
4 A broad perspective on gambling problems

Key points

- While the prevalence of people experiencing a cluster of serious harms from gambling — ‘problem gambling’ — helps determine the scale of help services, measuring the harms and vulnerabilities among non-problem gamblers is relevant to harm minimisation and consumer policies.
- In many instances, the prevalence of vulnerabilities among, and difficulties faced by, gamblers is greater than the problem gambling prevalence rate. Surveys indicate that:
 - many people have problems controlling their gambling, with around 4 per cent of all gamblers finding themselves gambling after reaching a self-imposed limit or facing difficulties resisting gambling. (Such gamblers spend much more than those without these difficulties.)
 - around 4 per cent of gamblers lose track of time or reality while gambling
 - faulty cognitions about gambling — a significant source of vulnerability among consumers — are widespread, with around 10 per cent of gamblers thinking that, even on games of chance, they could win more if they used a certain system or strategy
 - up to 8 per cent of ‘low risk’ gamblers report adverse health impacts from their gambling
 - more than 17 per cent of gamblers believe gambling has had an adverse effect on their lives
- Many of the people experiencing specific harms and cognitive difficulties are not problem gamblers, including:
 - 90 per cent of those finding it difficult to resist gambling
 - 60 per cent of those people whose jobs are adversely affected
 - 96 per cent of those who believe wins are more likely following losses
- Problems and vulnerabilities rise with the frequency of gambling and are much greater for gaming machines than other gambling forms:
 - while around 4 per cent of all gamblers find it hard to resist gambling, this share rises to more than 30 per cent for regular EGM players
 - a regular EGM player is also much more likely to be always criticised by others about their gambling than a non-regular gambler
 - people who only play lotteries, scratchies, bingo or raffles face few problems compared to those who play EGMs, wager or play casino table games.
- The likelihood of problems rises with EGM spending
 - for example, less than 1 per cent of people spending \$500 or less on EGMs annually felt they had a gambling problem compared to around 40 per cent of those spending more than \$15 000 annually.
- Risks associated with EGM playing apply to customers of all venue types (clubs, hotels and casinos).

Policy initiatives to address the vulnerabilities and harms associated with gambling can be costly for government and for those businesses supplying gambling services and equipment. Ultimately, those costs fall on taxpayers, gamblers and the community. There has to be a big enough problem to justify such costs and to motivate specialised measures targeted at gambling, rather than, as is usual with most other consumer services, standard consumer protection laws and resort to general mental health services.

This chapter and chapter 5 explore the evidence about the prevalence of the harms and vulnerabilities that people experience when gambling, and how these are linked to gambling forms and intensity of playing. Vulnerabilities should be distinguished from harm — and relate to risks of harms, but not necessarily to their presence (see later).

This chapter emphasises the general risks and harms associated with gambling, regardless of whether they are experienced by problem gamblers, while chapter 5 considers the prevalence of ‘problem gambling’ specifically.

4.1 Measurement should be policy-relevant and relate to vulnerabilities and harm

The public health and consumer approach to gambling — the framework applied by the Commission in this inquiry (chapter 3) — implies that the core target of policy is prevention and amelioration of the *detriment* people face when they or others gamble (chapter 3). There are several ways of assessing that detriment, or the risk if it occurring, including measuring:

- the incidence and prevalence of cases where gamblers (or other affected community members) suffer adverse effects associated with gambling. So-called measures of ‘problem gambling’ fall into this category, but there are many other prevalence estimates relevant to the assessment of harm
- the costs of the harms associated with gambling on the community as a whole (an approach developed in the Commission’s 1999 report and discussed in chapter 6 of this report)
- features of the environment and its interaction with consumers that increase the likelihood of harm.

Problem gambling remains a central policy issue

Much of the policy and public debate about gambling reflects concerns about ‘problem gambling’ — where a gambler experiences a cluster of significant harms. Problem gambling is measured as a single category based on various screening diagnostics (chapter 5), not as a spectrum. Depending on the chosen method, either a person is a problem gambler (a ‘case’) or not.¹ Just as in many other public health areas, measuring cases of severe problems is central for policy.

A high score on an integrated measure of problem gambling, such as the Canadian problem Gambling Index (CPGI) or the South Oaks Gambling Screen (SOGS) guides governments about the funding needed for specialised counselling and treatment services. Information about this sub-group can also help venue managers and health practitioners identify vulnerable people. Above all, the prevalence of this group among relevant populations may inform changes to venue practices (for example, self-exclusion) and technology (such as lower intensity machines).

Harms experienced by non-problem gamblers also matter for policy

There is often an implicit assumption that only problems severe enough to warrant counselling or ‘treatment’ are policy relevant. This conceals more widely prevalent gambling problems among consumers that are insufficiently severe to be considered ‘problem gambling’. In contrast, in many other areas of consumer policy and public health, such as alcohol consumption and motor vehicle safety, policy interest extends beyond those people whose cluster of behaviours or symptoms are extreme. So, most alcohol research and policy is not directed merely at the prevalence of alcohol dependency and the harms that are entailed by it, but rather the harms that alcohol consumption can pose for all people (such as alcohol-based violence or drink driving).

Notably, surveys of consumer detriment attempt to find the prevalence and severity of harms experienced by people from consumer transactions across *all* individuals, not just for those individuals where harmful outcomes and behaviours are concentrated. In the consumer sphere, the ACCC has drawn attention to cases where hundreds of thousands of consumers have experienced detriments that, while very small at the individual level, aggregate to a significant cost (Productivity

¹ The instruments used to measure problem gambling do provide a scale of problems, but people scoring below the problem category, are categorised as having lower risks, and not as lying somewhere on a spectrum of problem gambling. In contrast, in the disability area, people are often recognised as having a disability of a certain kind, but with recognised and measured gradations of its severity.

Commission 2008, pp. 215–6). Were the approach used in the problem gambling literature to be applied to consumer policy, it would ignore a sizeable share of aggregate consumer detriment. For example, it would imply that the only aspects of product safety relevant to consumer policy are those where a consumer suffers significant injury. (This would be as misplaced as only including those people who derive great pleasure from gambling when considering the consumer benefits of gambling, and excluding those whose pleasures are more modest.)

Accordingly, while it is critical to measure the prevalence of problem gamblers, their spending share and the associated level of harms, there are in fact problems of different kinds (not just of varying progressivity) experienced by gamblers that are relevant to policy. In that context, where problems are amenable to policy intervention, it is useful to measure the nature, prevalence and duration of adverse effects among the population generally. It is also useful for policy purposes to identify the prevalence of factors that predispose people to harm.

Without attempting to be exhaustive, harms include particular instances of gambling-related adverse impacts on people’s health, jobs, finances, emotional states and relationships, even if some of these problems are experienced by people not categorised as ‘problem gamblers’. In gambling, the prevalence (and severity) of these harms are relevant to policy. More specifically, measures of harm might encompass instances of:

- theft, domestic violence or other illegal behaviours
- inability to meet the costs of essentials such as food or rent
- lower performance at work, possibly leading to job loss
- relationship problems
- health or personal impacts, such as feelings of guilt, anxiety, depression and helplessness. It is important to emphasise that emotional costs are as conceptually legitimate as other harms, even though they are subjective, sometimes hard to measure, and are often socially conditioned. Some commentators (Svetieva and Walker 2008, p. 167, and emphasised by the Australasian Gaming Council, sub. DR377, pp. 12–13) are sceptical about the validity of certain personal feelings as harms because these feelings are a reflection of the wider moral and cultural acceptance of gambling in a community or of an individual’s personality. However, the fact that personal feelings are to some degree culturally dependent does not make them benign. Many injurious outcomes — shame, guilt, grief, self-hatred and suicidal thoughts — associated with certain actions, reflect the ambient social mores

-
- problems controlling money or time spent when gambling, where the consequences are adverse and regretted. Issues related to control are relevant to pre-commitment, ‘break in play’ policies and machine design — with the target group being considerably wider than problem gamblers
 - the number of family members and others adversely affected by problem gamblers. This may be relevant to provision of counselling services, early intervention strategies for children of problem gamblers (who face higher risks) and the provision of third party exclusions
 - unfair or illegal behaviour by a supplier, such as pressure on a vulnerable person to gamble, incorrectly posted odds or crooked games, the latter being very rare in regulated gambling. (The risks of fraud on overseas internet gaming sites provide a contemporary example.) This is relevant to probity rules, complaint mechanisms, regulatory oversight, and player education.

Many of these harms will be found only for problem gamblers, but a public health approach recognises that some of them will also be present among lower risk gamblers.

Policy should also address risk factors linked to harm

A further central tenet of public health is not just to assist those currently suffering harm, but to assess the extent to which a population is at risk of future harm. This is particularly relevant to prevention and community awareness policies.

For instance, faulty cognitions leave consumers vulnerable to excessive spending (though not necessarily to problem gambling) with the obvious financial and potentially other harmful implications this has for them. However, the presence of faulty cognitions would not always be associated with harm, but would be a risk factor for it.

There are analogies in other public health and consumer policy areas that reinforce the appropriateness of this broader approach, such as:

- motor vehicle safety belts. Someone failing to wear a safety belt will not necessarily be harmed — indeed most are not. Before governments mandated safety belts, many people did not install them despite their safety benefits (and, when made mandatory, many did not wear them). In part, driver behaviours reflected over-confidence about their own driving skills and the risks involved (for example, see Matsuura et al. 2002). So not wearing safety belts does not equate directly to harm for the individual concerned. But it is highly relevant to the risks of harm for those individuals — and for the prevalence of harms among

the population as a whole. As a result, safety belts were mandatorily required in motor vehicles, people were required to wear them, and community awareness campaigns were used ('belt up'), in addition to legal penalties to change people's behaviours

- identifying people with impaired fasting glucose. Such people are not likely to be experiencing harm now, but, without behavioural change, may experience higher future risks of type 2 diabetes.

Accordingly, it is desirable to identify environmental circumstances or individual behaviours that are risk factors for harm.² Some of the relevant indicators include:

- misconceptions about gambling, such as a belief that gaming machines run 'hot' or 'cold'. Poor information or misunderstandings about a product may cause people to buy too much (or too little) or to misuse that product to their detriment, compared to a situation in which they were well informed. For example, cognitive misperceptions about some forms of gambling may fool people into playing for longer to make up past losses, or in the mistaken belief that they can win in the long-run on pure games of chance that have a house advantage (Nower and Blaszczynski. 2010). This is relevant to machine design, disclosure to players and general education, potentially including children
- the number of gamblers facing difficulties in remembering losses. The data from the Australian Household Expenditure Survey shows that people significantly underestimate their gambling spending (appendix B). This is relevant for policies such as player activity statements and player information displays
- on a regional basis, identifying areas where the prevalence of certain socio-economic characteristics are strongly correlated with likely adverse effects from gambling may also be relevant for some policies (for instance, local accessibility of gambling and targeted awareness campaigns). For instance, some jurisdictions have more stringent regional caps on gaming machines in areas of disadvantage.

