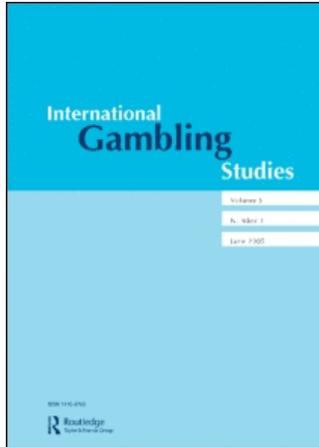


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Risky Business: A Few Provocations on the Regulation of Electronic Gaming Machines

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ABSTRACT *Electronic gambling machines (EGMs) proliferate in Australian club and hotel venues, generating revenues of billions of dollars annually and accounting for the majority of gambling expenditure. These revenues arguably rely on unsafe consumption practices, generating considerable harm. Clear evidence is available describing unsafe levels of EGM consumption by regular EGM consumers in hotels and clubs, and indicating modifications to EGM technology and systems to minimize harm. However, a comfortable orthodoxy, the discourse of 'business as usual', perpetuates current arrangements, sustaining in particular a model of the 'problem' gambler as an individualized flawed consumer. The article argues that the marketing and distribution of EGMs is neither accidental nor something for which the individual is responsible, and neither is the safeguarding of oneself from the harm produced by goods licensed by government. Pursuit of a goal of safe consumption for all EGM gamblers requires disruption of the discourse of business as usual.*

Introduction

Gamblers using Australia's 188,000 electronic gaming machines (EGMs) in hotels and clubs (Australian Institute for Primary Care (AIPC), 2006, p. 32) spent AU\$9.55 billion in 2003–04, 59% of net gambling expenditure (Office of Economic and Statistical Research, 2005, Summary Table D). EGM venues proliferate in all Australian jurisdictions except Western Australia. Only 5.7% of EGMs are located in Casinos, in contrast with 58.9% in clubs and 35.4% in hotels (AIPC, 2006, p. 32). Accessibility to EGMs is related to rates of EGM participation and expenditure (South Australian Centre for Economic Studies, 2005, pp. 39–41), and to rates of problem gambling (Błaszczynski *et al.*, 2001, p. 33). EGM gambling is favoured by around 85% of problem gamblers (Centre for Gambling Research (CGR), 2004, p. 97).

This paper argues that appropriate balance has not been found between liberalization and regulation in EGM gambling in hotels and clubs. In particular, current configurations of EGM technology and the EGM commercial system produce unacceptable levels of harm. This imbalance cannot be corrected by post harm-production interventions, yet feasible supply-side harm reduction measures are ignored. Instead, the responsibility and costs of EGM-related harm are sheeted home to individual gamblers.

We contend that a 'comfortable orthodoxy' supports the maintenance of current EGM arrangements in Australia, masking a level of harm production that would not be acceptable in other consumer markets. We discuss four elements of the 'comfortable orthodoxy' that support the current regulatory approach:

- (1) Only a small proportion of gamblers suffer harmful consequences from EGM gambling;
- (2) Current EGM arrangements are safe: gamblers are the problem;
- (3) Current EGM arrangements should not be altered as this will reduce the enjoyment of those who are not troubled;
- (4) The worlds of EGM gamblers are well understood, and their voices are heard in the framing of policy and regulation.

The comfortable orthodoxy has two main themes. First, it takes gambling, an acknowledged 'risky' diversion, as substantially exempt from usual standards of consumer safety. Second, it represents individuals as freely choosing, well informed consumers of this risk. These themes rest on a neo-liberal interpretation of the concept of consumer sovereignty, the idea that the consumer wants ultimately determine what goods and services are produced in society. A strong version of consumer sovereignty erases the influence of supply-side forces in constituting the market, implying that EGM gambling consumption simply reflects consumer wants with each individual consumer subsequently becoming 'the best or proper judge of her own well-being' (Sugden, 2003, p. 3).

