Gambling and corporate social responsibility (CSR): Re-defining industry and state roles on duty of care, host responsibility and risk management

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Abstract

During the 1990s, states embraced legalised gambling as a means of supplementing state revenue. But gaming machines (EGMs, pokies, VLTs, Slots) have become increasingly controversial in countries such as Australia, Canada and New Zealand, which experienced unprecedented roll-out of gaming machines in casino and community settings; alongside revenue windfalls for both governments and the gambling industry. Governments have recognised that gambling results in a range of social and economic harms and, similar to tobacco and alcohol, have introduced public policies predicated on harm minimisation. Yet despite these, gaming losses have continued to climb in most jurisdictions, along with concerns about gambling-related harms. The first part of this article discusses an emerging debate in Ontario Canada, that draws parallels between host responsibility in alcohol and gambling venues. In Canada, where government owns and operates the gaming industry, this debate prompts important questions on the role of the state, duty of care and regulation 'in the public interest' and on CSR, host responsibility and consumer protection. This prompts the question: Do governments owe a duty of care to gamblers?

The article then discusses three domains of accumulating research evidence to inform questions raised in the Ontario debate: evidence that visible behavioural indicators can be used with high confidence to identify problem gamblers on-site in venues as they gamble; new systems using player tracking and loyalty data that can provide management with high precision identification of problem gamblers and associated risk (for protective interventions); and research on technological design features of new generation gaming products in interaction with players, that shows how EGM machines can be the site for monitoring/protecting players. We then canvass some leading international jurisdictions on gambling policy CSR and consumer protection.

In light of this new research, we ask whether the risk of legal liability poses a tipping point for more interventionist public policy responses by both the state and industry. This includes a proactive role for the state in re-regulating the gambling industry/products; instituting new forms of gaming machine product control/protection; and reinforcing corporate social responsibility (CSR) and host responsibility obligations on gambling providers – beyond self-regulatory codes. We argue the ground is shifting, there is new evidence to inform public policy and government regulation and there are new pressures on gambling providers and regulators to avail themselves of the new technology – or risk litigation.

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The gambling industry is transnational, and has grown exponentially over the last 15 or so years, developing existing and new markets worldwide. A key driver of this unprecedented growth is the increasingly sophisticated technology of gambling product design and delivery and the accessibility of machines (frequently in local clubs and hotels, as well as casinos).

Cash-strapped governments the world over, in countries like Australia, Canada, New Zealand, Scandinavia, South Africa, the UK and various states in North America, drawn to the lure of supplementing state revenue in the 1990s, have come to rely increasingly on gambling-derived taxes. Yet researchers, communities, regulators and governments are raising the issue of what to do about gambling-related harms and the extent of gambling losses (a proxy for gambling-related harms). Gambling has become a significant area of public policy and government activity that requires more critical examination. It tends to work as a 'redistributive tax' (Stansfield, 2008), withdrawing funds from disadvantaged communities for disbursement (via governments) into general revenue; with a small proportion allocated to problem gambling research, education and treatment.

Here we concentrate on VLTs, slots, pokies or electronic gaming machines (EGMs)[1]; although the arguments we raise about host responsibility, player tracking systems and problem play identification, can easily be extended to different types of gambling. We argue the ground is shifting and that liability is on the horizon – unless gambling is made safer for consumers of gambling products and unless both governments and industry turn their attention to what would constitute a sustainable gambling approach. For a starter, this would need to address the issue that an estimated 30–50% of net gaming losses are contributed by problem gamblers.

Problem gamblers contribute disproportionately to gaming revenue,[2] regular players are especially at risk and the harm is often profound. With the roll-out of electronic gaming machines into communities and casinos, it has become increasingly evident from gambling research that gambling results in a range of harms – not just for individuals, but for families, communities and local economies (see Anielski & Braaten, 2008; Australian Institute for Primary Care, 2006; Banks, 2007; Hall, 2006; Harrison, 2007; New Focus Research, 2006; SACES, 2005; Schellinck & Schrans, 1998, 2004, 2007).

This is complicated by the fact that governments have become increasingly reliant on gambling-derived revenues – which in turn, raises issues for analysis of the role of the state in public policy, where the state takes on multiple and conflicting roles including as owner, operator and regulator; along with its role as 'co-producer' with industry. In countries like Canada, Australia and North America, the gaming industry, governments and regulators have so far emphasised 'light touch' regulatory models emphasising voluntary industry codes of conduct, individual (player) responsibility and informed consent within an addictions gambling paradigm which focuses interventions on problem gamblers (stances widely associated with the 'Reno' model of responsible gaming (Williams, 2005).

1. Is gambling harmful?

The *harms* associated with EGM gambling put it along side tobacco and alcohol in terms of the need for special laws and regulations, a focus on potentially harmful effects of product consumption, licensing, and specific host training aimed at preventing harms; which under certain conditions of provision and use, result in detrimental economic, social and other impacts on users, their families and communities (Harrison, 2007; SACES, 2005). Some of the externalities of gambling (those often unforeseen and longer term negative costs or effects) are acknowledged in the funding of gambler's help counselling and other 'ambulance at the bottom of the cliff' treatment and support services for those impacted by problem gambling (Blaszczynski & Farrell, 1998; Harrison, 2007[3]; Productivity Commission, 1999; SACES, 2005; Stitt, Giacopassi, & Nichols (1999); Thompson, Gazel, & Rickman, 1999). But these do not address prevention of harms.

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[1] Gambling encompasses a broader range of products and platforms including lottery, bingo, wagering, spread betting, casino table games, and so on, and new platforms such as internet gambling. This article focuses on venue based gaming.

[2] The Australian Productivity Commission (1999) estimated that problem gamblers (2.1% of the general population) contribute 33% of industry revenue. Schellinck and Schrans' research put the figure at 54% in community settings and less than 40% in casinos.

[3] Some of the 'downside' impacts related to community impact listed by IPPR (2007, p. 1) include 'increased problem gambling, mixed employment effects, displacement of existing businesses and spending, and damage to a city's image'; the other studies cited above examine impacts including financial problems, family breakdown, suicide, crime, health system costs, work performance and so on.