Total costs are more policy relevant than prevalence measures per se

Moreover, consumer policy and public health policy considers not just the prevalence of problems among consumers, but also their total cost. As an illustration:

² It is possible to see how the presence of risk factors are correlated with harms in a cross-section of people, but it would also be useful to see if their presence of a risk factor is a useful indicator of future harm. The first wave of a Victorian longitudinal survey into gambling commenced in 2008, and will enable a much better analysis of how people's risk profiles change and what factors might trigger these changes.

-
- a defective toy may affect a relatively small number of children (very low prevalence), but, if it results in death or major injury, can nevertheless represent a significant cost
 - a health condition may have high prevalence (for example, short-sightedness), but technology or other measures may have negated the costs of this condition (spectacles and contact lenses).

As in the population health area, a key issue is not just counting harms, but assessing how they are affected by exposure (frequency of play, session length, and playing intensity), form of exposure (for instance, gaming machines versus bingo) and the context (the nature and behaviour of the venue; the characteristics of the machine technology). While there is considerable research on the nexus between risk factors (such as exposure) and risk status based on problem gambling screens, research on the broader links between risk factors and harmful outcomes is still in its infancy (Rodgers et al. 2009).

A broad framework facilitates policy evaluation

A broad framework for assessing harms and risks provides a richer basis for policy and research. It provides better guidance about prevention of more serious problems and early intervention — critical elements of any public health strategy — and a better basis for targeting policies.

From an evaluation perspective, it also provides a much better foundation for detecting whether past policies have been effective. First, in prevalence surveys, the samples of all those adversely affected by gambling are much larger than those categorised as problem gamblers, so that it is easier to:

- discover whether policies may have reduced prevalence problems. Large swings in prevalence rates of problem gambling measured using population surveys can arise through pure chance because of sampling errors. For instance, with a survey sample of 10 000 gamblers and a measured problem gambling prevalence rate of 0.5 per cent, a policy maker can be 95 per cent certain that the true prevalence rate lies somewhere between 0.38 and 0.66 per cent — a large range relative to the point estimate.³ So, were subsequent surveys to find lower (higher) prevalence rates, it would be difficult to be sure that these represented genuine reductions (increases) or simply sampling error. However, if the prevalence rate of a problem (not problem gambling) was 15 percent, the

³ This based on Wilson's interval (not the normal approximation interval). The range ignores the probable impact of non-sampling errors, which would tend to widen it further.

comparable range would be 14.3 to 15.7 per cent, and it would be much easier to tell whether policies subsequently affected the prevalence of that problem

- examine the characteristics and risk factors that lead to problems — which could assist in targeting policies and potentially in developing guidelines for ‘safe’ gambling (as in alcohol consumption).

Second, it can indicate the extent to which policy has affected the extent of harms or vulnerabilities. For example, a policy might:

- significantly reduce the prevalence of a particular harm or vulnerability, but with that effect concentrated among people not rated as problem gamblers. Discovering that effect would be lost if only problem gamblers were considered
- significantly reduce the prevalence of problem gambling, but less significantly reduce aggregate harm. The success of public policy in the alcohol area is not just (or even mainly) measured by the reduction in the prevalence of alcoholism
- not reduce the prevalence of problem gambling, but it might reduce the degree of harm experienced by them.

An assessment of effective gambling policies needs to consider the full spectrum of harms and risks.

A broad approach is less susceptible to false attribution of harms

Sometimes people experiencing harm from gambling would have still experienced harm had they not gambled. In particular, the severe gambling problems of *some* of those people with pre-existing mental health issues are likely to have had harmful outlets through other activities — such as substance abuse — had gambling not been available. Similarly, people who harm themselves when they encounter problems with their gambling may have an inherent susceptibility to self-harm regardless of the source of the problems that trigger it.

This means that a policy that reduces severe problem gambling may only partly alleviate harms to the affected people. The Commission’s analysis of the social costs of gambling has taken account of this (chapter 6).

However, some gambling harms or vulnerabilities may be less subject to these attribution problems.

- the high prevalence of lower-level problems exceeds the proportion of people suffering prior mental health conditions, so the latter cannot explain the former
- some problems or vulnerabilities are likely to relate to gambling alone, and not to some intrinsic trait of a person that must have such an outlet. For instance, it is improbable that a community awareness program that successfully addressed

people's faulty cognitions in gambling and their systematic underestimation of losses (which pose risks for over-expenditure) would be offset by the appearance of new faulty cognitions in other areas of their life.

How are assessments made?

Assessments of the harms and risks experienced by gamblers are drawn largely from population surveys and from information about the impacts of gambling on people seeking counselling. Notwithstanding a range of concerns about subjective reporting, some questions about harm have been explicitly tested for their validity (as in the case of the CPGI), while other evidence appears to suggest the self-reported gambling behaviours and impacts are not as unreliable as many think.⁴ (Chapter 5 takes up the issues associated with the specific instruments used to assess harms relating to counts of problem gamblers.)

4.2 Identifying vulnerabilities

The evidence suggests that many people have traits or behaviours that elevate their risks of harm.

Control problems

The most likely immediate source of harm for most consumers is excess expenditure associated with control problems and false cognitions — gambling losses in excess of the amount they would have spent had they played with control and with good knowledge about the service they were buying.

Using the 2008–09 Queensland prevalence data, the evidence suggests that around three to four per cent of all gamblers face difficulties 'at least sometimes' in controlling their gambling. For instance, around one in twenty-five gamblers play on after reaching a self-imposed limit and have difficulty stopping play (table 4.1). These problems rise with problem gambling risk status.

Despite low prevalence rates⁵ of control problems in the non-problem gambling group, the actual number of people affected in this group can be large, and, indeed,

⁴ However, notably Hodgins and Makarchuk (2003) find some evidence for the reliability of self-reported facets of gambling.

⁵ 'Low' is a relative term, indicating the low rate of control problems among non-problem gamblers compared with problem gamblers. Some might argue that a rate of 4 per cent is actually

can be much greater than those categorised as problem gamblers. This reflects the fact that the number of people affected is the multiple of the prevalence rate and the number of people in the relevant sub-population. The former is low but the latter can be very large, with the overall effect that many people are affected.

Table 4.1 Who experiences control problems?

Control issue	Share of risk group who have control problems ^a					Share of affected group who are CPGI 0-7
	All gamblers	Recreational	Low risk	Moderate risk	Problem gamblers	
	%	%	%	%	%	%
Difficulty resisting gambling	4.4	2.4	14.0	40.6	88.3	90.0
Difficulty limiting the size of bets	1.4	0.1	7.7	24.9	53.4	81.0
Gambling after reaching limit	3.9	2.0	13.1	40.1	74.7	90.4
Difficulty limiting the amount spent	1.8	0.5	7.3	27.1	70.2	81.0
Difficulty stopping play	2.3	0.7	7.9	35.6	83.4	82.3
Difficulty limiting time	1.8	0.3	8.6	27.3	73.7	79.1
Desire to gamble is too strong	0.9	0.1	4.7	10.5	64.4	65.5

^a The shares in columns 2 to 6 relate to the percentage of each group who sometimes, often or always experience the particular control difficulty. For instance, 4.4 per cent of all gamblers report sometimes, often or always finding it difficult to resist gambling. The categories of gamblers — recreational, low risk, moderate risk and problem gamblers are CPGI categories. To put the above numbers in perspective, the share of the gambling population accounted for by these CPGI groups were respectively 91, 6.3, 2.1 and 0.5 per cent. So, while 88 per cent of problem gamblers had difficulties in resisting gambling, this equated to only $0.88 \times 0.005 \times 100$ or 0.44 per cent of the gambling population. In contrast, while only 2.4 per cent of recreational gamblers had difficulties resisting gambling, this equated to $0.024 \times 0.91 \times 100$ or 2.2 per cent of the gambling population. Significant contributions are also made by low risk and moderate risk gamblers. The net effect is that, as shown in the last column, 90 per cent of people having difficulties resisting gambling are non-problem gamblers. The results for the 2006-07 Queensland prevalence study were broadly similar, albeit generally showing slightly higher prevalence rates of control problems among the general gambling population. However, as in the 2008-09 study, 4.4 per cent of all gamblers had difficulty resisting gambling, and non-problem gamblers accounted for 90 per cent of those affected.

Source: Based on analysis of unit records from the 2008–09 Queensland prevalence survey.

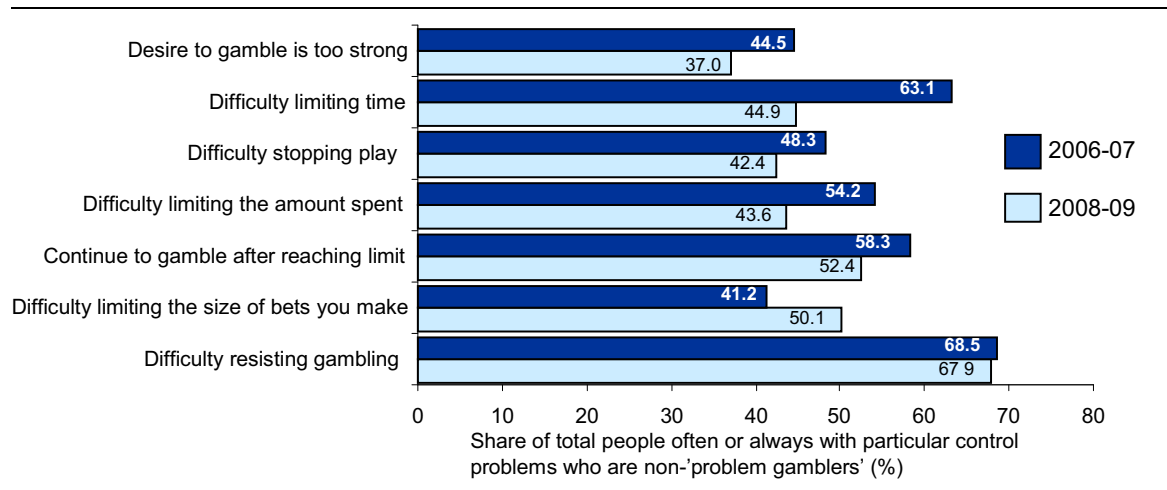
To illustrate, 4 per cent of Queensland gamblers rated as ‘no to moderate risk’ say that they ‘sometimes’, ‘often’ or ‘always’ find it hard to resist gambling (a relatively low prevalence), while around 90 per cent of people categorised as problem gamblers fall into this group (a high prevalence). However, there are around 2.3 million people in the lower risk group and around 12 000 categorised as problem gamblers. That means that, respectively, there are around 93 000 non-problem gamblers and 10 300 problem gamblers experiencing this difficulty.

a high prevalence rate for a problem that may have significant effects on consumers’ gambling expenditure.

Accordingly, nearly 90 per cent are from non-problem groups. Similar results are apparent for other control problems (table 4.1).

The importance of non-problem gamblers among people with control difficulties is not an artifice of choosing a low standard for defining those difficulties. Even where the criterion is that a gambler has to ‘often or always’ experience these control problems, non-problem gamblers still account for around half of the total number of people adversely affected (figure 4.1).