The interaction of regulation, consumers, products and technologies that shape a particular market are always contingent and negotiated, and are subject to adjustment of any or all of the 'four Ps': 'the four major controllable variables of the marketing mix—product, price, promotion and place' (Monash University, 2007). No 'natural' set of arrangements frames the EGM (or any other) industry. However, the comfortable orthodoxy constitutes as 'natural' a set of arrangements, which, while not denying problem gambling, exclude upstream issues of harm causation from discourse while privileging downstream treatment-based responses. We call this comfortable orthodoxy the discourse of 'business as usual'.

The Discourse of 'Business as Usual'

Discourses are not just regimes of signs and language. Arrangements of technologies and practices operate to materially shape reality, as Barry (2001) argues. Discourses are 'productive' of certain types of social categories and arrangements, constructing and ordering their object through representation and practice. This process rests as much on what is excluded from representation as what is included, and entrenching a certain way of speaking or writing about an object organizes knowledge and understanding of that object, and shapes its form (Foucault, 1979, 1980). A 'discursive structure is not a merely "cognitive" or "contemplative" entity; it is articulatory practice which constitutes and organizes social relations' (Laclau and Mouffe, 1985, p. 96).

The discourse of business as usual is partly constituted by over-extending the sense of consumer sovereignty. Governments frequently limit consumer sovereignty to protect social or individual well-being in the face of risky products, or to overcome market failure and supplier power. All of these limitations apply to gambling in very obvious ways, yet the discourse of business

as usual presents EGM gambling as simply a market response to consumer demand (see ACIL Consulting Pty Ltd, 1999).

Australian EGM systems were devised by a coalition of government and corporate actors seeking to produce a new consumer segment, colonizing social space in pursuit of private profit and public revenue. For state governments, this was a revenue raising response to fiscal retrenchment by federal government (Smith, 1998). In such a supply driven development there is little space for the exercise of 'consumer sovereignty', but nonetheless the discourse of business as usual transposes responsibility for EGM related harm into a matter of individual choice, relying on such 'commonsense' phrases as 'no-one is forced to use EGMs' to establish and maintain orthodoxy.

Such a taken-for-granted, commonsense view is frequently disrupted and challenged by dramatic reports of EGM-related loss, crime and personal disaster. Pressure to transform current arrangements could, in principle, emerge at this experiential level. However, harm (named and calibrated as problem/pathological gambling) has always been internalized within the discourse of business as usual, constituting the suffering of gambling casualties as 'normal' (Collins, 1996).

A key discursive term, acknowledging yet containing the disruptive effects of harm, is 'responsible gambling', referring to the establishment of a 'responsible' practice of gambling by individuals (i.e. knowing when to stop). 'Responsible gambling' is a carefully structured, if elastic and goalless term, discursively transferring responsibility for industrialized (and normalized) harm production to end users. It would, perhaps, be helpful for harm minimization purposes were it to denote pursuit of the absence of harm by all means. Yet the actually existing category of 'responsible gambling' invariably ignores the EGM system's harm producing capacity.

Examples of this limitation abound, including the official views of the government of Victoria (Australia), who seek to foster 'responsible gambling' by 'encouraging gamblers to play safely without harming themselves or others [and] promoting good customer service practices by gambling providers' (Victoria, Department of Justice, 2007).

The Queensland (Australia) Responsible Gambling Code of Practice asserts that 'responsible gambling' will occur 'in a regulated environment where the potential for harm associated with gambling is minimized and people make informed decisions about their participation in gambling' (Queensland Office of Gambling Regulation, 2005, p. 4).

Tabcorp (a publicly listed company holding one of the duopoly club and hotel EGM operator's licences for Victoria) maintains that 'industry focus must be on identifying and rehabilitating' that 'small proportion of the population' who develop gambling problems (Tabcorp, 2000, p. 4)

Tattersall's (a publicly listed company and the other Victorian operator) defines 'responsible gaming' as 'the exercise of each person's rational and sensible choice based on his or her individual circumstances' (Tattersall's, 2000, p. 11).

Tabcorp sees the centrepiece of its 'responsible gambling' strategy as provision of information, including information about 'how to source counselling services' (Tabcorp, 2006, p. 61). Tattersall's argues that 'responsible gambling' should promote informed choice, encourage a responsible culture, and provide a safety net for those with problems (Tattersall's, 2006, p. 10).