The measurement and costing of broader impacts is a nascent science and the subject of scoping projects such as the national Canadian SEIG project developing a framework for measuring the social and economic impacts of gambling in Canada (Manitoba Gaming Control Commission, 2007; Anielski & Braaten, 2008); and some notable studies including the comparative Western Australia-Victoria scoping community impact study funded by the former Victorian Gambling Research Panel[4] (SACES, 2005).

In recognition of such harms, some jurisdictions have an unrestricted veto on gambling and licence to operate by exemption. The Canadian Criminal Code, for example, sees gambling as essentially criminal in nature and exerts a blanket prohibition on gambling, but has decriminalised it 'in circumstances where regulations will minimise the potential for public harm' (Sasso & Kalajdzic, 2007, p. 5).[5] As noted above, jurisdictions consistently acknowledge the harms of gambling by setting aside funds for problem gambling treatment/counselling, public education and awareness campaigns and for research into problem gambling, its measurement and the social and economic impact of gambling. For example, national, provincial and/or state gambling measurement studies to monitor prevalence and incidence of problem gambling are routinely conducted in most regulated and developed gambling jurisdictions around the world including Canada, United States, Australia, New Zealand, the UK, and in Europe. The results are controversial and trigger debates about whether states should be more interventionist.

In the first part of this article, recent debates in Ontario, Canada are used as the catalyst for discussing broader notions of duty of care, host responsibility and community expectations about gaming industry CSR; and the role of governments/regulators. We then examine three domains that constitute a new accumulating evidentiary base to drive and inform new standards for gaming industry CSR, host responsibility and government policy:

- The capacity to reliably identify problem gamblers on-site in venues as they gamble;
- The availability and use of player tracking central monitoring system (CMS) data systems to provide management with high confidence identification of problem gambling behaviours and associated risk;
- Research on technological design features of new generation gaming products in interaction with players, that show how EGM machines can be the site for monitoring/protecting players.

2. The Ontario host responsibility duty of care debate and corporate social responsibility of gambling industry

In 2006 the Ontario Problem Gambling Research Centre released a report "*Do Ontario and Its Gaming Venues Owe a Duty of Care to Problem Gamblers?*" authored by William Sasso and Jasminka Kalajdzic, attorneys at Sutts, Strosberg LLP in Windsor Ontario (Sasso & Kalajdzic, 2006). Their revised version is mainly drawn on below (Sasso & Kalajdzic, 2007). This report (referred to as the Sasso and Kalajdzic report) examined a number of questions related to government/industry duty of care:

- Whether the 'Government of Ontario is responsible at law for the harm suffered by problem gamblers in the province's casinos';
- Whether government (and those involved in the operation of Ontario's gaming venues) has a legal duty 'to take positive steps to lessen or eliminate situations of danger or to prevent further financial and other harm to the problem gambler'; and if so
- 'What form of assistance is required to meet that duty'? (Sasso & Kalajdzic, 2007, p. 4).

These are important questions for governments and regulators and interrogate the appropriate role of the state acting 'in the public interest' – especially in Canada, where government is the owner/operator. In the absence of clarification by court decision, the authors examine obligations according to statutory and common law, according to established jurisprudence. Canadian law lays the foundation for statutory obligation in that gaming is to be

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[4] The Victorian Gambling Research Panel was established in 2000 by an act of parliament to commission research on the social and economic impacts, with funding from the Community Support Fund. It was abolished in December 2004 when the Victorian government made the decision to shift the research function in-house: within the Victoria Department of Justice; thus reversing its previous commitment to independent research.

[5] The authors cite the 1994 judgment R v Andriopoulous, in the Ontario Court of Appeal (Sasso & Kalajdzic, 2007, p. 5).

administered 'in the public interest and in accordance with principles of honesty and integrity' (Sasso & Kalajdzic, 2007, p. 6[6]). Sasso and Kalajdzic place principal reliance on the 1974 Supreme Court of Canada case of *Jordan House Limited v. Menow*,[7] and draw parallels between the obligations of hosts in licensed premises serving intoxicated individuals in that case and gambling venues in relation to problem or pathological gamblers. They also reference the 'Anns test' as a framework previously used by the Supreme Court of Canada to clarify and establish duty of care responsibility. The 'Anns test' is based on a British decision of the House of Lords in Anns v. London Borough of Merton in 1977, which found that to establish duty of care it is necessary also to satisfy three conditions.

They argue the first: *that the harm complained of is a reasonably foreseeable consequence of an alleged breach of a duty of care*, is established by virtue of self identification by problem gamblers themselves to casino management/ employees through for example, players seeking self exclusion. The second duty of care criterion *that there is sufficient proximity between the parties to justify duty of care*, they argue, is established by observation by casino employees, of patron's having 'control problems' and from data available in casino loyalty Winners Circle and player loyalty tracking data. They note such data give casino operators knowledge of players' 'frequency of visits, gambling losses and duration of play' (Sasso & Kalajdzic, 2006, pp. 562–566); which are proxies for problem gambling.

In examining the applicability of the 'Anns test' the Sasso and Kalajdzic report argues that casino operators have knowledge of problem gamblers and sufficient proximity, thus meeting the first two test criteria of reasonable foreseeability and proximity. With regard to the third duty of care criterion: *that there are no policy reasons that remove or restrict such obligation*, Sasso and Kalajdzic (2007, 13 citing the 2003 Canadian case of *Odhavji Estate v. Woodhouse*) maintain that the third duty of care criterion of the 'policy test' is also passed by the extension of commercial host liability in case law involving alcohol.

Sasso and Kalajdzic further cite two Canadian cases, *Cooper v. Hobart* and *Odhavji Estate v. Woodhouse* where the Supreme Court of Canada used the 'Anns test' expanding and defining duty of care criteria to include: whether there are any pre-existing legal avenues for recourse or remedies available in addressing the issue or loss: 'Would the recognition of the duty of care create the spectre of unlimited liability to an unlimited class?' Whether the conduct under question is 'operational in nature, or is it in the nature of governmental or legislative policymaking? And whether it occurs as a result of governmental, legislative or regulatory policy-making or as a result of policy and practice (Sasso & Kalajdzic, 2007, p. 13)?