Figure 4.1 Non-problem gamblers account for around half of those gamblers ‘often or always’ experiencing control problems
Queensland 2006–07 and 2008-09



Source: Based on analysis of unit records from the 2006-07 and 2008-09 Queensland prevalence surveys.

The large number of people affected by gambling control difficulties has some promising implications for the value of policy action in pre-commitment. Policies with modest efficacy or reach have the potential to relieve problems for many people, simply because the target population is large.

Prevalence estimates should take account of exposure

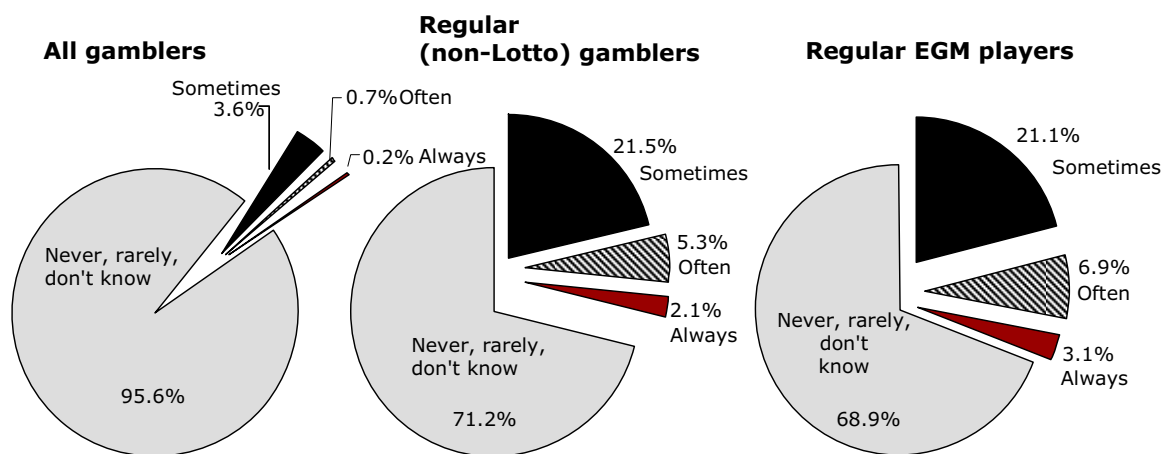
Estimates of the prevalence of harms based on the adult population or all gamblers can be misleading (an issue taken up further when measuring problem gambling prevalence rates in chapter 5). The gambling population includes all people who have gambled at least once over the past 12 months on any of a wide range of gambling products (usually excluding sweeps and raffles). From a product safety perspective, ‘gambling’ is too aggregated an activity for assessing harm. Some gambling products are intrinsically lower risk (for example, bingo or lotteries) and some exposures to gambling also involve minimal risk (someone gambling just once or twice a year). From an epidemiological perspective, harms should be

gauged depending on the extent of people’s exposure to varying forms of gambling, since this is relevant to determining appropriately targeted policy responses.

Figure 4.2 provides an illustration of this for one kind of control problem: the difficulty of resisting gambling opportunities.

Figure 4.2 Regular gamblers have much greater control problems

Queensland 2008–09



^a Relates to gamblers facing difficulty resisting the opportunity to gamble. Regular gambling is defined as at a total of 52 times or more of gambling per year across all types of gambling (but excluding counts of lottery or scratchies gambling).

Data source: Queensland prevalence survey 2008-09.

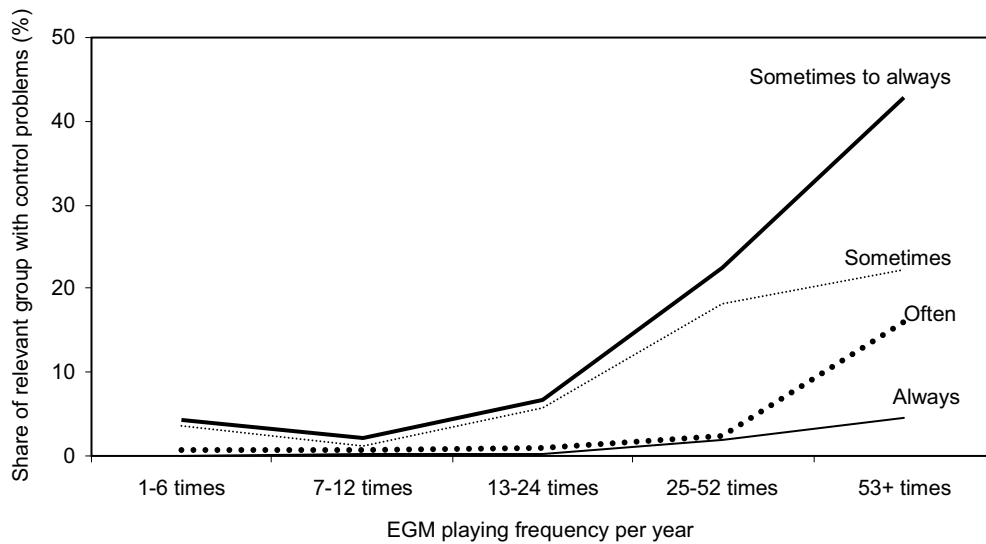
People who gamble regularly have a much higher likelihood (around 30 per cent) of experiencing control problems, and indeed around 7.5 per cent of them experience these difficulties often or always. This likelihood is higher for those gamblers playing gaming machines weekly or more often — nearly one in three at least sometimes say they have a control problem, and one in ten say they often or always do.

More finely gradated data show that control problems appear to accelerate, the greater the level of exposure to gaming machines (figure 4.3). The causality may go both ways. More frequent players may develop control problems, or gamblers with control problems may play more frequently.

Either way, from a practical perspective, these results mean that a significant proportion of the people who venue staff see playing regularly have control and other problems with their gambling. This suggests policy and voluntary measures put in place by venues and the gambling industry should attempt to target those who regularly gamble.

Gamblers experiencing control problems are also important sources of revenue for venues (figure 4.4). The Commission estimates that using the most recent Queensland survey the seven per cent of EGM gamblers who sometimes, often or always had difficulties resisting gambling accounted for around 55 per cent of total EGM spending. And the 1.8 per cent of EGM gamblers who often or always had difficulties resisting gambling accounted for an estimated 29 per cent of total EGM spending.

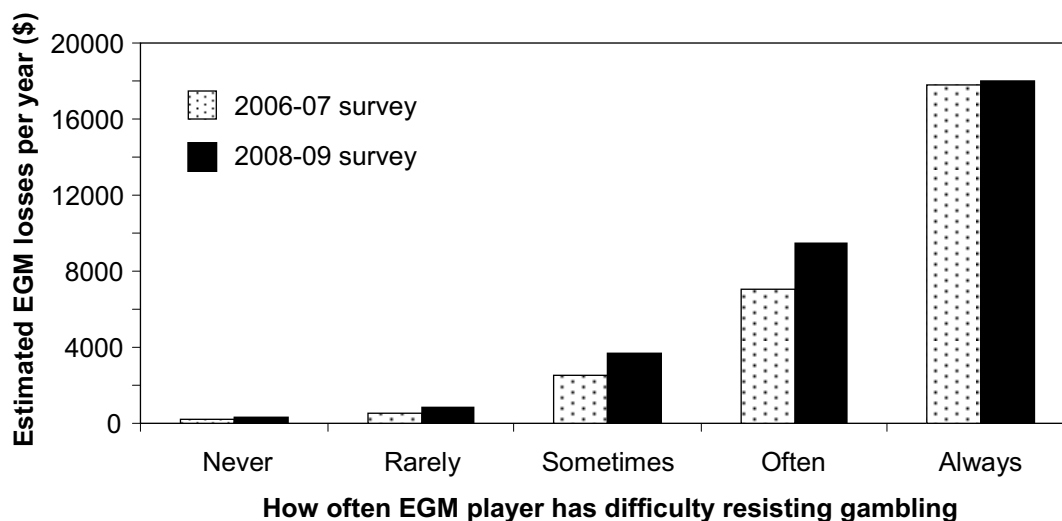
Figure 4.3 Higher exposure is associated with increasingly greater control problems
Queensland 2008-09



^a Relates to people who have difficulty resisting the opportunity to gamble.

Data source: Queensland prevalence survey 2008-09.

Figure 4.4 People with control problems spend much more annually
Queensland gaming machine players



^a EGM spending is proxied using the methods described in appendix B.

Data source: Queensland prevalence surveys, 2006-07 and 2008-09.

Control problems partly reflect the state of mind of people when playing (table 4.2).

Table 4.2 Dissociation reduces gamblers' self-control^a
South Australia 2005

Form of dissociation (sometimes to very often)	All gamblers	Recreational	Low risk	Moderate risk	Problem gamblers	Share of affected people who are CPGI 0-7
	%	%	%	%	%	%
Lost track of reality	1.6	0.7	4.7	16.1	49.3	76.0
Played in a trance	1.8	1.0	3.6	16.8	60.4	74.5
Lost track of time	3.9	2.4	12.6	31.7	65.9	87.0
Felt someone else controlling actions	1.2	0.7	0.8	7.2	48.0	69.7

