



Legacy Gambling Harms: What Happens Once the Gambling Stops?

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Abstract

Purpose of Review Legacy gambling harm refers to adverse consequences that extend past the period where people are actively gambling at harmful levels. These harms can affect the gambler, people close to them and the wider community. This article reviews current research that investigates legacy harms; the types of legacy harm, how long they last and whether evidence suggests these harms are real or instead imagined injuries or reflections on past regrets.

Recent Findings Legacy harms to individuals can be broadly categorised as including financial, relationship, emotional/psychological, health, culture, work/study and criminal/deviance harms. In addition, legacy harms affect entire communities by drawing funds and social capital away from vulnerable communities, leaving them socially, culturally and materially impoverished. Most legacy harms that accrue to gamblers have a half-life of 4 years, although financial harms last somewhat longer at 5 years. Greater distance in time from a past gambling issue is reliably and positively related to health and well-being indicators, including the Health Utility Index and the Australian Unity Wellbeing Index, which suggests that legacy gambling harms are real and have a lasting impact on well-being, rather than just imagined hardship from prior gambling difficulties.

Summary These findings suggest programme and policy development to support gamblers in reducing and managing their legacy harms, rather than focusing only on relapse prevention.

Keywords Legacy · Harm · Gambling · Health · Utility · Well-being · Problem · Public

Introduction

Gambling-related harm can profoundly affect both people who gamble and people who are close to them [1, 2•]. Excessive time and money spent on gambling is the proximal source of harm that takes resources away from important obligations [3]. These observations are not controversial. However, there are two important aspects of the harm emanating from gambling that have received recent attention. First, there is a growing recognition that gambling-related harm extends to people who do not, and may never, meet the formal criteria for disordered gambling [4]. That is, people can be harmed by virtue of spending too much time or money gambling, regardless of whether their pattern of

behaviour meets clinical criteria for pathology. While these impacts may be less severe on an individual level, they are not negligible; and include symptoms such as missing bill payments, deteriorating relationships with one's family or being late for work. In this way, gambling harm is increasingly recognised as being akin to the harm from alcohol consumption, where people can drink too much and experience adverse events, without necessarily having an alcohol abuse disorder [5, 6]. Throughout this article, we use the term “harmful gambling” to refer to gambling that leads to harm, even if it does not constitute a gambling disorder.

The second area to receive increased attention, and most germane to this current report, is that gambling harm can extend past the period where people are actively gambling at harmful levels [2•]. This means that once someone stops gambling at problematic levels, they can still experience the ongoing consequences of their prior episodes of harmful gambling. Likewise, the person's gambling can have lasting effects on family, friends and communities [7••]. In short, excessive gambling can lead to psychosocial and economic

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legacy consequences: The impact does not necessarily cease when the gambling stops.

Most of the research on gambling problems, and more recent work on gambling harm, explicitly recognises only harm that accrues directly from current gambling [8, 9•, 10–12]. This article, in contrast, reviews work that reflects on the legacy of harm that continues past the active period of gambling at harmful levels. We shall review the following: (1) the types of harm that constitute legacies from past gambling, (2) how long legacy gambling harms last for and (3) evidence for whether legacy harms have a real impact on well-being, as opposed to simply being imagined injuries or manifestations of regret. This work shows clear parallels to the recognition that gambling harm extends beyond people who are classified as disordered gamblers: It can persist over time, as well as being transmitted over social networks.

What Are the Types of Legacy Harm?