In reference to *Jordan House* and the 'Anns test' of duty of care they conclude 'it is arguable that Ontario, the Ontario Lottery and Gaming Corporation (OLG) and gaming venues owe a positive duty of care to assist the problem gambler in certain circumstances' (Sasso & Kalajdzic, 2007, p. 4). They further contend: 'because inducements to gamble increase with one's losses by virtue of programs like the Winner's Circle, casino operators may, in fact, be viewed as actively soliciting gamblers with a higher probability of dependency' (Sasso & Kalajdzic, 2007, p. 11). These conclusions have particular bearing on both government and industry obligations to show a duty of care towards gaming machine players.

In response, the Sasso and Kalajdzic (2006) paper has been the subject of a detailed critique by Cameron (2007) a professor of law at Osgoode Hall Law School at York University in Toronto. Cameron undertook the rebuttal response at the request of Davies, Ward Phillips and Vineberg LLP, a legal firm which has acted for the Ontario Lottery and Gaming Corporation (OLG) in various gaming industry matters.

Cameron queries whether there is a duty of care incumbent on gambling providers that parallels that of hosts in licensed premises serving intoxicated individuals: arguing that problem gambling is different from problem drinking; that the amount of alcohol consumed and the 'well-known signposts of alcohol impairment' are different; that 'identifying the problem gambler is more challenging' than in the alcohol context and that with regard to compensation, 'the approach is unworkable' as it would invite those who 'unwillingly take risks that are careless, foolish or reckless' and would encourage people 'to blame the house after the fact' (Cameron, 2007, pp. 557–558).

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[6] Citing the Alcohol and Gaming Regulation and Public Protection Act, 1996, S.O. 1996, c.26, s.3(3).

[7] Jordan House Limited v. Menow is the leading case in Canada on commercial host liability for alcohol service. Menow was a familiar patron of the Jordan House Hotel who was known to drink to excess and had been prohibited from drinking at the establishment in the past without responsible accompaniment. On the night in question Menow arrived with others but had been permitted to drink after they had departed for a period of 5 h and past the point of intoxication. He was ejected once he became a nuisance to other patrons and was struck by a vehicle while wandering on the highway in front of the establishment. In 1974 the Supreme Court of Canada landmark decision based on this case found those businesses that serve alcohol owe a duty of care to patrons under certain circumstances. This case was used as a framework by Sasso and Kalajdzic to consider similar duty of care responsibilities for casino operators and problem gamblers.

Cameron is critical of Sasso and Kalajdzic's reliance on *Jordan House* (1974) and argues the later British House of Lords case of *Anns* (1978) more appropriately applies[8] but would not establish negligence. She argues: '(t)o meet the Jordan House criteria of knowledge, gaming employees would, in effect, be required to practice psychiatry on the job' (Cameron, 2007, p. 558). On the issue of host responsibility Cameron draws on the judgement in the *Childs v. Desormeaux* case citing the Chief Justice's majority opinion, which observed that 'the '"perverse" incentive' to encourage over-consumption' supports the imposition of a duty to monitor alcohol consumption in the interests of the general public' (Cameron, 2007, p. 563). Cameron argues it is questionable whether the kind of monitoring required by law in relation to alcohol sales is possible in gaming venues 'that attract a fluid clientele which for the most part, gambles in relative anonymity' (Cameron, 2007, p. 563).

Drawing on *Childs v. Desormeaux*,[9] Sasso and Kaladjzic acknowledge that 'Canadian judges will likely be cautious in extending host responsibility in other contexts' (Sasso & Kalajdzic, 2006, p. 565). But they also indicate it could be successfully argued that commercial gaming is more akin to the commercial host situation for alcohol than to the social host context mitigating the Childs case and further, that the majority judgement in Childs clarifies what would be expected in terms of commercial host responsibility.

In summary, Cameron makes a number of misleading assertions about gambling, problem gamblers, loyalty programs and self-exclusion as a proxy for identifying problem gamblers (which are taken up in the discussion of new research evidence presented below):

- Cameron argues how could industry 'monitor a syndrome that lacks a concrete definition, and is revealed in emotions and behaviour that occur—in substantial part—offsite and away from the gambling itself' (Cameron, 2007, pp. 563–564); 'it remains unclear who is a problem gambler and when a duty to prevent such a person from gambling would crystallize' (Cameron, 2007, p. 566); and how, even if it could be monitored, would this differentiate between 'gamblers who simply have lost from those who are psychologically unable to stop' (Cameron, 2007, p. 564).
- Cameron implies it is valid to apply to venues the finding of general population prevalence studies: 'the province and those who operate its gaming facilities know that a small percentage of those who gamble are or will become problem gamblers' (Cameron, 2007, p. 561[10])
- Cameron is critical of the Sasso and Kalajdzic argument about the use of loyalty programs to identify risk: 'loyalty programs that recognise and reward regular customers do not indicate which ones, if any, have a gambling problem'; and '(i)nformation that shows who plays in which facilities, at what level, and with what degree of frequency does not reveal the presence or absence of a gambling problem' (Cameron, 2007, p. 558).
- Of gamblers who choose to self exclude, Cameron argues there 'can be no proximity under *Anns,* and no prima facie duty of care for problem gamblers who have self-excluded.' And 'those who do not self exclude have chosen to take the risks that are associated, in their case, with continuing to gamble'. . .'Facilities have no direct knowledge of those who choose not to self-exclude, are not capable of diagnosing problem gambling, and are not in a relationship of sufficient proximity to unidentified problem gamblers to establish a prima facie duty of care' (Cameron, 2007, p. 565).

In highlighting key points of the Ontario debate, we urge avoidance of legal obfuscation (and another 5 years of inaction or business as usual). We argue the evidence is already there for both industry and governments to apply more interventionist policies and practices that will better protect gaming product consumers (or potentially risk litigation)

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[8] Cameron further examines the applicability of the 'Anns test' to the issue of whether in the case of the problem gambler, there exists a prima facie duty of care. The 'Anns test' first addresses the nature of the relationship between the parties to determine 'whether that relationship warrants the imposition of a legal duty of care', 'asks whether the loss or injury was reasonably foreseeable, and the then considers whether the parties are 'sufficiently proximate' to establish a prima facie duty of care. Once a prima facie duty is established, the second branch of the test asks whether there are policy considerations 'which ought to negative or limit the scope of the duty, the class of persons to whom it is owed or the damages to which breach may give rise' (Cameron, 2007, p. 560).