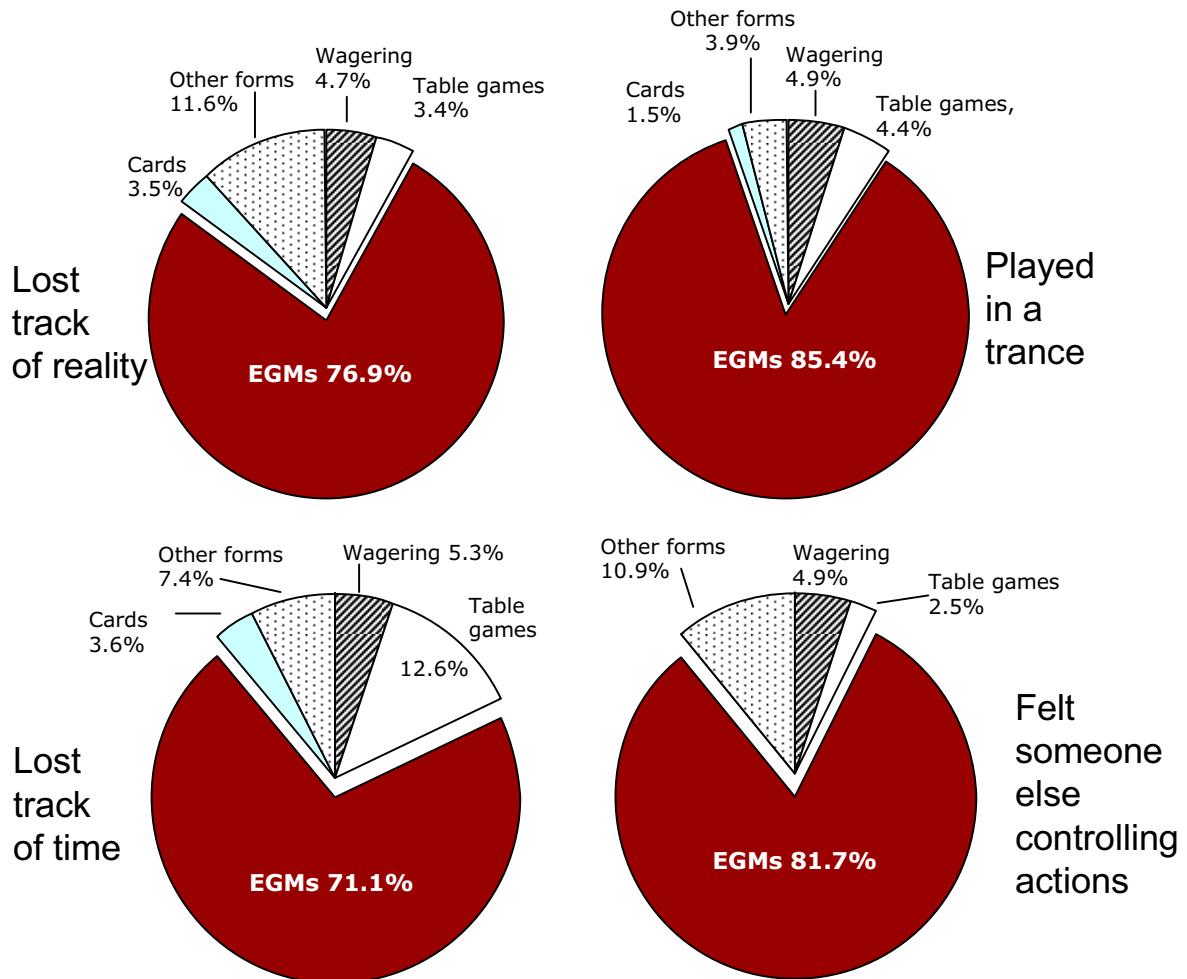
^a The shares in columns 2 to 6 relate to the percentage of each group who sometimes, often or very often experience the particular form of dissociation. For instance, 1.8 per cent of all gamblers report playing in a trance when gambling. The prevalence rates of dissociation rise with CPGI risk. However, most people affected by dissociation are not problem gamblers (column 7). So, of those people who lose track of time 87 per cent were people not categorised as problem gamblers and 13 per cent are problem gamblers.

Source: South Australian 2005 prevalence survey.

Gamblers report varying levels of dissociation, which can limit the usual capacity for people to re-assess whether they wish to continue to gamble (a point made by Dickerson in supporting some form of pre-commitment — chapter 10). Again, as with control problems generally, there are considerably more people categorised as non-problem gamblers than problem gamblers affected by dissociation.

Gaming machines dominate as the form of gambling where dissociation is most likely (figure 4.5) — which is a probable reflection of the continuous nature of play and the lack of social contact while playing (Blaszczynski and Nower 2007; Hing and Breen 2002).

Figure 4.5 Gaming machines are most closely associated with dissociation^a



^a The charts show the gambling form most usually associated with each form of dissociation. For instance of those people who lose track of reality, 76.9 per cent it relates to gaming machines.

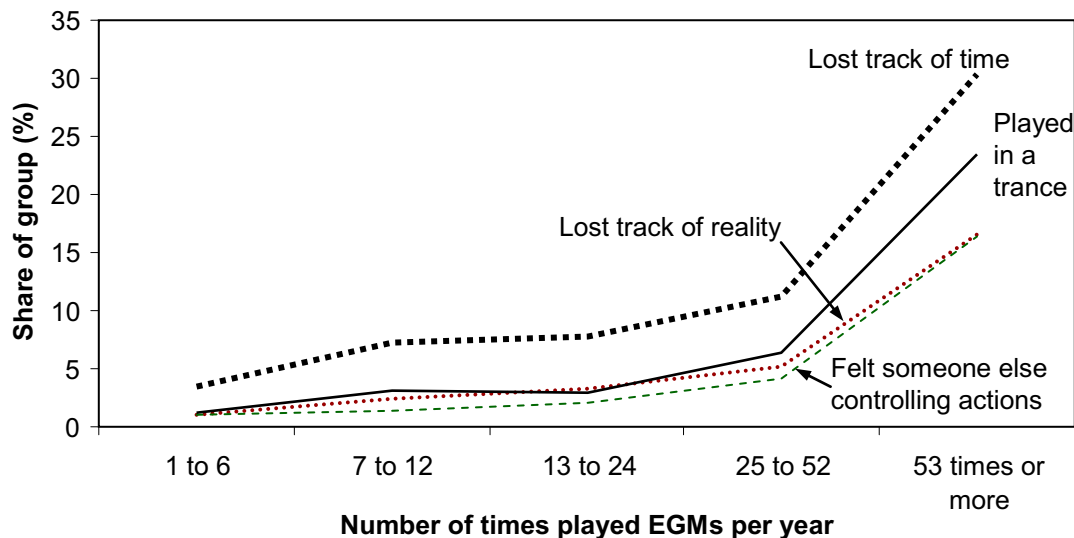
Data source: South Australian 2005 prevalence survey.

There are greater rates of dissociation, the more that people play EGMs (figure 4.6). For instance, someone playing more than once a week on gaming machines has a nearly twenty-fold increase in the probability of playing at least sometimes in a trance than people who play one to six times a year.

While self-responsibility is a highly desirable goal, the widespread existence of control problems among gamblers, especially those engaged in regular EGM

playing, suggest that this goal may be difficult to achieve without tools that allow gamblers, prior to gambling activities, to set and keep to limits on their future behaviours (chapter 10).

Figure 4.6 There is greater dissociation for people playing EGMs more often
South Australia 2005



^a The shares relate to the percentage of each group who sometimes, often or very often experience the particular form of dissociation.

Data source: South Australian 2005 prevalence survey.

Faulty cognitions

Faulty cognitions are widespread among gamblers generally (table 4.3).

While there are many gambling forms where people may have misunderstandings, a key concern is that many people do not know how gaming machines work (in ways that are likely to affect their decisions about expenditure of time and money). Even sophisticated players with statistical and computing knowledge can have misapprehensions about how gaming machines really function, claiming that gaming machines record and respond to a gambler's history of playing (sub. DR383). This is not so.

Across all gambling types, problem gamblers tend to have a much higher rate of faulty cognitions. However, among gaming machine players the difference in the extent of faulty cognitions by risk class, while still present, is less marked.

Table 4.3 Faulty cognitions among gamblers^a

Category of faulty cognition	Share of risk group					
	All gamblers	Recreational	Low risk	Moderate risk	Problem gamblers	Share accounted for by CPGI 0-7
Share of <u>all</u> gamblers agreeing or strongly agreeing with the proposition						
	%	%	%	%	%	%
<i>Queensland 2006-07</i>						
After losing many times in a row you are more likely to win	5.5	4.6	9.5	20.3	33.1	96.3
You could win more if you use a certain system/strategy	9.1	7.9	15.9	24.6	31.5	97.8
<i>Queensland 2008-09</i>						
After losing many times in a row you are more likely to win	8.0	8.2	24.4	..
You could win more if you use a certain system/strategy	13.6	18.1	28.2	..
Share of <u>gaming machine</u> players rating their agreement with the proposition as 5 or more out of a scale of 10						
<i>South Australia 2005</i>						
How strongly agree that winning and losing on poker machines tends to occur in cycles	55.5	53.9	68.9	71.5	59.7	98.7
Believe that there are certain ways of playing poker machines that give you a better chance of winning money	18.3	17.0	30.9	27.9	27.9	98.1
Engage in rituals or superstitions when play poker machines	8.0	6.9	13.0	16.8	41.9	93.5
Always bad to play on a poker machine that has recently paid out,	45.6	45.0	47.2	53.4	60.0	98.4
Consider good at picking winning machines	9.1	8.2	18.2	12.8	18.3	97.5

^a In the 2006-07 Queensland data, the faulty cognitions relate to all gambling forms and for all gamblers (but only to those rating CPGI 1 or more in the 2008-09 survey). The percentages for these surveys relate to those agreeing or strongly agreeing with the relevant proposition. The South Australian data are on a different basis. The CPGI was only given to regular (non-Lotto) gamblers in the South Australian survey, with the presumption that all non-regular gamblers were no-risk players. The percentages for this survey relate to the share of gamblers in each risk group who rate their agreement with the relevant proposition as 5 or more on a scale out of 1 to 10. A significant share of gamblers did not know whether to agree or not with the propositions, so it should not be assumed that the proportion of gamblers without false cognitions can be estimated by taking away the above numbers from 100. In the McDonnell-Phillips (2006, p. 202) also finds widespread faulty cognitions, such as continuing to gamble because of the 'sense that a win is due' or using strategies to influence the win rate.

Source: South Australian prevalence survey 2005 and Queensland prevalence survey 2006-07 and 2008-09.

For instance, around 60–70 per cent of gaming machine players think that winning and losing occurs in cycles on machines, with low and moderate risk gamblers more likely to believe this than problem gamblers. It is not clear, therefore, that there is

an *intrinsically* much greater susceptibility to faulty cognitions among problem gamblers compared with low and moderate risk gamblers, especially gaming machine players. The likely reason for the much greater prevalence of faulty cognitions among problem gamblers generally is that they more frequently play gaming machines than other risk groups.

Either way, faulty cognitions are very widespread among gamblers, particularly EGM players. For instance, the prevalence of the faulty view that wins occur in cycles was 5.5 per cent of the Queensland adult gambling population — around ten times more than the problem gambling prevalence rate. Indeed, around 98 per cent of Queenslanders having this belief were *not* problem gamblers. (The effects of faulty cognitions among different groups may be different. Nower and Blaszczynski (2010) found that problem gamblers more often played EGMs to win than non-problem gamblers, suggesting that problem gamblers' behaviour may be more sensitive to their faulty cognitions.)

