gambler and probable pathological gambler.

For further information, see: The Gambling Research Exchange Ontario, <https://www.greo.ca/en/topics/sogs.aspx>

NODS: National Opinion Research Centre DSM Screen for Gambling Problems

Toce-Gerstein et al (2009) give the following explanation of the NODS screening tool:

NODS is based on the American Psychiatric Association's (APA) DSM-IV criteria for pathological gambling and is a hierarchically structured 17-item screen that was originally developed for use in a U.S. national epidemiological and policy study (Gerstein et al. 1999) and deployed

subsequently by researchers in the United States and elsewhere (Bakken et al. 2009; Hodgins, 2004; Hong et al. 2009; Sartor et al. 2007; Wickwire et al. 2008; Wulfert et al. 2005; Xian et al. 2008). The 17 NODS items yield a score ranging from 0 to 10, corresponding to the number of discrete DSM-IV criteria for pathological gambling. A presenting score of 5 or more qualifies as pathological. In addition, scores of 3 or 4 have been classified as corresponding to the subclinical syndrome of problem gambling, and scores of 1 or 2 have been defined as an at-risk population with increased likelihood of progression to problem or pathological status, relative to persons with scores of zero.

Gambling Research Exchange Ontario further explains:

A self-assessment version (NODS-SA) is also available. This tool helps individuals decide if they should change their gambling behaviour or seek help for their gambling.

Lie/Bet:

This two-question Yes/No scale is derived from the 10 question DSM-IV scale (Johnson et al, 1997).

The Lie-Bet Screening Instrument:

1. Have you ever felt the need to bet more and more money?
2. Have you ever had to lie to people important to you about how much you gambled?

If both questions are answered Yes, it shows the potential need for further screening to establish if treatment is needed (Johnson et al, 1997).

PPGM: Problem and Pathological Gambling Measure

A simpler Yes/No answer structure for 14 questions about past 12 months gambling behaviour, again based on DSM-IV criteria. It is organised in three sections: 'Problems', 'Impaired Control' and 'Other Issues'.

Yes answers are scored as follows

- 0 indicates no risk/non-problem gambling
- 1 indicates at-risk
- 2–4 indicates problem
- ≥5 indicates pathological gambling

Note: Information about this screening tool is readily available online. The version replicated here is taken from the Gambling Research Exchange Ontario's SBIRIT Toolkit, available here:

<https://www.problemgambling.ca/resources/sbirt-toolkit/screening/ppgm.html>

UK: PGSI short form

This was developed by Dr Rachel Volberg and is used by the UK Gambling Commission for its prevalence surveys. It comprises three questions believed to be 'quite suitable for population prevalence research' (Williams and Volberg, 2013).

The Gambling Commission's explanation of screening tools provides the following details:

This instrument is formed of three questions from the PGSI, which are scored on a 4-point scale from never to almost always. It is asked to all participants of a survey who have gambled at least once in the last 12 months.

The questions and scoring system are as follows:

In the last 12 months...

1. Have you bet more than you could really afford to lose?
2. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
3. Have you felt guilty about the way you gamble or what happens when you gamble?

Responses to each item are dichotomised (that is, given a score of 0 or 1) to show whether a person meets the criteria or not. A total score between 0 and 10 is possible.

0 = Non-problem gambler – Gamblers who gamble with no negative consequences

1 = Low-risk gambler – Gamblers who experience a low level of problems with few or no identified negative consequences

2-3 = Moderate-risk – Gamblers who experience a moderate level of problems leading to some negative consequences

4+ = Problem gambler – Gambling with negative consequences and a possible loss of control

Note: this screening tool is readily available online. The version replicated here is taken from the Gambling Commission's explanation of screening tools, available here: <https://www.gamblingcommission.gov.uk/news-action-and-statistics/Statistics-and-research/Problem-gambling-screens.aspx>

This multiplicity of screening tools is further complicated by the fact that different researchers may use different points on the scale to define 'problem' versus 'pathological'. Williams and Volberg (2012) found that the accuracy of the main screening tools was, at best, modest. While Otto et al's 2020 analysis suggested that potentially none of these screening tools would be regarded as robust in a psychiatric setting.

It should also be noted that multiple screening tools have been used to establish the prevalence of problem gambling amongst a population. However, as Williams and Volberg (2010) noted, the prevalence rate can vary dramatically depending on the collection method used. They compare the findings from a telephone survey where gambling is included as part of an overall health and wellbeing questionnaire which typically results in problem gambling prevalence rates of 0.7 per cent to 0.9 per cent in a general population with the same screening tool used in a face-to-face interview. In the latter methodology they suggest a typically higher prevalence rate of 4 per cent.