Constant repetition of such assertions, including presentation of value judgements as 'facts', is fundamental to domination of the conceptual field of

EGM gambling. It is difficult to engage with any field other than through the terms and arguments that define what can be said about it (Foucault, 1980). Researchers have become deeply involved in developing tools to calibrate essentially governmental categories of harm via such instruments as the South Oaks Gambling Screen (SOGS) (Lesieur and Blume, 1987) and the Canadian Problem Gambling Index (CPGI) (Ferris and Wynne, 2001). Although such 'governmental' production has value, it discursively constructs problem gambling as an innate human quality, ignoring the behaviour-shaping capacities of sophisticated technologies and practices. This foundational premise established, researchers also reinforce the dominant discourse: 'the majority of the adult population gamble responsibly. Only a small minority of the population develops gambling-related harm' (Blaszczynski *et al.*, 2004, p. 309). Responsibility and harm are constructed as discursively coupled opposites.

This discursive formation produces a hypothetical 'deficit', the difference between a pathologized 'problem gambler' and an ideal-type 'recreational' gambler. The 'deficit' forms the (diversionary) target of practices of government, strategically producing a discursive object for rehabilitation. The option of making the gambling product safe is not available. What is needed is some fine-tuning of the practices of an errant coterie of imprudent consumers.

In the following sections we examine four orthodoxies that sustain the discourse of business as usual. Our aim is to provoke renewed debate about fundamental aspects of current EGM gambling arrangements in order to disrupt the maintenance of this discourse.

Orthodoxy One: Only a Small Proportion of Gamblers Suffer Harmful Consequences from EGM Gambling

The idea that 'most' gamblers 'gamble responsibly' is perhaps the most pernicious of all the orthodoxies of the discourse of business as usual. A basic engagement with available evidence illustrates the misleading nature of this claim.

According to a 2003 survey, about 1,259,000 people, 33.5% of Victorian adults, used EGMs at least once in that year, with 1.12% of all adults estimated to be problem gamblers and another 1% borderline or at-risk of gambling problems (CGR, 2004, pp. 11–12; Australian Bureau of Statistics (ABS), 2006, Table 2). In Victoria, 85.1% of problem gamblers mostly gamble using EGMs (CGR, 2004, p. 97). Thus, about 2.9% of those who use EGMs at all will be problem gamblers, and another 2.5% will be 'at-risk'—about 5.4% of all EGM users.

As gambling frequency increases, so does the incidence of harm. According to a recent Ontario study 'gambling related problems were related to an individual's level of consumption' (Chipman *et al.*, 2006, p. 24). In 2003, about 8.5% of Victorian EGM users (107,000 people) were regular (weekly) users (CGR, 2004, p. 53), of whom 27.8% were found to be problem gamblers—about twice the all-gambling average (CGR, 2004, p. 93). Thus, about 36,000 of Victoria's 42,000 problem gamblers mainly used EGMs, and most (83%) at least weekly. A further 32,000 EGM users were at-risk (CGR, 2004, pp. 97, 53, 93). Available evidence indicates that more than half of regular EGM users were current problem or at-risk gamblers.

Caraniche Pty Ltd (Caraniche) (2005), report venue-based research where more than a quarter (27%) of those surveyed were problem gamblers (measured by the CPGI), while another quarter (25.4%) were moderate risk (the next at-risk group)

(Caraniche, 2005, Table 5.10). In New South Wales, Australia (NSW), Sharpe *et al.* (2005) report screening patrons in club and hotel venues, via which 20% of study participants were classified as problem gamblers (scoring SOGS 5+, a relatively high cut-off) (Sharpe *et al.*, 2005, p. 508). Further, Sharpe *et al.* (2005) advise that 'anecdotally, those patrons who were present in venues every night and gambled heavily were noted to be reluctant to volunteer to take part in the study' (Sharpe *et al.*, 2005, p. 514). Given the method used to catalogue gambler status, we believe these data corroborate the Caraniche (2005) estimates.