It is important to distinguish gambling harm from disordered gambling [13]. Disordered gambling refers to a mental health condition and behavioural features associated with dependence and inability to control gambling behaviour. Likewise, problem gambling has a focus on behavioural indicators of excessive behaviour, such as feeling the “need to gamble with increasing amounts of money in order to achieve the desired excitement” [14]. Gambling harms, in contrast, are negative consequences that people experience because of their or another person’s gambling involvement. Furthermore, these negative consequences may extend past the period where people are gambling with great intensity, as defined in terms of the money and time they devote to it [3]. When these negative consequences persist past this time of intensive gambling involvement, the consequences are termed *legacy harms* [2•]. There are additional sub-categories of legacy harms as well. For instance, *life course harms* are consequences that substantially alter people’s life trajectory, where those impacts may be of such significance that the person may never return to a state of full recovery [9•]. When people lose a job due to their gambling, for example, they may never regain the same earnings or professional achievement. Divorce and bankruptcy are other severe consequences that result in a fundamental change in the trajectory of one’s life. Another sub-category of legacy harms is *intergenerational harms* [9•]. For example, when children lose parental investment during critical points in their development due to parental gambling, their developmental outcomes, including school performance, job prospects and lifetime potential, may never fully recover. Significant parental gambling losses may also mean they are unable to provide support to their children later in life, such as in producing a deposit for buying a home.

Having established some core definitions and distinctions, we will now review some key conceptual and empirical milestones that, we shall argue, now enable a proper consideration of legacy gambling harms.

Foundational Research

It has long been recognised that a gambling disorder has profoundly negative effects on the person who gambles. It is not surprising, therefore, that most research in the gambling field has focused on the prevalence, individual characteristics and treatment of people with a severe gambling problem [15, 16]. More recently, a public health view of gambling has been gaining traction to recognise and respond to the broader effects of gambling on individuals, families and communities [17]. A public health perspective highlights that, although the financial, relationship, health and other impacts of gambling are most acute amongst individuals with a severe gambling problem, gambling can harm gamblers across the entire risk spectrum [16], inclusive of low-risk and moderate-risk gamblers [18]. Importantly, a public health model also recognises the propagating effects beyond the person who gambles, to also include affected others and the wider community [17, 19]. The focus of harm reduction efforts is extended from simply enabling gamblers to make informed choices, to instead promote the need for a multi-sectoral approach to reduce gambling harm across the population [17, 20, 21]. This shift has recently catalysed research in several key areas of gambling-related harm. These include its conceptualisation, measurement and prevalence.

Based on a public health approach that measures impacts in terms of health-related quality of life, gambling harm has been conceptualised as the adverse consequences of gambling that lead to a decrement in the health or well-being of an individual, family unit, community or population [9•]. This conceptualisation encapsulates a broad range of harms occurring across the spectrum of gambling risk that have measurable impacts on health across the population. Based on this reframing, researchers have developed public health frameworks outlining the risks and effects of gambling-related harm to inform future research, policy and practice [16, 21 e.g. 9•, 10, 11, 22–24]. These draw attention to factors beyond the individual, such as product design, regulation, policy and industry practices that have an impact on gambling harm.

Accompanying this public health reconceptualisation, recent research has focused on the measurement of gambling-related harm, beyond tallying the prevalence of those with a diagnosable gambling disorder. Recently developed measures include the Harm Questionnaire [HQ: 25] and the Short Gambling Harms Screen [SHGS: 26]. The SHGS has been psychometrically validated and is increasingly being

used [27]. Recent work has further evidenced its validity when benchmarked against reductions in health and well-being [28–30]. Current work [31] has further validated the SGHS (renamed the Gambling Harm Scale-10), validated a 20-item measure (GHS-20) to elicit further detail on each domain of harm and validated measures of harm to affected others (GHS-10-AO, GHS-20-AO). This next-generation suite of measures will further increase the public health understanding of gambling-related harm. However, although the integrated assessment of harm to gamblers and affected others is a welcome development, the authors recognise that (1) their assessment is an “instantaneous” one, which involves only a snapshot at the time the gambling is occurring, and (2) that have impacts on non-adult children of gamblers, typically not included in prevalence surveys and are not currently incorporated.

With the availability of gambling harm measures, prevalence studies are increasingly measuring harm from gambling to better understand its nature, distribution and quantum in the population. Recent prevalence studies in Australia [10, 32–37], New Zealand [8] and Finland [38] have administered the SGHS. In nearly all these studies, 9–10% of adults report gambling harm-to-self in the past year, with higher rates amongst males. Recent work has also measured harm-to-others at the population level. Results indicate that each person with a gambling problem affects up to six others [39], harming 5–11% of the adult population each year [19, 33, 36, 40, 41]. Affected others experience severe adverse effects in numerous life domains and have reduced well-being, and partners and women report the most harm [1, 19, 27, 41, 42]. Although affected others likely experience less harm individually than the gambler themselves, the many-to-one nature of the relationship means that the aggregate impact may well be greater.