Researchers, including Perrone et al (2013) argue that clinical measurement of problem gambling (SOGS and DSM-IV) does not allow for the assessment of social, cultural and environmental factors. They suggest this leads to limited view of the impact of crime on society in general.

Appendix B: Prevalence of gambling and problem gambling in Australia, Canada, New Zealand, United Kingdom and United States of America

The following details the latest available information on the prevalence rates (in the overall population) of gambling and problem gambling in the major English-speaking jurisdictions covered in this review.

Note that there is no agreed single way of establishing prevalence of gambling or problem gambling globally. Indeed, some surveys use two different survey instruments to establish problem gambling prevalence (e.g. Williams and Volberg 2013 study of Ontario, Canada) and then provide an average across both. All the prevalence data reported here is via self-reported questionnaires. There is also no recent nationwide study (yet) of gambling and problem gambling in Canada. Examples given here are for the most populous provinces.

- Armstrong and Carroll (2017) reported the following prevalence rates in **Australia** in 2017:
 - 39% of adults 18+ gamble at least once a month;
 - 1.1% prevalence rate of problem gambling (using screening tool PGSI)
- Malatest and Associates Ltd (2014) reported the following prevalence rates in **Canada/British Columbia** in 2014:
 - 72% of adults 18+ participated in at least one form of gambling in the past 12 months;
 - 0.6% prevalence rate of high risk gambling, 2.6% prevalence rate of moderate risk (using screening tool CPGI)
- Williams and Volberg (2013) reported the following prevalence rates in **Canada/Ontario** in 2011:
 - 83% of adults 18+ participated in at least one form of gambling in the past 12 months;
 - 1.23% prevalence rate of problem gambling (using PPGM and CPGI screening tools [note: 1.23% is the average across both – a higher prevalence rate from those who answered PPGM rather than CPGI])
- Rossen/New Zealand Ministry of Health (2015) reported the following prevalence rates in **New Zealand** in 2011/12:

- 52% of those over 15 years of age participated in at least one form of gambling in the past 12 months;
 - 1% prevalence rate of moderate risk gambling, 2% prevalence rate of high risk gambling (using screening tool PGSI)
- The Gambling Commission (2020) reported the following prevalence rates in the **UK** in 2018/19:
 - 47% of adults 16+ had participated in any form of gambling over the last 4 weeks;
 - 0.8% prevalence rate of moderate risk gambling, 0.5% prevalence rate of high risk gambling (using screening tool PGSI)
- Welte et al (2015) reported the following prevalence rates in the **USA** in 2011:
 - 77% of adults participated in at least one form of gambling in the past 12 months;
 - 2.4% prevalence rate of high risk gambling (using screening tool DSM-V, SOGS)

Appendix C: About the Commission on Crime and Problem Gambling

The Commission on Crime and Problem Gambling was launched by the Howard League for Penal Reform in June 2019. It is scheduled to run for three years and it will try to answer three questions:

- What are the links between problem gambling and crime?
- What impact do these links have on communities and society?
- What should be done?

The Chair of the Commission is Lord Peter Goldsmith QC. He leads a team of 16 Commissioners, comprising academics and professionals with expertise in the criminal justice system and public health as well as experts with knowledge of the gambling industry and lived experience of addiction.

Together, the Commissioners will investigate patterns of crime linked to problem gambling, and the societal harms that connect the two, before seeking to make recommendations for government, the gambling industry and within the criminal justice system.

The Commissioners will focus less on individuals and treatment and more on the broader impact that the links between problem gambling and crime have on communities and society. They will consider how people affected by problem gambling can be diverted from the criminal justice system.

The Commission will look at the driving forces influencing change and practice, including legislation, politics and the media. It will engage with industry and political leaders throughout its work.

For more information: <https://howardleague.org/commission-on-crime-and-problem-gambling/>

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About the Howard League for Penal Reform

The Howard League for Penal Reform is a national charity working for less crime, safer communities and fewer people in prison. We campaign on a wide range of issues including short term prison sentences, real work in prison, community sentences and youth justice. We work with parliament and the media, with criminal justice professionals, students and members of the public, influencing debate and forcing through meaningful change to create safer communities.

Our legal team provides free, independent and confidential advice, assistance and representation on a wide range of issues to young people under 21 who are in prisons or secure children's homes and centres. By becoming a member, you will give us a bigger voice and give vital financial support to our work. We cannot achieve real and lasting change without your help.

Please visit www.howardleague.org and join today.

About the author

Sarah Ramanauskas is Senior Partner at Gambling Integrity. She works with lottery and gambling operators in the UK, Europe and the US to ensure that their players are protected from gambling-related harm. Gambling Integrity's audit and compliance services help gambling operators understand and identify the risks associated with crime and gambling, in particular where crimes may have been committed in order to fund a gambling addiction.
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