The frequency bias effect (in which heavy users will be over-represented in venue based studies) explains how problem and at-risk gamblers disproportionately contribute to EGM expenditure (Productivity Commission (PC), 1999, Appendix P, p. P16). Caraniche (2005) report that problem gamblers averaged sessional EGM expenditure nearly three times that of non-problem gamblers (AU\$103 vs about AU\$36) and more than twice as many gambling sessions per week (4.3 vs 1.98), amounting to expenditure of about AU\$443 per week, six times that of non-problem gamblers. At-risk gamblers averaged expenditure of about AU\$256 per week (Caraniche, 2005, Table 5.10). For comparative purposes, we note that the PC estimated in 1999 that problem gamblers averaged 18.9 times the expenditure of recreational gamblers (PC, 1999, p. 5.21), the ABS warning that self-assessment of gambling expenditure is likely to be severely underestimated (ABS, 1998).

Table 1 displays Caraniche (2005) data on EGM gambler status and expenditure (Caraniche, 2005, Table 5.10). We estimate about 37,400 problem EGM gamblers and another 33,400 at-risk EGM gamblers in Victoria at June 2006 (ABS, 2006, Table 2; CGR, 2004, p. 12). Applying these estimates to average weekly expenditures in Table 1, problem gamblers contributed about AU\$876 million (or 35.5%) of the AU\$2.47 billion Victorian EGM consumption in 2005–06 (Victorian Commission for Gambling Regulation, 2006). Another AU\$446 million (or 18%) came from at-risk gamblers.

Thus, on our estimates, problem or at-risk gamblers spent about 53% (AU\$1.3 billion) of the money expended on hotel and club EGMs in 2005–06 in Victoria. The PC's 1999 estimate was that severe and moderate problem gamblers contributed about 33.7% and 8.7%, respectively, of total EGM expenditure—a total of 42.4% (PC, 1999, Appendix P, p. P16). A 2006 Northern Territory (Australia) prevalence survey produced an estimate of 43% (School for Social and Policy Research, 2006, p. 46). Williams and Wood (2004) estimated that 'about 35% of Ontario gaming revenue is derived from moderate and severe problem gamblers'

Table 1. Proportion of aggregate group EGM consumption attributable to each problem gambler status group

Category	No.	%	Visits per week	Spend per visit (AU\$)	Weekly spend (AU\$)	Total weekly spend from this group (AU\$)	% of aggregate weekly spend
Non-problem	130	31.1	1.98	35.85	71	9,228	9.7
Low risk	69	16.5	2.13	56.52	120	8,307	8.7
Moderate risk	106	25.4	3.35	76.32	256	27,101	28.4
Problem	113	27.0	4.34	103.41	449	50,714	53.2
Total or average	418	100.0	2.95	68.03	224	95,350	100.0

Source: Caraniche (2005, Table 5.10); calculations by the authors.

and suggest that 'up to 60% of revenue from gaming machines in Ontario may derive from problem gamblers' (Williams and Wood, 2004, p. 42; see also PC, 1999, p. 7.46; Centre for International Economics, 2001).

At present, the EGM industry's most problematic consumers (from both public relations and public health perspectives) are their best customers. Serious attempts to reduce harm should estimate the extent of revenue decline if those attempts succeed, since reducing problem and at-risk gambling must reduce revenue, *pari passu*. Such budgetary modelling would be a sign of policy intent, as is its current absence. For example, the Victorian Government's 2006 policy paper does not budget for diminished revenue or reduced growth resulting from proposed initiatives (Victoria Department of Justice, 2006, p. 42). Given all of this, the orthodoxy that only a small proportion of gamblers suffer harm is, at best, simplistic and misleading.

Orthodoxy Two: Current EGM Arrangements are Safe, Gamblers are the Problem

A second orthodoxy within the discourse of business as usual is that EGM gambling is fundamentally safe. The process of testing and approval of EGMs implies scrutiny of game safety, but this is not addressed in current regulatory arrangements, and systems to monitor and assess risk and harm are not in place.

We identify three 'pillars' of EGM regulation in Australia. These are: protection of government revenue; maintenance of game fairness and probity; and provision of 'responsible gambling'. These pillars, however, are accorded neither conceptual nor practical equivalence.