From the above, it can be concluded that the field is in a relatively strong position regarding the assessment of harm (or morbidity, in a public health framework) due to concurrent gambling problems, as experienced by the gambler and other adults with whom they have significant relationships. But although there is growing consensus on concurrent gambling harms, literature that specifically addresses legacy gambling harm is sparse. Langham et al. [2•] outlined a comprehensive taxonomy of gambling harm that explicitly recognised the existence of legacy, lifetime and intergenerational consequences. As part of this framework, the authors identified that these ongoing harms, like immediate harm, can be broadly categorised into dimensions including financial, relationship, emotional/psychological, health, culture, work/study and criminal/deviance.

The financial consequences of gambling along with time spent gambling are the proximal sources of gambling harm [3]. The debt and other financial problems associated with gambling do not automatically disappear with

resolution of a gambling problem. Using UK banking data on 6.5 million UK residents, Muggleton et al. [43] found an association between gambling participation and indicators of financial distress, as well as negative health and well-being outcomes. In addition, past gambling was associated with negative future outcomes of unemployment, disability and even premature mortality. Relatedly, Swanton and Gainsbury [44, 45] and Oksanen et al. [46] found that people with gambling problems have high consumer debt, and that their debt stress relates to poor mental health. Thus, there is evidence that financial debt is an important component of legacy gambling harm that may in turn be related to other harms.

More recently, Rockloff et al. [7••] suggested that legacy harms can also include social and cultural damage at a community level, extending out from individual level harms that affect gamblers and people directly connected to them. Community level harm can therefore be understood as multidimensional, referring to either the breakdown of the relationship between the individual and their community, or the impact of gambling on the community itself. Negative consequences stemming from gambling in New Zealand, for instance, have been found to contribute to a dissolution of traditional values and practices of some vulnerable communities, contributing to, and compounding, long-term health and well-being inequities. Gambling can prevent some people from being involved in their communities, whereby cultural obligations may not be fulfilled, eroding social and cultural capital and increasing a sense of marginalisation. Time, money and energy spent on gambling are diverted away from community development activities, including volunteerism and the sharing of resources that enhance communities. Moreover, gambling proceeds are a significant contributor to charitable organisations, but those revenues are often not distributed equitably with the communities from which they came. Consequently, one legacy of gambling harm includes a transfer of wealth and resources from vulnerable communities, which can least afford to lose wealth and would benefit the most from charitable proceeds, and redistributes those funds to communities that are less vulnerable. This observation parallels the more general regressive redistributive effects of gambling, which is to channel money from the vulnerable people to corporations, investors and the public purse. In comparison to the diverse groups and interests that make up communities, the gambling industry is well-connected, represented and heard at local and national government levels in most Western democracies. Moreover, a member of a community that has been severely affected by gambling can feel the consequences, despite having no personal connection to the activity. Thus, it is important to recognise that beyond the usual focus of gambling studies on the harms or problems that accrue to individuals, there is a larger story of legacy harms that accrue to entire

communities that leave them socially, culturally and materially impoverished.

How Long Do Legacy Harms Last?

Despite a relative lack of information on the broader question of assessing legacy harm, contemporary research has been able to understand the narrower issue of how long gambling harm lasts after people transition out of an episode of harmful gambling. Rockloff et al. [7••] conducted an online survey looking at legacy harms of gamblers ($N=735$, 43% female) that was administered between April 8th, 2020 and May 23rd, 2020. The survey included participants who admitted to having an “issue with gambling, no matter how minor” at some point in the past, but at least 1 year distant from the year-end of 2019. The survey used the language of a gambling *issue* rather than a gambling *problem* since people would be less likely to admit to the latter due to concerns about social desirability. Nevertheless, admitting to an issue was assumed to be indicative of past instances of harmful gambling, regardless of whether respondents met criteria for problem gambling.