[9] The *Childs v Desormeaux* case refers to a situation where a guest (Desormeaux) became intoxicated at a private party, and, after leaving the event, seriously injured another person (Childs) in a car accident. Childs subsequently sued Desormeaux as well as the hosts of the party. The trial judge initially supported a duty of care claim against the hosts on behalf of Childs but this was overturned in a Court of Appeal. In this case there were distinctions made between commercial and social host responsibility surrounding alcohol consumption and impacts. The duty of care argument was, therefore, rejected based on the 'Anns test' as it was found that it failed to meet either of the first two elements in establishing that the hosts of the party owed the 'users of the road' a duty of care.

[10] Population prevalence surveys are misleading as they include all persons, including those who do not gamble at all.

and enable a more sustainable industry (by that we mean one underpinned by consumer protection practices and not disproportionately reliant on the losses of problem gamblers).

The analysis is broader than legal argument and includes the moral and ethical underpinning of contemporary notions of the role of the state as regulator/protector to lead on requiring host social responsibility as a condition of licence to operate. In other industry sectors, this embraces examination of product safety and broader issues of social and economic sustainability and the social responsibilities of industry in relation to harm prevention for product users. CSR has come a long way since Freidman's (1970) adage of the primary obligation of corporations to shareholders and has more recently been applied to the gambling industry (Grayson and Hodges, 2004). CSR is now more broadly understood to encompass wide-ranging social, ethical, environmental and economic obligations to stakeholders (including broader communities and future generations) and not just shareholders (Ebner, 2007; Leipziger, 2003; Williams, Siegel, & Wright, 2006). These broader notions of CSR have been embraced by parliaments wishing to drive new accountabilities for business (European Commission, 2007; UK Government, 2007); but they have been slow to be applied to the gambling industry. In terms of state role, governments have entered into wide-ranging contractual or public private partnership arrangements with the gambling industry, which render them co-producers, which now appear to lead to compromise and inaction on issues of public protection and industry regulation.

3. Research on identifying problem gamblers on-site in venues

A controversial but important area for the gaming industry has been the issue of venue staff interventions when players manifest signs of distress or patterns of play associated with problem gambling. Doubts about staff interventions have been expressed regarding player privacy, the evidence base for associating certain behaviours with problem gambling and the accuracy/subjectivity of staff judgements. In the Ontario debate, Cameron argued that such interventions were problematic as industry 'cannot monitor the activities of problem gamblers because it cannot identify who they are' (2007, p. 566).

Although the question of whether problem gamblers can be recognised on the floor is seen as important (Allcock, 2002), in the absence of a systematic approach to venue staff interventions, a major means of identifying problem gamblers in need of assistance is seen to be player self-selection. Cameron for example, sees gambling as an individual choice with concomitant consequences. She argues from the standpoint that it is only right that gambling providers rely on self report for identifying problem players; emphasising player-initiated actions like opting for a formal deed of self-exclusion from the gambling venue or opting to present to a problem gambling councillor for treatment outside the venue. It should be noted that self-exclusion involves very small numbers of players and direct interaction with a gambler is currently the most common way that problem gamblers can be identified. Psychologists and counsellors use standard screens such as the DSM IV to identify people who are pathological gamblers or are at risk of becoming one. This is following the long established approach of inferring internal characteristics of the individual through external measurement, either as measured and responded to by the person, or through direct observation of cues. Some of the items in these screens measure reported behaviour as it is felt that behavioural cues are a useful means of identifying at risk and pathological gamblers (such as chasing losses).

While problem gamblers, are acknowledged to exist, it is recognised that there are gamblers who may vacillate between problem and non-problems stages of gambling (Reith, 2007; Wynne, Smith, & Volberg, 1994). So the challenge is to identify such gamblers as problem gamblers. Associated cues on the floor at the time they are observed can target interventions at any time. This method of identification has been established by one industry-sponsored review (Allcock's study for the Australian Gaming Council (AGC) 2002) and three field studies (Delfabbro, Osborn, Nevile, Skelt, & McMillen, 2007; Hafeli & Schneider, 2006; Schellinck & Schrans, 2004).

Using single cues the Allcock AGC (2002) study concluded that problem gamblers could be identified with a maximum of 70% confidence. The Hafeli and Schneider paper was a small-scale study that generated a taxonomy of visible cues and identified ways these cues could be recognised by staff in the venue. Our discussion will focus on the results of the two other larger studies (one Canadian and the other Australian), that empirically tested the accuracy and viability of using cues to identify at risk or problem gamblers at venues.

The Schellinck and Schrans (2004) paper is based on data collected in a random survey deriving a sample of 711 regular VLT gamblers in Nova Scotia. Respondents self reported the frequency with which they exhibited a list of

indicators while gambling.[11] The study focused on combinations of behavioural (e.g., long gambling sessions, quitting only at closing time), physiological (e.g., getting the shakes, feeling nauseous) and emotional (e.g., depression, anger) player responses to gambling, which could be used to identify problem gamblers with a high degree of confidence.[12] While acknowledging that some of the self-reported behaviours may be difficult to observe (for example, nausea), cues were categorized on the basis of their observability; and thus the ease of implementation by gaming floor staff.

A wide range of visible and non-visible cues when occurring in combination during a visit, were found to have high a confidence value (90% or better) in classifying somebody as a problem gambler. The cues found in the combinations with the highest confidence are those that have been listed by others as most likely to identify problem gamblers (Allcock, 2002). These include attempts to obtain cash through the use of credit cards, cashing cheques or borrowing from friends; signs of agitation and disorderly behaviour such as hitting the machine, long gambling sessions, last out at closing time, and playing two machines at one time.

Some cues observed alone were found to be somewhat predictive of problem gambling. For example, gamblers who feel sick to their stomach or become nauseous or gamblers who feel sad or depressed while playing the machines (all factors that could be elicited from staff trained in on-the-floor interventions) help identify problem gamblers. But as opposed to 'observation/elicitation' of a single cue, when cues are combined, the ability to accurately identify problem gamblers (confidence) goes up dramatically[13] (Schellinck & Schrans, 2004, p. 22).