The discourse of business as usual views gambling as a risky pastime, and this constructs the first pillar: high levels of public revenue that must be efficiently collected and protected. General consumption in Australia is taxed at 10%, via the Goods and Services Tax, whereas EGM consumption is taxed in Victoria at a rate of at least 33.3%, and in hotels at 41.7%.

High tax rates are justified on two grounds (Victoria Department of Justice, 2006, p. 9). The first is a response to duopoly rents arising from licensing arrangements. The second is to compensate for the substantial externalities associated with gambling (i.e. factors not included in transactions but which have an effect on human welfare) (Pass *et al.*, 1993, p. 189).

Although unregulated gambling will always exist to some extent, the legalization of gambling has seen it become (mostly) fully governable. Centralized monitoring and control systems exemplify EGM gambling's governability (Miller and Rose, 1990), and assure collection of government revenues, as well as helping to legitimate gambling liberalization via the perceived independence of technology from corruption.

The second pillar, game 'fairness' and probity, is also relatively well enacted. Current arrangements divide and often outsource processes of testing, approval and licensing, meaning that successful corruption of the system would involve active collusion. It is unlikely that EGM games systematically defraud users within the specifications prescribed in the Australia and New Zealand National Standard Working Party (National Standard) (2004). However criminal cyber-interference in the operation and outcomes of video lottery terminals has been documented in Canada (see McMullan and Perrier, 2003, 2007), as has 'insider' defrauding of the Ontario lottery (see Marin, 2007). In Australia, controversy has

arisen over money laundering using EGMs whose banknote acceptors (BNAs) accept up to AU\$10,000 (see for example Benson and McIlveen, 2006). The examples suggest vigilance with regard to probity has not declined in importance, although probity issues are generally seriously addressed.

The third pillar is the provision of 'responsible gambling', that key element of the discourse of business as usual via which imprudent consumers form the locus of harm. Yet, in NSW a review by the Independent Pricing and Regulatory Tribunal (IPART) recognized that industry should also 'contribute to a culture of responsibility by providing gambling services and *products that are as safe as feasibly possible*, in venues that encourage responsible gambling' (IPART, 2004, p. 26, emphasis added). Further, the Victorian Gambling Regulation Act (Act No. 114/2003) explicitly sets out the minimization of harm as one of its objects (Section 1.1 (2)(a)(i)). Minimizing harm by rendering products 'as safe as feasibly possible' via systematic and/or technical means is not articulated within the discourse of business as usual. Unlike the other pillars, 'responsible gambling' does not draw on all feasible approaches.

Research regarding the role of technology in shaping the interactive relationship between gamblers and EGMs commonly refers to their 'structural characteristics' (Griffiths, 1993, 1999). For Griffiths, '*structural characteristics* are those which are responsible for reinforcement, may satisfy gamblers' needs and may actually facilitate excessive gambling' (Griffiths, 1999, pp. 267–8, emphasis in original). Structural characteristics (the product) are distinguished from the 'situational characteristics' (i.e. the number and location of venues, and their marketing—place and promotion) that entice people to gamble (Griffiths, 1999, p. 269).

Evidence suggests that EGM related harm could be reduced through modification of EGM primary structural characteristics, notably random ratio (RR) schedules governing the frequency and magnitude of reinforcements, which rely on behaviour-modification principles drawn from Skinner's theory of operant conditioning (Skinner, 1953; Ferster and Skinner, 1957). RR schedules have been shown to be effective in conditioning responses that are difficult to extinguish, and which persist through long periods without reinforcement (Skinner, 1953; Ferster and Skinner, 1957).

Delfabbro *et al.* (2005) found that EGM player behaviour and preferences were 'consistently related to factors influencing the rate and frequency of reinforcement, although frequency was generally found to be more important than magnitude' (Delfabbro *et al.*, 2005, p. 20). Gamblers preferred a steady stream of immediate reinforcements (Delfabbro *et al.*, 2005, p. 21), also evidenced by a preference for 'a faster rather than a slower play speed' (Delfabbro *et al.*, 2005, p. 20). Other studies of the effect of RR schedules indicate that EGM gamblers are more likely to increase their rate of play following small wins and slow down after relatively large wins (Dickerson *et al.*, 1992; Delfabbro and Winefield, 1999). At the same time, conditioning to the arousal caused by the excitement of gambling causes gamblers to desire this sensation when they are not gambling (see Anderson and Brown, 1984). Secondary aspects of EGMs (lights, sounds) may also condition gamblers (Griffiths, 1999; Loba *et al.*, 2001). Griffiths (1993) observes of British gaming machines that, given their 'conditioning effects, rapid event frequency, short pay out intervals and psychological rewards, it is not hard to see how fruit machine gambling might become a repetitive habit' (Griffiths, 1993, p. 117).