Participants in the survey were asked when their last issue with gambling had occurred and were given a checklist of 83 gambling harms that they might have experienced during this time. This 83-item checklist was derived from prior research [9•] and aimed to be a comprehensive and non-redundant list of all harms that might occur due to gambling involvement. To see if the harms experienced during this past period of problematic gambling were continuing (i.e. legacy harms), participants were given a restricted list of all the past harms they had reported, and asked to check off any harms that “still affect you at sometime within the last 12 months due to gambling that happened in the past.” Participants could add additional legacy harms as a fill-in-the-blank, although few volunteered substantially new harms that were not previously chosen.

The results showed that most gamblers in the sample had continuing harms ($n=417$, 56.7%). Importantly, and as predicted, gambling harms were less frequent with greater distance in time from the past harmful gambling episode. The likelihood of gambling harms remaining after the end of a period of harmful gambling, with harm decreasing exponentially with time since the problems ceased, and probability of reporting the harm modelled as a logistic model of the risk function.

Knowing that the underlying degree of experienced harm demonstrates exponential decay illustrates an important property of gambling harm. Many harms drop-off quickly with distance from the past episode of harmful gambling; however, at least some harms are more long-lasting. To determine the likely longevity of different types of harm,

Rockloff et al. [7••] calculated the half-life of gambling harms from the regression probability model. The half-life of a harm is the time when it is 50% likely that the original harm experienced during the episode of harmful gambling is no longer being experienced. The probability model suggested that for any randomly chosen single harm, the half-life is 4 years. However, the length of harms varied somewhat by category. Financial harms, as a group, had the longest half-life at 5 years, and work/study harms and other harms (e.g. legal consequences) had the shortest half-lives at 2.4 and 2.2 years, respectively. Rockloff et al. [7••] also calculated the longevity of specific gambling harms (e.g. increased credit card debt due to gambling), irrespective of harm category, and found that harms involving community relationships, church involvement and domestic and other violence were shorter lived than other types of harm.

In sum, gambling harm can be surprisingly long-lived, showing a 4-year half-life, but not all specific symptoms of harm have the same lifespan. Financial harms are likely to last longer, whereas harm to community relationships tends to be somewhat shorter. This is important information for treatment providers and policymakers in terms of setting realistic expectations for clients and making provisions for follow-up support. People who experience harm from their gambling will likely want to know when they can expect some relief from the issues that are affecting them, and positively framed guidance can be helpful. Most of the harms that people experience will begin to disappear quickly, although some harms may still linger. Nevertheless, in general, the financial devastation of gambling is not a life-long curse, and helpfully, community relationships are likely to recover faster than other issues.

Imagined Injuries or Manifestations of Past Regret?

To verify the results of legacy gambling harm being a true burden, rather than an imagined hardship from a past traumatic experience, participants in Rockloff et al.’s study were surveyed on two measures of well-being, including the Health Utility Weight (HUW) and the Personal Wellbeing Index (PWI) [see 28,33]. As expected, people who reported more continuing gambling harms also reported lower well-being on these indices, even though neither measure asked questions specifically about gambling, gambling problems or gambling-related harm. The greater the number of legacy harms a participant had, the lower the well-being reported on both indices (HUW and PWI). Moreover, well-being on both measures improved with increasing distance in time from the past gambling issue, at least suggesting that the reduction in harm was responsible for increases in well-being.

Discrete Periods of Harm

There are important assumptions built into the conceptualisation of legacy harms as it has been studied so far. First, people were asked about a past gambling issue, no matter how minor, that affected them at some time in the past, and to indicate when “most” of those issues had resolved, or conversely whether they were ongoing. This forces a discrete conception of gambling issues that is somewhat artificial. Some people may have discrete periods where they gamble heavily and experience gambling harms, whereas there are other times when they either do not gamble or gamble at a low and affordable level. However, it is possible, and perhaps probable, that gamblers also move smoothly through times of greater and lesser gambling involvement. That is, gambling harm may not only occur as a result of discrete episodes of “problem” or “non-problem” gambling, but instead gamblers experience varying levels of harm in line with varying levels of involvement. Consequently, some harm identified in past work on legacy harms, such as that by Rockloff et al., may be low-level immediate harm from continuing gambling rather than true legacy harm that emanates from past gambling. Similarly, it is unclear as to how low-level immediate harms occurring from continued gambling may impact the intensity and longevity of legacy harms resulting from previous episodes of harmful gambling. Further research can help address this limitation by understanding what proportion of the harms might stem from continuing gambling.