It is cues in combination that have the greatest power to accurately target problem gambler interventions. Combined cues with the greatest predictive value included: length of session, obtaining more money to continue gambling by cashing a cheque or borrowing money, gambling until closing time, obtaining cash by any means, sighing and groaning while gambling, visible behaviours related to play, either jamming the machine to allow for continuous play or hitting/kicking the machine; combined with three physiological cues: feeling sick/nauseous while gambling, getting the shakes/trembles while gambling, and getting dry eyes (Schellinck & Schrans, 2004, p. 20).

The authors identified 192 three-cue combinations that had confidence levels of 90% or better and contained at least one visible cue that could be directly observed. The list of combinations if taken together, provide the potential for identifying 86.3% of problem gamblers (Schellinck & Schrans, 2004, p. 20). In every combination, keeping track of the gambler plays a part either in terms of the length of the play session or the proportion of time spent gambling while at the venue. By focusing on cue combinations that are highly predictive of problem gambling and that include at least one easily observable cue in combinations of two or three, this study confirms the availability of a methodology, now rigorously tested internationally in both Canada and Australia.

A study by Delfabbro et al. (2007), commissioned by the Australian Ministerial Council on Gambling, replicated and extended the Schellinck and Schrans study to examine a wider range of cues and to determine the practicality of identifying the cues predictive of problem gambling in the venue using observational methods. There were three empirical phases: a survey of 120 venue staff and interviews with 15 counsellors in order to explore issues surrounding the identification of problem or at risk gamblers on site; a survey of 680 regular gamblers recruited outside venues (400 respondents) and through advertising to the community (280 respondents); and two observational studies.

Phase one results found that venue staff endorsed the list of cues the authors derived from earlier work and felt confident that they could identify problem gamblers. They also felt they were not adequately trained for interventions on the floor. The counsellors interviewed concurred.

The regular gamblers surveyed were classified according to their gambling risk status using the Canadian Problem Gambling Index (CPGI) (Ferris & Wynne, 2001). This divided the sample into No Risk (281), Low Risk (117), Moderate Risk (144) and Problem Gamblers (137) (Delfabbro et al., 2007, p. 15). The ability of the cues to identify

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[11] This study is based on a secondary analysis of the 1998 Nova Scotia gambling survey which screened over 18,650 people to derive a random sample of regular video lottery machine gamblers (Final Report, 1998 Nova Scotia Regular VL Players Survey, Nova Scotia Department of Health Section 1, 7).

[12] The occurrence of these cues was then weighted by frequency per trip and number of trips to VLT locations per month in order to create a dataset reflective of the frequency of these events in the venues and their association with problem gamblers.

[13] For example, the single cue of playing for 2 h or longer has a confidence value of 54.3% and a support of 13.7% with problem gamblers doing this in 51.5% of their visits. When playing for two or more hours is combined with borrowing money from friends the ability to correctly identify problem gamblers jumps to 81.9% and the frequency with which the cue combination occurs (support) drops to 1.4%. When a third cue is added, getting a headache while playing on those visits where they gamble for more than 2 h and borrowing money, the confidence goes up to 97.2% (Schellinck & Schrans, 2004, pp. 20–24).

problem gamblers was used as the criterion for subsequent analysis. All of the visible indicators tested were more likely to be exhibited by problem gamblers, with emotional and social behaviours most predictive.

> People who became angry, depressed, violent towards machines, or who sweated a lot while gambling, complained to staff, or tried to disguise their presence at the venue, were significantly more likely to be problem gamblers (Delfabbro et al., 2007, p. 15).

The researchers examined the potential for groups of indicators used in combination to identify Problem Gamblers.[14] Confirming the validation of this recent research of in-venue identification of problem gambling, combinations of any three of these indicators achieved an overall correct prediction rate for problem gambling of approximately 90% (Delfabbro et al., 2007, p. 190). Further analysis found that the set of highly predictive indicators varied between males and females.

Phase-two of Delfabbro et al.'s results corroborate the overall conclusions found in the Schellinck and Schrans (2004) study; showing that during some sessions problem gamblers are likely to exhibit several cues which can be used as reliable indicators of problematic gambling behaviour. The set of predictive cues identified largely overlapped, with a sufficient number that are manifested visibly, and, therefore, can be used as reliable observational indicators of risk for gambling problems.

In phase three, one observational study was carried out in Adelaide and kept detailed records of gamblers' display of cues that might identify them as problem gamblers. The other, carried out in venues in Canberra and New South Wales focused on detailing the nature of cues exhibited in order to better specify behaviours and events that might be associated with problem gambling. Both these studies, enabled in situ observation of cues and cue sequencing associated with risk in phase two.

The results of the observational components of the study offer substantive insight into the issues surrounding implementation of venue intervention plans and provides practical recommendations for improving the feasibility and effectiveness of targeted intervention strategies for high-risk and problem gamblers on site. Due to ethical constraints, the researchers were not able to verify whether those gamblers observed were problem gamblers according to accepted screening criteria (e.g. DSM IV, CPGI), but they did demonstrate that the combination of cues identified as predictive of problem gambling during phase one of the study were exhibited by certain gamblers and were easily observable in the venue.

The results also suggested that while it is feasible to identify problem gamblers on the floor using these indicators, staff are unlikely to observe all cues during a particular session of play. To compensate for this limitation it may be possible to develop protocols that in the event one cue is observed (e.g., gambling for over 3 h without a break) staff are alerted to then look for other cues that would help confirm the status of the gambler.

4. Using loyalty player tracking CMS data systems to provide management with high confidence identification of problem gamblers using new software to track and analyse player behaviour

Cameron makes a number of assertions regarding venue's capacity to identify problem gamblers and take steps to stop them gambling. She argues:

> it would be difficult to establish proximity between problem gamblers and their hosts under the *Childs* criteria: the gaming industry does not and cannot control the risk of problem gambling; it cannot monitor the activities of problem gamblers because it cannot identify who they are; and it cannot prevent them from seeking and gaining access to other casinos or alternative games of chance. It can and does offer those who are in difficulty an option to self-exclude, on the basis that it is their responsibility to observe the voluntary ban. Even so, it is not reasonable for the self-excluded to expect that gaming facilities will stop them from gambling (Cameron, 2007, p. 566).