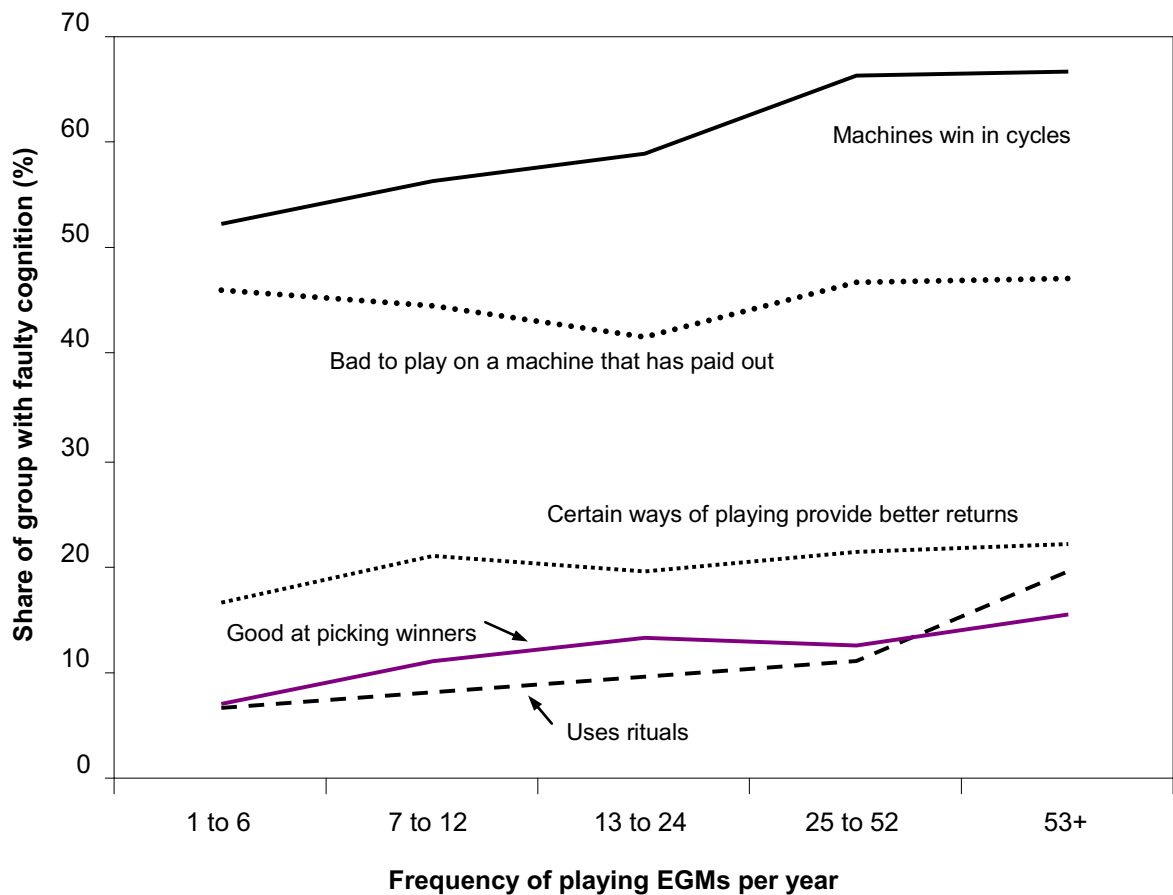
In the case of the South Australian evidence, which relates only to gaming machines, more than half the gaming machine playing population thought wins occurred in cycles, and 99 per cent of the gamblers holding the false belief that wins occur in cycles in machines were not problem gamblers. The key policy implication of this is that the target group for policies that might address faulty cognitions (or their consequences) should extend to the whole EGM playing population.

In many products, greater familiarity with the product improves knowledge about its characteristics. Clubs Australia asserted that:

Repeat purchasers are typically experienced in the consumption of a product category and therefore cannot be regarded as “vulnerable”. That is, through repeat consumption they have grown aware of many of the nuances of the products they consume. (sub. DR359, attach. p. 4)

However, an evidence-based approach to this issue suggests that this is not true for at least one aspect of gaming machines (figure 4.7). There is no reduction in rates of false cognitions as gamblers increase their frequency of play, and indeed, the rates climb somewhat. Moreover, people *believe* they acquire more knowledge when they play more often. So around 13 per cent of infrequent EGM players did not know if wins ran in cycles, while less than 4 per cent of gamblers playing on them more than 52 times a year did not know. Regular players are, in effect, more certain about their false cognitions.

Figure 4.7 Faulty cognitions increase with greater playing frequency



^a The increases in the share of people with false cognitions will partly reflect the changing share of people who do not know whether a proposition is true or not. The share of people who did not know/could not say went down with greater frequency of play. For instance, 13 per cent of those who played 1 to 6 times a year did not know whether machines won in cycles or not, whereas less than 4 per cent of people playing more than 52 times a year did not know.

Data source: South Australian survey, 2005.

4.3 Identifying those who are harmed

Gamblers experience a wide range of harms — financial, health, employment and psycho-social — of varying seriousness (tables 4.4 to 4.7).

Table 4.4 Harms to jobs and health

Various states 2005–2009^a

Indicator	Share of risk group experiencing harm			Of affected people, the share who are CPGI 0-7
	Low risk	Moderate risk	Problem gambling	
	%	%	%	%
<i>Affected health</i>				
Qld 2008-09	2.9	16.9	87.7	55.3
Qld 2006-07	2.4	28.7	70.9	66.7
NSW 2006	6.4	25.5	81.0	42.7
SA 2005	4.0	27.4	83.6	53.9
Tasmania 2007 ^b	7.9	10.5	88.3	26.8
Victoria 2008	3.6	23.1	71.6	59.7
<i>Job impacts (Queensland 2006-07)</i>				
Adversely affected job performance	1.5	8.8	38.5	59.1
Had to change jobs	0.2	2.4	14.1	46.4
Dismissal from work	0.0	0.1	9.1	4.9

^a The Queensland surveys relate to all gamblers, while the NSW and Tasmanian to weekly gamblers and the South Australian survey to at least fortnightly gamblers. This may explain why the share of affected people who are CPGI 0–7 is higher for Queensland, and, to a lesser extent, South Australia. Results are less reliable for low prevalence items. ^b For Queensland, NSW and South Australia results relate to people nominating health concerns from gambling experienced from rarely to always. In the case of Tasmania, the results refer to health problems experienced sometimes to almost always, since the Tasmanian survey used the unmodified CPGI.

Source: Tasmanian, Queensland, NSW and South Australian prevalence surveys.

Table 4.5 Broad indications of problems

Various states 2005–2009^a

<i>Indicator</i>	<i>Low risk</i>	<i>Moderate risk</i>	<i>Problem gambling</i>	<i>Of affected people, the share who are CPGI 0-7</i>
	%	%	%	%
<i>Sometimes to always thought had a gambling problem</i>				
Qld 2008-09	1.9	34.0	73.3	69.8
Qld 2006-07	1.3	33.2	88.0	62.0
NSW 2006	2.9	36.2	83.1	46.8
SA 2005	4.3	37.6	83.7	60.5
Tasmania 2007 ^b	7.6	56.4	100.0	51.5
Victoria 2008 ^c	5.4	39.0	89.9	66.0
<i>Wanted help for gambling problems</i>				
Qld 2008-09	1.2	6.4	39.8	51.8
Qld 2006-07	1.4	6.3	47.6	46.3
<i>Tried to get help for problems</i>				
Qld 2008-09	1.0	3.5	18.3	59.9
Qld 2006-07 tried to get help for problems	0.7	2.2	28.4	37.2
<i>Other results for Queensland 2006-07</i>				
Tried to be excluded from a venue	6.6	16.1	40.9	77.5
Some problem on scale of 1 (a small problem) to 10 (severe problem)	40.4	76.3	89.2	89.8
Problem rating 4-10 in scale 0 to 10	4.1	25.3	81.8	64.3

^a The category of 'recreational' gamblers (those with a CPGI score of 0) is not shown above. This is because by definition anyone answering 'rarely' or more to a CPGI question at least scores one, which would put them at least into the low risk category. In the case of the non-CPGI questions shown above, the survey was only applied to people with a CPGI score of one or more. The Queensland surveys' CPGI questions relate to all gamblers, while the NSW and Tasmanian to weekly gamblers and the South Australian survey to at least fortnightly gamblers. ^b The scale for Tasmania is from 'sometimes' to 'almost always' — the unmodified CPGI scale. ^c The unit record data for the CPGI items for the Victorian Survey results gave the scores, not the ratings. So the data shown here refer to people who at least scored one on this CPGI item.

Source: Tasmanian, Queensland, NSW and South Australian prevalence surveys.

Table 4.6 Financial harms

Various states 2005–2009^a

<i>Indicator</i>	<i>Low risk</i>	<i>Moderate risk</i>	<i>Problem gambling</i>	<i>Of affected people, the share who are CPGI 0-7</i>
	%	%	%	%
<i>Often/always bet more than can afford</i>				
Qld 2008-09	0.6	6.7	40.8	46.8
Qld 2006-07	0.4	7.6	34.6	50.0
NSW 2006	0.0	6.9	57.7	18.1
SA 2005	0.1	12.3	53.9	39.2
Tasmania 2007 ^b	0.0	6.4	77.9	11.7
Victoria 2008	0.8	7.2	50.8	37.3
<i>Sometimes to always caused financial problems for the household</i>				
Qld 2008-09	1.0	13.9	47.7	60.3
Qld 2006-07	0.7	11.6	54.7	49.4
NSW 2006	0.0	9.3	57.0	23.2
SA 2005	0.5	6.1	65.2	23.1
Tasmania 2007 ^c	0.0	13.7	86.2	20.5
Victoria 2008 ^d	2.4	19.7	83.3	50.6
Bankruptcy (Qld 2006–07)	0.8	0.1	7.0	59.5

^a The Queensland survey relates to all gamblers, while the NSW and Tasmanian to weekly gamblers and the South Australian survey to at least fortnightly gamblers. ^b The results refer to betting more than could, 'often' to 'almost always', since the Tasmanian survey used the unmodified CPGI. ^c The results refer to betting more than could 'sometimes' to 'almost always'. ^d The data shown here refer to people who at least scored one on this CPGI item.

Source: Tasmanian, Queensland, NSW and South Australian prevalence surveys.

Table 4.7 Psycho-social harms^a

Various states 2005–2009^a

<i>Indicator</i>	<i>Low risk</i>	<i>Moderate risk</i>	<i>Problem gambling</i>	<i>Of affected people, the share who are CPGI 0-7</i>
<i>Often/always felt guilty about gambling</i>	%	%	%	%
Qld 2008-09	1.0	16.0	66.1	55.0
Qld 2006-07	0.3	9.1	66.6	36.9
NSW 2006	0.0	8.6	66.3	19.4
SA 2005	0.1	15.2	71.9	37.4
Tasmania 2007 ^b	0.0	13.7	57.9	27.8
Victoria 2008	0.7	13.4	71.4	41.3
<i>Often/always criticised about gambling</i>				
Qld 2007-08	0.2	2.0	45.3	19.7
Qld 2006-07	0.1	2.2	28.5	25.6
NSW 2006	0.0	6.9	44.3	22.5
SA 2005	0.4	5.8	30.2	37.3
Tasmania 2007 ^b	0.0	3.2	34.1	13.3
Victoria 2008	0.1	4.1	33.9	30.2
<i>Other indicators (Queensland 2006-07)</i>				
Not enough time to look after family's interests	1.6	4.6	32.0	55.7
Breakup of important relationship	2.4	2.2	15.5	72.2
Obtaining money illegally	0.4	1.6	4.8	70.7
Trouble with the police	0.1	0.4	2.5	51.8

^a The Queensland surveys relate to all gamblers, while the NSW and Tasmanian to weekly gamblers and the South Australian survey to at least fortnightly gamblers. Results are less reliable for low prevalence items (such as committing crimes). ^b In the case of Tasmania, the results refer to problems experienced 'often' to 'almost always', since the Tasmanian survey used the unmodified CPGI.

Source: Tasmanian, Queensland, NSW and South Australian prevalence surveys.

The same patterns apparent for control problems and false cognitions are replicated, with many people not categorised as problem gamblers experiencing harm. For instance, in the 2008-09 Queensland prevalence survey, around 70 per cent of people perceiving themselves to have a problem were not categorised as problem gamblers.