Implications

For gamblers, research on legacy harms provides a realistic basis for understanding what to expect with the cessation of harmful gambling. That is, gamblers can be informed that (a) the consequences of gambling do not resolve when the harmful gambling stops; (b) continuing to gamble in a way that causes harm can mean longer lasting harm; and that (c) harms typically have a shelf life. Greater insight into the longevity of gambling harm, but also the knowledge that harms do usually resolve over time, may help to break relapse cycles where people return to gambling as a means to cope with the lasting consequences of previous harmful gambling episodes.

It is difficult to know how long the legacy of harm to social capital and the environment continues because most communities are persistently exposed to harm. There is little prospect for recovery when harmful gambling is pervasive within the community. Future research may be able to understand those rare cases in which gambling opportunities are removed from communities to track how entire

communities may recover. This knowledge is important in understanding the pervasive effects of gambling on communities, rather than the usual focus of psychologists regarding the effects of gambling on individuals.

There are clear implications for this work in how services should be changed. Much work by treatment services is organised around supporting recovery and protecting people against relapse. However, there is less consideration around how people might be supported in recovery to ameliorate their ongoing experiences of harm. Support services can be resourced to provide a more holistic offering, such as financial, relationship and mental health counselling, to improve upon people’s situation past the end of harmful gambling involvement. Self-help groups, such as Gamblers Anonymous, are explicitly concerned with positive growth and community reconnection during recovery, yet they are limited in the provision of formalised interventions.

Funders of gambling treatment services need to recognise the importance of legacy gambling harms so that comprehensive long-term support can be provided to those who need it. This recognition may have a knock-on effect of reducing the high rates of gambling relapse. Explicit support could be provided to recovering gamblers that recognises the burdens of legacy harms, not just as potential triggers for relapse, but also to address ongoing harm and improve people’s lives during recovery. For instance, bolstering people’s use of and access to *recovery capital* [47] may improve their long-term welfare. People experiencing legacy harms could also be encouraged to seek support from non-gambling services, since their period of harmful gambling has ceased. Relationship, financial counselling, health and mental health services could assist in this regard. Self-help resources are also needed to support people to cope with and address the legacy harms from their gambling.

Conclusion

Research into legacy gambling harms is nascent, but some clear findings are now available. Legacy harms extend well beyond harmful episodes of gambling. On average, these lingering effects can have a half-life of around 4 years, with financial harms lasting longer with a half-life of 5 years. As these figures reflect the half-life of the harm, there are some people who will experience harms far longer. These legacy harms are not just regrets or remembrances of past harm, but instead have been shown to be reliably related to reductions in well-being using two different measures: HUW and PWI. Moreover, many harms fall away quickly after the resolution of most issues, whereas other harms disappear more slowly. The pattern of reduction in harm can be described by a decreasing logistic curve. There is a manifest need for greater thought and investment into how to support gamblers

in recovery. Services need to be resourced to provide continued support for clients beyond recovery from a gambling problem to help them cope with and address the ongoing experience of legacy harms.

In the future, knowledge must be developed on the legacy of gambling harms that accrue to affected others, including to children, as well as the intergenerational consequences that may continue beyond the lifespan of individual gamblers. Research is also needed on legacy harms to whole communities, where harmful gambling can weaken social ties and impoverish entire communities. There are recreational benefits to gambling, although these benefits must be measured against the harm that gambling causes. The growing public health understanding of gambling, including its immediate and legacy harms to gamblers, affected others and communities, indicates that gambling causes far greater decrements to health and well-being than previously thought.

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Declarations

Competing Interests The authors declare no competing interests.

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