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[14] They found that four gambling intensity indicators such as gambling for 3 h or more or rapid play of the machines were significant predictors for problem gambling and that 80% of gamblers were correctly classified using these variables. Similar results were found for three impaired control indicators (88% correct classification), four social behaviour indicators (84%), five money-sourcing indicators (86%), three emotional indicators (82%), one 'other' behaviour (80%) and three irrational attributions (82%). When the top five overall predictors were used in a predictive model a correct classification rate of 91% was achieved.

Casinos routinely collect data on players patterns of play, spend and losses via loyalty, VIP or other player reward schemes.[15] Other sources of knowledge for operators include mandatory reporting of bets that exceed $10,000 (an anti money laundering provision in Australia mandated by Austrack) and in Ontario, where prescriptive active monitoring provisions include requirements under the Gaming Control Act 1992, that players gambling in amounts that exceed $2500 must register with the casino and must provide further personal financial information for amounts that exceed $10,000 (Sasso & Kalajdzic, 2007, p. 10). These authors also recognise that where inducements to gamble increase with increasing losses, the industry may be seen as 'actively soliciting gamblers with a high probability of dependency' (Sasso & Kalajdzic, 2007, p. 11). This refers to the practice whereby software applied in real time in venues is able to alert floor managers (via a CMS alert system) to high spending patrons who are then 'looked after' by various rewards and some argue, incentives to stay longer in the venue, to travel on free flights to gamble at other venues or other complimentary rewards and services including drinks, hotel accommodation, meals and so on.

Based on their research with player tracking, identification of problem gambling, and loyalty database analysis, Schellinck and Schrans developed a paradigm to identify risk for problem gambling using the information typically gathered by casino loyalty systems. In 2005 they used this technique for Saskatchewan Gaming Corporation (SGC) to produce models for two casinos operating in the province; Casino Regina and Casino Moose Jaw. These models identify high-risk and problem gamblers at the 90+% confidence level as measured by Problem Gambling Severity Index (PGSI), the nine scored items comprising the Canadian Problem Gambling Index CPGI (Ferris & Wynne, 2001). To develop the models two samples of active player club members were obtained for each of the two casinos; those who had played within the past year ($n = 1000$) and those who had played in the 2 week period prior to the survey ($n = 500$). Each randomly selected club member was surveyed and provided informed consent to link their risk measures (survey items including CPGI scores) with the player club information stored in the loyalty database. Up to 30 months of loyalty data was accessed for analysis purposes with models customized to meet specific market characteristics for each casino (Schellinck & Schrans, 2006).

The models developed by Schellinck and Schrans were subsequently incorporated into the iCare Responsible Gaming Program jointly developed by iView Systems and SGC.[16] In January 2006 the iCare Program was implemented at the two casinos in Saskatchewan, Casino Regina and Casino Moose Jaw and has proven to be effective in identifying high-risk gamblers for targeted intervention. The system is fully integrated into SGC's customer care and accepted by staff and patrons with over 1600 customer interventions to-date. In the first year of operation, analysis of SGC interactions with high-risk identified players indicated a statistically significant reduction in players moving to higher risk levels and an increase in players moving from high to lower risk levels (personal communication).

The Saskatchewan Gaming Corporation iCare Program incorporates player interventions based on special training of on-floor staff when the player tracking system alerts the in-venue presence of players with high-risk profiles. Other systems such as that produced by Techlink Entertainment[17] in Nova Scotia include machine based features that allow players to monitor expenditure, set money limits or self-exclude; while tracking and storing player information that can be used to assess impacts for player behaviour and game outcomes including identification of risk.

Using only the information typically gathered and stored by player tracking systems, including loyalty programs, gaming operators can now set parameters and confidence levels for identification of risk (balancing degree and level of precision and tolerance required for false positive versus false negative identification rates of those at high risk for problem gambling). The most recent evidence for this approach can be found in the Nova Scotia Player Tracking Data Analysis Report produced by Focal Research for the Nova Scotia Gaming Corporation (Feb, 2007).

These paradigms work because they take into account combinations of extreme behavioural patterns that a large proportion of problem and high-risk gamblers exhibit. Using the data stored by player tracking systems means that these behaviours can be measured with far greater accuracy than in the past by generating literally hundreds of variables measuring different aspects of player behaviour that can then be included in the paradigm. The success of the programs is also due to the customisation process. Each model needs to be developed for each casino's or gaming operator's specific customer base as there will be different behaviour profiles depending on the location, market

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[15] Incentives for regular players to use the club or loyalty card include rewards, free games, and reward points for free food, beverages, parking, rooms and for high rollers or VIPs, jet flights, weekends away, golf and other freebies provided by the casino.

[16] Refer to the iCare Responsible Gaming Program at http://www.icaregaming.com/.

[17] Refer to Techlink Entertainment Responsible Gaming Device (RGD) program at http://www.techlinkentertainment.com/html/rgd.php.

characteristics and the nature of the casino/venue. Once a paradigm is developed it is subject to validation with an independent test or hold-out sample to ensure it works before it is incorporated into a duty of care system. The system is virtually tested on a daily basis in interaction with staff and the gamblers identified by the system. To-date the paradigms have withstood testing over time and the programs have performed as designed.

Not all high-risk or problem gamblers can be identified in this manner. Many simply do not exhibit behaviours that distinguish them from other gamblers. In these cases other means can be implemented to identify high-risk gamblers who are not picked up by the systems (such as the visible cues exhibited on the floor discussed above). As experience is gained with these systematic methods of identification it will be possible to tease out more combinations of cues that are flags for gambling risk, thus expanding the reach and accuracy of problem gambling identification.

Interestingly, the primary impetus behind the adoption of programs like iCare and Techlink's RGD are related to concerns surrounding insurance and potential liability risk for problem gambling. SGC has addressed this risk by adopting a proactive system. Casinos and gambling providers who have a loyalty program or CMS tracking gambling behaviours will benefit greatly in their ability to meet their duty of care (and be socially responsible) by implementing these paradigms in the future. It may also eventuate that failure to use available player tracking technology to proactively intervene to prevent harms may be tested in court and could conceivably become part of expected host responsibility and in cases of breach, claims in negligence.