In a much more general perspective on harm, nearly one in five gamblers report that gambling has had an adverse effect on their lives, while 70 per cent say that it has made no difference (table 4.8). Only 12 per cent perceive it as positive. This is a surprising finding for an entertainment product, whose purpose is to add to the enjoyment of people's lives.

The Australasian Gaming Council claimed that:

... the harms identified by the PC remain concentrated in the problem gambler group, and to a lesser degree, the moderate risk group. Policy intervention must thus be targeted appropriately to impact these groups rather than impacting all gamblers. (sub. DR337, p. 2)

This misconstrues the estimates of the prevalence of harm. Problem gamblers do, of course, experience concentrated harms — and more so than other gamblers. However, as shown above, harm is experienced by many non-problem gamblers, with this group accounting for a greater share of the aggregate prevalence of harms than problem gamblers.

Table 4.8 Impacts on the lives of gambler

Group	Share of group considering gambling to be a positive or negative factor in their personal lives		
	Positive	Negative	No effect
	%	%	%
All gamblers	12.1	17.4	69.5
Moderate risk	31.6	45.8	22.7
Problem gamblers	6.6	85.2	5.2
Often/always bet more than could afford	3.0	89.2	7.8
Sometimes to always felt had a problem	19.9	70.6	8.0
Sometimes, often or always health problems	17.3	75.0	5.2
Often/always criticised	0.0	77.6	22.4
Sometimes to always caused financial problems	9.0	80.4	7.8
Often/always felt guilty	4.4	74.3	17.5

^a The CPGI questions implemented in the Tasmanian survey used the unmodified CPGI categories of never, sometimes, often or always.

Source: Tasmanian prevalence survey 2007.

In addition, regular gambling and EGM gambling — regular or not — increases the likelihood of harm (tables 4.9 and 4.10). Regular play of EGMs is particularly problematic. For example, the probability of always experiencing health problems associated with gambling were 131 times greater for regular EGM gamblers than non-regular gamblers (table 4.9)

The likelihood of harm rises steeply and continuously with the frequency of EGM gambling and expenditure levels (table 4.11 and figure 4.8). As an illustration, the perception that gambling is a problem affects around 0.2 per cent of gamblers who play EGMs 1 to 6 times a year, but 27 per cent of those who play 53 or more times (a 170 fold increase in risks, noting rounding of the above estimates). At certain levels of frequency of playing, EGM gambling does not satisfy the criterion of a ‘safe’ product.

Table 4.9 Regular and EGM players face more problems

Queensland 2008-09

<i>Outcomes</i>	<i>sometimes</i>	<i>often</i>	<i>always</i>	<i>Risk relative to non-regular gamblers (sometimes to always)</i>	<i>Risk relative to non-regular gamblers (always)^a</i>
	%	%	%	Ratio	Ratio
Non regular gamblers					
Bet more than could afford	1.15	0.12	0.03	1.0	1.0
Felt might have problem	0.28	0.07	0.03	1.0	1.0
Caused health problems	0.24	0.02	0.02	1.0	1.0
Criticised about gambling	0.24	0.05	0.01	1.0	1.0
Caused financial problems	0.12	0.04	0.01	1.0	1.0
Felt guilty about gambling	1.09	0.22	0.14	1.0	1.0
Non-regular EGM gamblers					
Bet more than could afford	1.66	0.19	0.10	1.5	4.0
Felt might have problem	0.74	0.02	0.08	2.2	2.8
Caused health problems	0.35	0.00	0.05	1.5	3.1
Criticised about gambling	0.47	0.26	0.03	2.4	2.1
Caused financial problems	0.37	0.02	0.03	2.4	3.3
Felt guilty about gambling	2.04	0.45	0.26	1.9	1.9
Regular (non-Lotto) gamblers					
Bet more than could afford	11.59	0.93	2.39	11.5	95.0
Felt might have problem	8.34	1.37	1.83	30.8	63.2
Caused health problems	2.46	1.21	1.42	18.5	88.8
Criticised about gambling	7.60	1.44	1.47	33.7	101.8
Caused financial problems	4.00	1.05	0.79	33.6	87.5
Felt guilty about gambling	12.1	3.9	1.4	12.0	10.2
Regular EGM gamblers					
Bet more than could afford	14.68	1.38	2.51	14.3	99.8
Felt might have problem	10.91	1.98	2.79	41.9	96.4
Caused health problems	2.54	1.72	2.09	23.0	130.7
Criticised about gambling	9.58	1.00	2.33	41.4	161.4
Caused financial problems	5.05	0.85	1.15	40.5	127.4
Felt guilty about gambling	14.32	5.27	2.15	15.0	15.5

^a A regular gambler is someone whose total frequency of gambling involving gaming machines, wagering, keno, casino table games and sportsbetting is 52 or more times per year. (The frequency of playing lotteries, scratchies, bingo and a variety of other gambling forms do not make any contribution to the total used to compute regular play — hence the term 'non-Lotto'.) A regular EGM gambler is one who plays EGMs once a week or more. A non-regular gambler includes people playing lotteries, scratchies or other games 52 times or more per year. The risk ratios in columns 5 and 6 are calculated respectively as $(S_R+O_R+A_R)/(S_{NR}+O_{NR}+A_{NR})$ and A_R/A_{NR} where R denotes regular (non-Lotto) or regular EGM players, and NR denotes a non-regular gambler. S, O and A are respectively the shares of the relevant gambling groups who say sometimes, often or always. For example, the likelihood of someone who is a regular EGM player saying they sometimes, often or always get criticised about their gambling is 41.4 times higher than a non-regular gambler. The likelihood of someone who is a regular EGM player saying they always are criticised about their gambling is 161.4 times higher than a non-regular gambler.

Source: Queensland prevalence survey 2008-09.

Table 4.10 Regular and EGM players face more problems

Victoria 2008

<i>Outcomes</i>	<i>Rarely or sometimes</i>	<i>often</i>	<i>always</i>	<i>Risk relative to non-regular gamblers (rarely to always)</i>	<i>Risk relative to non-regular gamblers (always)^a</i>
	%	%	%	ratio	ratio
Non-regular gamblers					
Bet more than could afford	4.41	0.28	0.23	1.0	1.0
Felt might have problem	1.30	0.12	0.11	1.0	1.0
Caused health problems	0.89	0.09	0.11	1.0	1.0
Criticised about gambling	1.36	0.07	0.07	1.0	1.0
Caused financial problems	0.93	0.07	0.06	1.0	1.0
Felt guilty about gambling	3.34	0.26	0.42	1.0	1.0
Non-regular EGM gamblers					
Bet more than could afford	13.86	1.21	0.88	3.2	3.8
Felt might have problem	5.65	0.39	0.6	4.3	5.5
Caused health problems	3.31	0.36	0.48	3.8	4.4
Criticised about gambling	4.16	0.4	0.35	3.3	5.0
Caused financial problems	3.41	0.26	0.28	3.7	4.7
Felt guilty about gambling	10.98	1.14	1.63	3.4	3.9
Regular (non-Lotto) gamblers					
Bet more than could afford	23.14	2.70	2.60	5.8	11.3
Felt might have problem	13.37	1.43	4.67	12.7	42.5
Caused health problems	8.29	2.03	1.87	11.2	17.0
Criticised about gambling	10.31	1.83	3.99	10.8	57.0
Caused financial problems	7.97	1.60	1.50	10.4	25.0
Felt guilty about gambling	18.50	4.29	5.16	7.0	12.3
Regular EGM gamblers					
Bet more than could afford	28.00	5.46	5.82	8.0	25.3
Felt might have problem	16.82	2.88	9.58	19.1	87.1
Caused health problems	9.38	5.18	4.37	17.4	39.7
Criticised about gambling	9.23	1.79	9.30	13.5	132.9
Caused financial problems	10.16	4.07	3.65	16.9	60.8
Felt guilty about gambling	19.18	8.75	9.81	9.4	23.4

^a The second column of this table provides data for people scoring 1 on the relevant CPGI category (rarely or sometimes), rather than 'sometimes' only, as in the data shown for Queensland. See above table for construction of the table and its interpretation.

Source: Victorian prevalence survey 2008.

Table 4.11 Problems consistently rise with frequency of playing EGMs

<i>Outcome</i>	<i>Share of group affected</i>				
	1-6 times	7-12 times	13-24 times	25-52 times	53+ times
	%	%	%	%	%
Queensland 2008-09					
Bet more than could afford (sometimes or more)	1.0	2.4	5.5	13.6	28.8
Thought might have gambling problem (sometimes or more)	0.2	1.0	3.7	9.9	27.2
Health affected (rarely or more)	0.4	1.1	2.5	4.1	16.9
Criticised about gambling (sometimes or more)	0.3	1.0	2.5	9.2	20.0
Caused financial problems (sometimes or more)	0.0	0.1	2.9	4.7	12.9
Felt guilty about gambling (sometimes or more)	1.5	2.9	9.1	15.2	33.5
Wanted help	0.2	3.7	2.2	5.3	28.3
Victoria 2008^a					
Bet more than could afford (often/always)	0.8	3.3	6.2	8.7	19.4
Health affected (rarely or more)	2.1	5.8	11.5	11.6	37.6
Criticised about gambling (often/always)	0.2	1.4	3.3	6.7	20.5
Caused financial problems (often/always)	0.1	1.4	1.9	3.7	15.4
Felt guilty about gambling (often/always)	1.4	4.3	6.1	15.5	27.7

^a Other than the item relating to health problems, the data for Victoria use a more stringent categorisation of harm (often/always) than the Queensland data shown (sometimes to always). This reflects the fact that the unit record data for Victoria relate to the CPGI score, not the Likert rating. Were a CPGI 1+ score to be used to categorise some level of harm, then that would include rarely as well as sometimes, and would raise the probability of harm at any given frequency. For example, if the probabilities were calculated for feeling guilty about gambling (rarely to always) for Victoria, the probabilities associated with the frequency of playing EGMs from 1-6 to 53+ are, respectively, 8.5, 20.8, 25.9, 30.8 and 51.5 per cent.

Source: Queensland prevalence survey 2008-09 and Victorian prevalence survey 2008.

Some forms of gambling appear to be largely immune to serious problems (table 4.12).

Table 4.12 Some forms of gambling pose few harms of any severity^a

<i>Harm</i>	<i>Gambles on less risky forms only</i>			<i>Plays one or more riskier form</i>		
	<i>Rarely or sometimes</i>	<i>Often</i>	<i>Always</i>	<i>Rarely or sometimes</i>	<i>Often</i>	<i>Always</i>
	%	%	%	%	%	%
Bet more than could afford	1.76	0.02	0.03	10.06	0.93	0.79
Felt might have problem	0.38	0.03	0.03	3.97	0.36	0.8
Caused health problems	0.22	0.02	0.01	2.62	0.43	0.45
Criticised about gambling	0.6	0.02	0.01	3.48	0.32	0.64
Caused financial problems	0.35	0.02	0	2.54	0.33	0.32
Felt guilty about gambling	0.84	0.07	0.09	8.17	1.02	1.45

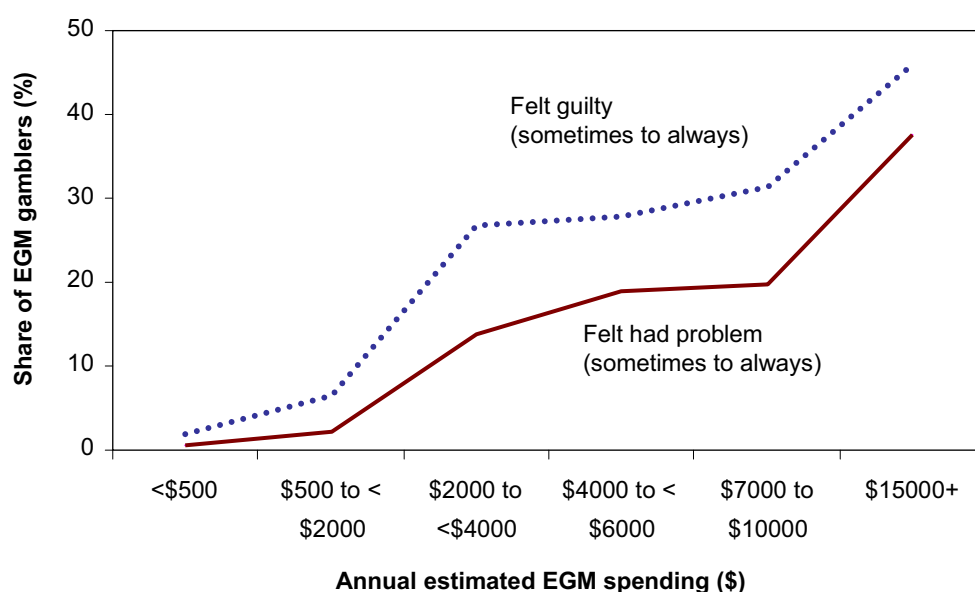
^a Potentially riskier forms were gaming machines, table games, and wagering. Less risky forms were lotteries, scratchies, raffles and bingo. A further category, where less information about risk is available includes sportsbetting, keno, informal games, SMS competitions and any other form of gambling not listed above.

Source: Victorian prevalence survey 2008.

Of those gamblers who *only* play lotteries, scratchies, bingo, or any combination of these forms — constituting the majority of gamblers — very few suffer harm. For instance, around 25 in 10 000 gamblers playing only on lower-risk forms experience any health problems associated with their gambling and only around 1 in 10 000 always suffer such problems.

Figure 4.8 Adverse impacts rise with spending

Queensland 2008-09^a



^a See appendix B about how spending is calculated.

Data source: Queensland prevalence survey, 2008-09.

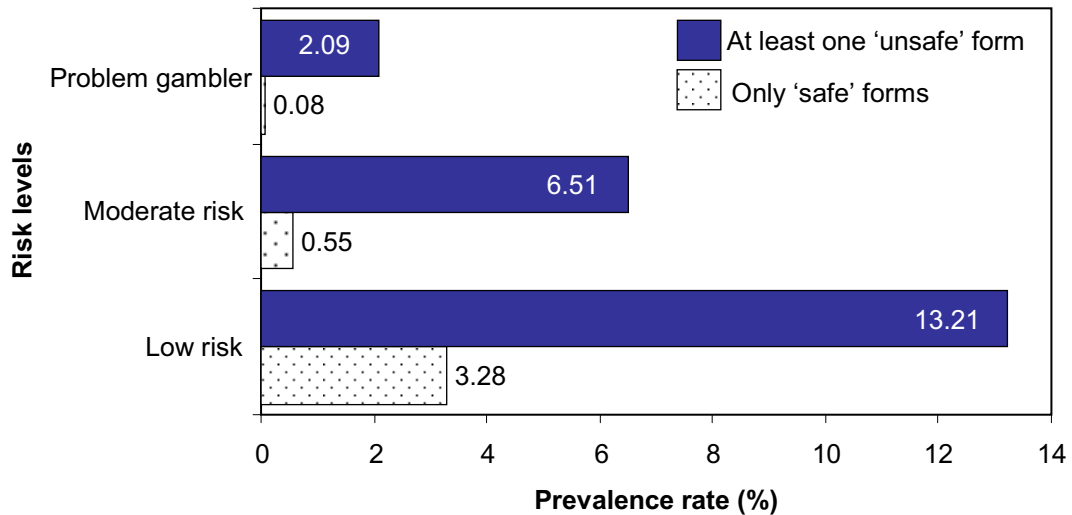
In contrast, among the group of gamblers who play on *at least one* less safe gambling form (gaming machines, wagering, casino table games), the risks are much greater. Around 350 of every 10 000 of this group say that they experience at least some degree of gambling-related health problems, and around 45 in every 10 000 say they always experience such problems. This group includes people who only infrequently play just one less safe form, so it disguises the (significantly) higher risks among regular gamblers.

The differences in harms is reflected in comparative scores on the CPGI (figure 4.9). Less than 0.1 per cent of people playing the ‘safe’ forms are rated as problem gamblers (and in total around 0.6 per cent are moderate risk or problem gamblers). In comparison, 2.1 per cent of those playing the less safe forms are problem gamblers, and, in total, close to 9 per cent are moderate risk or problem gamblers.

These results strongly support the targeting of prevention and harm minimisation policies to specific forms of gambling, rather than to gambling per se.

Moreover, the findings bolster the case that lower-level harms are still policy-relevant. A significant concern about counting cases where people ‘rarely or sometimes’ experience some harm (say guilt over their purchases) is that this may just be a customary feature of consumption generally, and, as such, not of much relevance for policy. However, even for low level harms, the variations between safe and less safe forms of gambling are striking. Less than 1 per cent of people playing only safer forms of gambling say they rarely or sometimes feel guilty about their gambling, whereas the corresponding figure is 8.2 per cent for less safe forms.

Figure 4.9 Problem gambling and moderate risks are low for lotteries, bingo and scratchies



^a See note in above table.

Source: Victorian prevalence survey 2008.

Are the measured harms policy relevant?

Some argue that people decide whether to pursue any given activity after weighing up its net benefits — trading off its gross benefits against any associated costs. In many sports activities, people realistically take account of the prospect of injury or harm, but still decide to play because of their enjoyment of the sport. In that case, a regulated requirement to reduce their play would make them worse off, even though it would reduce those risks. In effect, anticipated non-pecuniary costs are just an additional price that people factor into their choices. The ‘rational addiction’ model presupposes just this kind of rational behaviour by those who are addicted — a

model considered at length and disputed by the Commission in its 1999 report (PC 1999).

To the extent that this is the case, the ‘harms’ experienced by the relevant individuals should not be counted as a social cost, but as an ‘internalised’ cost already taken into account by the person bearing it. While this argument may be valid for many activities, it is not a strong argument in relation to gambling harms:

- many gamblers have difficulties controlling their gambling (and as shown above, not just ‘problem gamblers’), and in that case, the usual assumption that consumers rationally trade off the gains from consuming a good against any costs no longer holds. One of the arguments for requiring pre-commitment technologies is that it provides consumers with a tool to overcome their control problems to the extent that they wish
- people suffer persistent guilt about their gambling behaviour, which is not consistent with a person balancing the good and adverse aspects of a pursuit
- people experiencing harm associated with their gambling have a strong tendency to say that gambling has had an overall negative effect on their lives (table 4.8). This again is not consistent with the ‘internalisation’ hypothesis
- faulty cognitions about gambling are widespread, so that the tradeoffs consumers make are no longer well informed. So, if a consumer persistently thinks that they can make up for past losses, they may (incorrectly) regard some current harm as acceptable (such as financial distress or relationship difficulties due to gambling).

4.4 Risks by venue type

Many types of venues provide gambling. Hotels, clubs and casinos all provide the most risky form — gaming machines. There are potential arguments in favour of any of these venues being safer than the others, with the potential for regulatory concessions (for instance, more generous gaming machine quotas or higher bet limits):

- in principle, clubs might be less risky than other venues because they are owned by their members and have a broad interest in assisting their local community
- hotels often have small numbers of machines (due to stricter quotas) and, on average, are less reliant on gaming machine revenue. It may be easier in small venues for staff to identify people with problems and to help them
- in some jurisdictions, casinos are less geographically accessible than clubs or hotels — such as the casinos in Launceston and Perth. Given people’s tendency

to gamble close to home or work, (and to some extent, the importance of tourists to casinos), this may imply that the group of people using casinos may have lower risk characteristics than those using pubs or clubs.

In particular, the Australasian Casino Association (ACA) has argued that casinos are quite different from other venue types:

A visit to any casino involves a premeditated decision by customers to travel, often over large distances. This provides a barrier to the consumption of gaming products with the degree of effort required. ... Casinos are major tourist attractions which compete on the international market for both consumers and investment. ... Casinos offer a range of gaming and non-gaming facilities including dining, entertainment, retail and accommodation. ... All of these features distinguish casinos as destination venues and differentiate them from convenience venues such as hotels and clubs. ... research [conducted by Anna Thomas] would appear to confirm the distinctly different nature of destination venues such as casinos compared to convenience venues and their influence, incidence and impact on problem gambling. ... The commission needs to publicly recognise that casinos are destination venues and very different from convenience venues in both the approach. (Downey, trans., p. 529–30)

The data reveals a more complex story and less differentiation between casinos and community venues than implied by the location of casinos and their broader tourist and entertainment functions. In particular, the data suggest that the relative risks faced by patrons depend on the jurisdiction.⁶

The information for Victoria is the most complete, as it is possible to relate risks to the multiple combinations of venue types that people may attend (table 4.13). Where people play gaming machines only at one venue type, the risks of the most serious impacts, problem gambling, is much the same between venue types. However, a broader view of harms suggests that they are highest in community venues, with little difference between hotels and clubs. While patrons only attending the casino face lower risks, those risks are still pronounced for some harms (such as health impacts and experiences of guilt). Moreover, around 30 per cent of people playing EGMs at the casino also play at other venues — these patrons face substantially heightened risks. For instance, around 9 per cent of those who play at community venues *and* at casinos are problem gamblers.

In Tasmania, few people only play at community venues (clubs and hotels), with most playing at both community venues and casinos, or at the casino alone. So while patrons who *only* go to casinos face lower risks, most of their patrons also go to other venue types — and this group faces significant risks.

⁶ It may also reflect sampling variations across the surveys — although the sample sizes are relatively high in all the prevalence surveys.

The data about venue preferences for NSW and South Australia relate only to the place people ‘usually’ play EGMs — and therefore cannot reveal risks for people who play at multiple venues. It appears from these data that people usually going to hotels face higher risks than those going to clubs, while those usually going to casinos face the least risks (based on South Australian data only). The latter needs to be carefully interpreted. As shown by the Victorian and Tasmanian data, a significant number of people playing EGMs in casinos play in multiple venues. Accordingly, in South Australia and NSW, it is likely that of the people who play in casinos, many *usually* play in some other venue, and these players are not represented as casino players in table 4.15. The people who play in multiple venues tend to face greater risks. Accordingly, the risks shown for *usual* casino gamblers in table 4.15 will probably underestimate the likelihood of risks for *all* casino EGM patrons.