5. Research on harm/protection dimensions of EGM machines

In some jurisdictions such as Australia, New Zealand and some provinces in Canada, gaming has reached the plateau characteristic of mature markets that are bounded by combinations of market saturation, regulatory limits to growth and government recognition of public concerns about harms. Where there are limits to the number of machines in a venue, or in a region, state or province; machine innovations target better return-on-investment (ROI) through quicker or more efficient throughput. From a gaming industry perspective, the capacity for growth lies in designing new machines with faster through-put or spend, devising new products, extending business to new markets in existing or new jurisdictions, and gaining access to new platforms (for example internet gambling and fixed odds betting terminals (FOBTs) in UK bookmaker's shops).

Over time, modifications to machines and in-venue facilities have targeted increased lines of play, faster spin rates, and note acceptors on individual machines; and ATMs in venues giving access to cash and floor practices such as serving refreshments at machines. Such changes have ramped up the potential spend/loss rate from machines (estimated at over $12,000/h on an Australian 1 or 2 cent stake EGM). Concerns are that changes to gaming products interact with players, shaping behaviour that may produce or increase potential harm, especially for regular frequent gamblers (e.g. playing weekly or more) (Australian Institute for Primary Care, 2006; Livingston & Wooley, 2007).

However, as established by the most recent study completed by Schellinck and Schrans (2007) in Nova Scotia, gaming technology, features and design not only have the potential to identify high-risk gamblers as a component of customer care but also can offer options to gamblers in managing and controlling their interaction with the machines. The Nova Scotia Gaming Corporation (NSGC) undertook a 6-month trial in Nova Scotia to test the impact of a Responsible Gaming system designed by Techlink Entertainment. The responsible gambling (RG) system was attached to Video Lottery Terminals (VLTs) that allowed 1825 players active during the trial period to track expenditures and amounts won or lost over the last week, month or year, and for the current session, set spending limits for certain time periods (i.e., until closing time, day week, month or year), and exclude themselves for specified time periods, including a 48 h "cool-down" period.[18]

All gamblers had to use a player card to activate the VLTs and the RG system which allowed the system to accumulate detailed statistics such as cash in, cash out, wins and losses, length of time active on each machine and use of the RG system features. Using a sample of 140 gamblers who had been administered the CPGI (Ferris & Wynne, 2001), Schellinck and Schrans used these machine data to develop a predictive model classifying the gamblers as high-risk (5+ on the CPGI scale) and low-risk gamblers. The model correctly classified 76.4% of gamblers, with 81% of those identified as high-risk gamblers classified as Moderate Risk or Problem Gambler and 94% of Problem Gamblers

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[18] Refer to NSGC http://www.nsgc.ca/reDevice.php for project details and access to the Final Report (http://www.nsgc.ca/pdf/Focal%20Research%20Report%20_2_.pdf).

correctly assigned to the high-risk category. The model was used to classify the remaining 1685 gamblers into high or low-risk categories and subsequent analysis provided valuable insights into the effects of adopting use of the RG features by high-risk gambles who were found to be different from the experiences of those gamblers identified as being at lower risk.

Use of the system features was associated with improved game outcomes including reduced losses and increased play time. Gamblers using the RG system appeared to derive greater play value, experiencing more winning sessions and improved cash-back. For low-risk gamblers feature use more often resulted in controlled play, with players maintaining consistent per session play levels whereas those who did not use the features tended to increase both the amount of time and money spent over the course of the trial. High-risk gamblers tended to use the features differently but there were no negative impacts associated with use of the features for gamblers in either risk group (Schellinck & Schrans, 2007, pp. 99–102).

A number of recommendations emerged from this report including provincial roll-out of the system on all gambling machines, on-going monitoring of feature impact by risk for gambling problems and the implementation of a universal, involuntary ''air-bag'' safety component as well as the voluntary ''seat-belt'' type features that gamblers could chose to use (Schellinck & Schrans, 2007, pp. 101–104). These would utilise models proven to be effective in identifying high-risk or problem gambling behaviour that would be triggered to alert gamblers to their level of risk for gambling problems or changes in their risk profile (Schellinck & Schrans, 2007, p. 103).

6. Globalisation and gambling harms –the international evidence

The research evidence cited above has implications internationally. It is not as if different jurisdictions have developed ideosyncratic products. Global suppliers of common-platform gaming products (VLTs, EGMs and slots) sell to multiple sites across the world. Transnational gaming corporations are expanding their casino networks and a diverse range of gambling products are percolating into different countries, drawing on a global gaming supply chain. State, regional or national jurisdictions tweak gaming product specifications according to regulatory standards and guidelines including spin rates, machine features, gambling software features, return to player ratio and so on. But essentially, the cross-jurisdictional similarities outweigh the differences in gaming products.

This is a globalised industry. What happens in one market is of crucial interest internationally – and the gaming industry and governments are watching developments in research that impinges on CSR, liability and risk management. It comes as no surprise that with the emergence of this globalised industry, international networks of those interested in its impact: researchers, regulators, lawyers, governments, treatment experts, the gaming industry and public policy commentators, are involved in defining, measuring and theorising the social, economic and broader cultural impacts of these new markets. CSR expectations are to some extent driven by community reactions to the perceived harms and the range of individual, economic and societal impacts, not all positive, associated with gaming. As the UK Responsibility in Gambling Trust (RiGT) independent Trustee David Grayson observes:

> Gambling is one of those sectors where responsibility for the misuse of its products and services, is critical. Alcohol and confectionary are in a similar position (Grayson, 2006).

Gaming industry CSR and what it should comprise and why, is only just emerging as a new area of focus for the industry[19] and for governments; and some forward-thinking jurisdictions have proactively embraced this evolving CSR philosophy and practice. (Recent examples include the player protection strategies by government-run Holland Casinos, new social responsibility codes in Britain and in Canada – Nova Scotia and Saskatchewan.) Governments are keeping a keen eye on progressive public health approaches in New Zealand and the host responsibility focus of new British legislation (in force from June 2007); which is yet to indicate the strength of its response.

In the Ontario debate, the core of Cameron's critique is that problem gamblers are not easily identifiable and hence a duty of care/social responsibility with regard to them should not be imposed on the host/venue operators.

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[19] The recent Global Gaming Expo G2E in Las Vegas in November 14–18, 2007 tagged CSR as a new track.

This argument is at odds with those more progressive jurisdictions where legislation imposes responsibilities on providers. Switzerland, as part of their licensing, has required casinos to actively identify and prevent problem gambling since 2000.[20] In the Netherlands, Holland Casino, the sole national government casino operator in the Netherlands, has implemented a Visitor Registration System, an Incident Registration System (with prompt detection of possible problem gamblers based on frequency of visits and on the floor observation) and a CCTV system of up to 250 cameras per casino and a proactive on-floor intervention system (Holland, 2007).

In New Zealand, statutory requirements under the Gambling Act 2003 (section 3) which took effect from 1 July 2004, require gambling providers to develop a policy for identifying problem gamblers and to 'take all reasonable steps' to implement the policy to identify actual or potential problem gamblers, provide information and advice, issue exclusion orders; even to those who do not identify themselves as problem gamblers but about whom staff continue to have concerns and refuse to permit excluded persons into gambling areas during the period of the exclusion[21] (Gambling Commission New Zealand, 2007).

In Britain, the 2005 Gambling Act and Code of Practice operative from September 1, 2007 includes an emphasis on host responsibility. Section 2.3 of the Licence Codes and Codes of Practice requires licensees (hosts) 'to make information readily available to their customers on how to gamble responsibly and how to access information about and help in respect of problem gambling' (Gambling Commission, 2007, p. 34). Section 2.1 requires Licensees to 'put into effect policies and procedures intended to promote socially responsible gambling', which must include specific policies and procedures in relation to 'how they will contribute to research into prevention and treatment of problem gambling', 'to public education on the risks of gambling and how to gamble safely' and 'how they will contribute to the identification and treatment of problem gamblers' (Gambling Commission, 2007, p. 27).

7. Conclusion

It is acknowledged that the harms associated with gambling impact wider than the individual and are manifested in impacts on families, workplaces, communities and in terms of broader issues related to wide-ranging economic, social and cultural impact; not all positive. Ten to 15 years after EGMs, VLTs Pokies, or Slots products were introduced for the first time into clubs, hotels and pubs in communities and into casinos, in a range of sites globally, researchers are now coming up with persuasive data which is re-casting how we think about problem gambling, how it is manifested in patterns of play in venues on machines, and how hosts and regulators are facing new accountabilities. The Ontario debate indicates the need for values of consumer protection and duty of care to underpin more interventionist approaches by government.

In the gambling literature little has been said about supply-side issues of product safety, host responsibility and player protections, as part of industry or provider corporate social responsibility (CSR); and governments have been slow to embrace these in terms of legislation or regulation; since their vested interests render them limited by conflict of interest. Despite a range of harm minimisation and problem gambler treatment policies and programs, in most jurisdictions the spend (measured as net gaming losses) continues to go up. This has prompted policy makers to ask what would or could, make a difference – short of removal of gaming machines; which as recently observed in Norway, resulted in a dramatic decrease in player losses and a related decrease in problem gambling (Gyllstrom & Engeb, 2008).

Compared to 10–15 years ago, general expectations of CSR have changed markedly, developing from philanthropic-focused volunteerism or transactive giving to the realisation that social responsibility, sustainability,

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[20] On April 1, 2000, the new Federal Law on Games of Chance and Casinos (Bundesgesetz über Glücksspiele und Spielbanken, 1998) came into effect in Switzerland to improve the regulation and management of casino operations across the country. The new law required casinos to actively participate in the identification and prevention of problem gambling (Article 27), as well as contribute to support services designed to for identification and assistance to those involved in excessive gambling (Article 28) (see <http://www.admin.ch/> for information on Swiss legislation).

[21] The New Zealand Gambling Act 2003 (sections 308–312) imposes specific requirements on gambling providers in relation to identifying problem gamblers under Exclusion Standard Operating Procedures. Three means of identifying actual or potential problem gamblers include: casino staff's use of the 'casino signs' for problem gambling', third party notifications and self identification (Department of Internal Affairs, 2007).

consumer protection and product safety are central to investor confidence, constitute core business, and require a 'whole of business approach' driven from the top, by strong corporate leadership.

> CSR though is about minimising negative environmental and social impacts, and maximising the positive impacts. Too often, businesses treat it simply as a bolt-on to business operations. It should be built-in to business purpose and strategy (Grayson, 2006).

At a general level, the business and the ethical case for CSR are now well established. Investors, social partners and consumers are now looking for demonstrated sustainability, benchmarking against international standards and a commitment to social sustainability as part of the licence to operate. They are also looking for demonstrated performance on emerging international sustainability indexes and standards such as the Global Compact and Global Reporting Initiative. Via ethical investing and sustainability indexes, ethical issues are gaining more traction. And governments are increasingly expected to compel industries to comply.

The Ontario host responsibility and gambling debate raises particular issues for CSR, the role of the state and public policy on gambling, given the 'government ownership/private operator model' that makes Canada such an interesting case study on the nexus between government and industry in terms of public policy on gambling. This renders the Ontario government 'responsible for any actions or omissions of the agent' and defines the role of the OLG/Ontario as both 'principal and agent' under the Criminal Code (Sasso & Kalajdzic, 2007, p. 7). This perhaps explains why Canadian provinces such as Nova Scotia are leading the way on universal adoption of player tracking and Saskatchewan Gaming Corporation on the use of casino CMS systems for venue player protection interventions. Unlike Australia and New Zealand, where gaming products are licensed to industry providers, in Canada, industry is more directly aligned with government; with attendant public accountabilities.

We argue these debates on duty of care have reached a tipping point in relation to electronic gaming machines (EGMs). The spectre of legal liability may put new pressure on providers (and on governments as legitimators of gambling products). It may compel more coercive player-protection interventions, as gaming is bracketed with other social harms such as tobacco and alcohol, in terms of new expectations on both industry and governments to adopt more proactive consumer protection strategies; or face the threat of legal action.

Acknowledgements

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