Table 4.13 In Victoria, problems are widespread among all venues providing EGMs, 2008^a

CPGI category	The venues where people play gaming machines						
	Clubs only	Pubs only	Casino only	Pubs clubs & casinos	Clubs & pubs	Pubs & casino	Clubs & casino
	%	%	%	%	%	%	%
Prevalence of CPGI 3-7	10.7	10.2	10.3	29.6	15.3	25.8	11.7
Prevalence of CPGI 8+	2.6	2.7	2.1	6.8	4.6	10.6	6.9
Bet more than could afford (often/always)	2.7	2.7	1.1	5.7	4.9	1.5	0.9
Health affected (rarely or more)	4.1	4.4	3.4	12.3	7.2	9.3	8.0
Criticised about gambling (often/always)	1.6	1.2	0.3	5.0	1.9	5.8	1.9
Caused financial problems (often/always)	1.0	1.2	0.0	4.0	1.9	2.1	0.0
Felt guilty about gambling (often/always)	3.1	2.8	2.8	7.4	6.9	11.7	5.9
Share of total EGM gamblers	35.8	25.0	14.5	3.1	7.1	3.1	2.9

^a The table shows the proportion of people playing at a particular venue (or group of venues) experiencing a particular harm. For instance, it shows that of people who play EGMs at clubs only, around 10.7 per cent face moderate risks, while 10.3 per cent of those who play EGMs at casinos alone fall into this category. The table ignores people going to ‘other’ venues (for example, interstate).

Source: Victorian prevalence survey 2008.

Table 4.14 In Tasmania, the biggest risks are for people who play EGMs in both community venues and the casino, 2007

CPGI category ^a	Casino only	Community venues and casino	Community venues only
	%	%	%
Prevalence of CPGI 8+	0.3	2.6	..
Bet more than could afford (often/always)	0.5	2.0	..
Health affected (rarely or more)	0.5	3.0	..
Criticised about gambling (often/always)	0.0	0.8	..
Caused financial problems (often/always)	0.3	0.8	..
Felt guilty (often/always)	0.8	1.9	..
Felt might have problem (sometimes to always)	1.6	3.4	..
Share of EGM players	33.9	64.3	1.8

^a This shows the proportion of people usually playing EGMs at a venue who are harmed. For instance, around 0.3 per cent of people who only play EGMs at casinos are rated as problem gamblers. The data did not distinguish between play at clubs and hotels (collectively being 'community' venues).

Source: Tasmanian prevalence survey 2007.

Table 4.15 People usually playing at hotels often face bigger risks in NSW and South Australia^a

CPGI category	Place where people 'usually' play EGMs					
	South Australia			NSW		
	club	hotel	casino	club	hotel	casino
	%	%	%	%	%	%
Prevalence of CPGI 8+	1.00	1.49	0.55	2.4	4.6	..
Bet more than could afford (often/always)	0.79	1.34	0.72	1.7	3.5	..
Health affected (rarely or more)	2.03	2.72	0.96	4.1	3.6	..
Criticised about gambling (often/always)	0.14	0.70	0.33	1.5	2.2	..
Caused financial problems (often/always)	0.14	0.46	0.09	0.3	1.5	..
Felt guilty (often/always)	0.94	1.78	0.55	1.9	4.0	..
Felt might have problem (sometimes to always)	3.04	3.00	1.34	4.4	4.9	..
Share usually playing EGMs at this venue ^b	8.9	79.6	10.1	70.9	26.7	2.3

^a Other than data on the share of people playing EGMs, the table shows the proportion of people usually playing EGMs at a venue who are harmed. For instance, around 2 per cent of people usually playing at a club in South Australia say they experience health effects due to their gambling. As the data relates only to the 'usual' place of play, it conceals patterns of play involving multiple venues. Data for people who usually play at the casino are not shown, since sample sizes are too small. ^b Totals do not add to 100 because some people refused to answer the question or said they 'did not know'.

Source: South Australian prevalence survey 2005 and NSW prevalence survey 2007.

Beyond the results from these prevalence studies, little published research on patronage is available. As noted by the ACA, Thomas (2009) is one of the few researchers to examine venue patronage patterns. In the three studies she undertook she found that most people only play EGMs sometimes, whether it be at the casino

or community venues (table 4.13). However, high frequency attendance by a player was much more likely at a pub or club than at the casino. For example, in the biggest study, which involved around 350 respondents, around 19 per cent of the sampled people played at community venues more than weekly, compared with only 2 per cent at the casino. Moreover, a score that measured people's frequency of playing suggested that, while problem gamblers tended to play at casinos somewhat more frequently than non-problem gamblers, their relative frequency of play appeared to be higher at community venues.

Several features of these studies should be noted:

- they consider the harm that is expressed as problem gambling, but not the broader measures of harm that are assessed in the tables above
- the sample sizes are relatively small and (to overcome this) were constructed to be non-representative in order to have reasonable populations of problem gamblers. This is a good survey design for the purpose at hand, so long as the two risk categories are representative of their counterparts in the general gambling population. However, were, for example, non-problem gamblers to have different venue or player frequency preferences than the general population of non-problem EGM players then that could lead to bias
- like the data above, the studies show people play more often at community venues *as a group* than at the casino. However, this needs to be interpreted carefully. One of the ways people end up playing frequently at community venues is by playing at more than one. There is no comparable choice for the casino — there is only one. Had a specific large hotel been compared with other community venues, then it too could be expected to have a lower frequency of visits than community venues as a whole.
- as noted above, people who play at the casino typically also play at community venues. Few people just play at the casino (roughly 10 to 15 per cent of casino patrons in the studies shown in table 4.16). So casino customers are not a distinctive group, though their motivation for playing at the casino (a 'big night out') may be different than playing at a community venue (an 'ordinary' night out at a safe and accessible venue) (Thomas 2009).
- by also considering the frequency of patronage, Thomas's studies point to the importance of not just counting the proportion of people visiting a casino or other venue type who experience problems, but the likelihood of finding them at these venue types.

Table 4.16 People play EGMs more rarely at Crown Casino than at community venues^a

Victoria, various dates

	Frequency of visits				Plays only at this venue type ^b	Frequency of play by risk group ^c		N
	Never	Sometimes	Fairly often	Frequently		Other gambler	Problem gambler	
	%	%	%	%		Score	Score	
<i>Study 1</i>								
Pubs/clubs	10.4	60.0	10.7	18.9	23.7	1.51	3.59	355
Casino	23.7	71.0	3.4	2.0	10.4	1.00	1.14	355
<i>Study 2</i>								
Pubs/clubs	16.5	58.5	8.9	16.1	13.4	1.32	3.04	224
Casino	13.4	76.3	5.4	4.9	16.5	1.26	1.98	224
<i>Study 3</i>								
Pubs/clubs	13.0	55.3	13.8	17.9	17.1	1.8	3	123
Casino	17.2	63.9	15.6	3.3	13.0	1.58	1.46	123

^a N is the sample size. Sometimes = 'less than once a month', fairly often = 'a few times per month', frequently = 'more than weekly'. ^b Thomas' s respondents all played EGMs. Accordingly, if a respondent said they never played at a casino (pub/club), they must only play at a club/pub (casino). This was the basis for the estimate of the share of people only playing at a given venue type. ^c The figures on frequency of play published by Thomas are not the average actual number of times different risk groups played at the different destinations. Rather, different frequency categories were scored 1, 2, 3 ... and it was these that were averaged. A five point scale was used for study one and two and a six point frequency scale for study three. Scoring of this kind could conceal variation in the actual underlying frequencies of play between people having the same score. For instance, suppose that 2 denoted someone playing less than once a month. Two people who played respectively three times a month and once a month would both get a score of 2, though one played at three times the frequency of the other. This should be considered when interpreting the average scores by risk group.

Source: Thomas (2009).

To pursue the implications of visit frequency, suppose that 99 000 people go to a venue each year and spend 30 minutes of enjoyable EGM play on average three times a year, encountering no harms. Suppose that an additional 1000 people go to the venue once a week and spend one hour playing EGMs each time, experiencing considerable harms. Overall, just one per cent of patrons visiting this venue experience harm — it appears to be a solidly 'safe' venue. However, in this illustration, people experiencing significant harm account for 26 per cent of the total time spent by patrons in the venue.⁷ In this hypothetical example, that translates to a 26 per cent chance that a person seen playing machines at this venue is experiencing harm — a reasonable basis for measures to help them.

⁷ The annual hours spent by recreational gamblers is 148 500, while 52 000 hours are spent by people experiencing significant harm.

Based on the Tasmanian prevalence survey — the only Australian prevalence survey to separately distinguish the session duration and sessions per annum in community venues and casinos — problem gamblers accounted for a significant share of the total time people spend playing EGMs (table 4.17). Consistent with Thomas’s studies, the share accounted for by problem gamblers is greatest in community venues, but it is still pronounced in casinos. So while finding problem gamblers is like discovering a needle in a haystack among the adult population, they are common among people playing at a gaming venue — and, at least, in the Tasmanian case, this applies to both casinos and community venues.

Table 4.17 Problem gamblers are relatively common among people actually playing gaming machines in venues^a

Tasmania 2007

	<i>Share of total annual hours played</i>	
	Casinos	Community venues
	%	%
Lower risk groups (CPGI 0–7)	67.8	45.5
Problem gamblers (CPGI 8+)	32.2	56.5

^a The share of total hours played was estimated by multiplying minutes per average session times sessions per year for each venue type for each person in the survey and then summing over these. It was then possible to calculate the share of total annual time spent in a venue type by problem gamblers (based on CPGI 8+). It should be emphasised — as discussed in appendix B — that there are many potential errors in people’s recall of time spent or sessions. The critical issue is that even were the share of total time accounted for by problem gamblers to be twice its real value, it would remain high in both venue types.

A final issue when considering the relative safety of venues is how this might change under alternative regulatory settings. In Western Australia, there is no community gaming and the only casino is not in the central business district. It is truly a ‘destination’ venue. However, in most other jurisdictions, casinos exist alongside many other gaming venues. Indeed, some of these casinos are centrally located and are as accessible as hotels and clubs in the local area — for instance, this would apply to the casinos in Melbourne, Brisbane and Adelaide. These casinos remain destination venues for table games (given their exclusivity to casinos), but it is not clear once gaming machine accessibility was liberalised, that casinos remained destination sites for gaming machines. That, and the evidence above, suggests that a strong case would have to be made for differential regulation in casinos compared with community venues. The Commission addresses this issue on a case by case basis — depending on an assessment of the relative costs and benefits (chapter 3).

Overall, the story that emerges for venue safety is nuanced: no type of venue is ‘safe’, though some, in some jurisdictions appear to pose less risks than others.

FINDING 4.1

There is strong evidence that gambling can have adverse health, emotional and financial impacts on many more people than those categorised as ‘problem gamblers’. As is the case in policies addressing harm from alcohol consumption, policy also needs to address these wider impacts.

FINDING 4.2

People playing gaming machines face much greater risks than people who gamble on other forms, particularly lotteries, scratchies and bingo.