The near-miss effect, related to the reel–symbol ratio of EGM devices (Griffiths, 1993, 1999), has also been found to be associated with the development of excessive gambling in experimental groups (Côté *et al.*, 2003). Skinner (1953) noted that ‘by paying off very generously ... for “three bars”, the device eventually makes two bars plus any other figure strongly reinforcing. “Almost hitting the jackpot” increases the probability that the individual will play the machine’ (Skinner, 1953, p. 397). Other research has found that the introduction of stopping devices (Ladouceur and Sévigny, 2005) can increase the risk of cognitive errors and excessive gambling. Studies that have manipulated ‘spin speed’ or length of the game cycle (Blaszczynski *et al.*, 2005; Ladouceur and Sévigny, 2006) have also shown that faster speeds are associated with an increased risk of excessive gambling. Speed of play has been found to predict problem gambler status (Blaszczynski *et al.*, 2001, p. 64).

Sharpe *et al.* (2005) report that ‘lowering the bet size would reduce the level of harm associated with gambling’ (Sharpe *et al.*, 2005, p. 518). Comparing play on modified machines (AU\$1.00 maximum bet) with machines with a AU\$10 maximum bet, it was found that the modified EGMs ‘reduced time spent gambling, number of bets and losses’. More than three times as many problem gamblers (7.5%) as recreational gamblers (2.3%) placed maximum bets in excess of AU\$1.00 and the preference for relatively large bets was a predictor of gambling problems and severity (Sharpe *et al.*, 2005, p. 518; Blaszczynski *et al.*, 2001, p. 57). The number of ‘lines’ available for gambling, in interaction with bet size, was found to be a factor in the production of harm: ‘the number of credits per line is predictive of problematic levels of gambling’ (Sharpe *et al.*, 2005, p. 516). This key study thus produced reliable evidence that reducing the maximum bet size (Blaszczynski *et al.*, 2001, p. 66), including the number of credits available to bet per line, would reduce harm.

Haw (2000) analysed data from 700 EGMs in NSW clubs, concluding that the availability of BNAs and multiple line betting significantly increasing gambling turnover (see also Delfabbro and LeCouteur, 2003, p. 86; Dickerson and Baron, 2000; Blaszczynski *et al.*, 2001, p. 37). Blaszczynski *et al.* (2001) found that modifying BNAs to accept a maximum AU\$20 banknote (the sole modification) cut player losses by 36.5% (Blaszczynski *et al.*, 2001, p. 74) without affecting player enjoyment (Blaszczynski *et al.*, 2001, p. 48) or inconveniencing recreational gamblers (Blaszczynski *et al.*, 2001, p. 85). The study found that 22% of problem gamblers used high-denomination BNAs compared to 10% of non-problem gamblers (Blaszczynski *et al.*, 2001, p. 57), suggesting the potential for harm minimization via BNA modifications. The PC (1999) found that almost three times as many problem gamblers (62%) used BNAs often or always in the course of a gambling session, compared to non-problem gamblers (23%) (PC, 1999, p. 16.77). The PC argued on this basis that BNAs should not be included in the design of EGMs ‘until evidence that they do *not* present risks is substantiated’ (PC, 1999, p. 16.77, emphasis in original). IPART (2004) recommended that BNA modification should be ‘prioritized for evaluation’ (IPART, 2004, pp. 98–104).

In 2001, BNAs in Queensland were adjusted to accept an initial limit of one AU\$20 banknote, with no further notes permitted until the balance dropped below AU\$20, permitting a maximum inserted credit balance of AU\$39.99. Revenue declined by approximately 6%, although seasonally adjusted growth of 1% was anticipated. The initial limit was amended within a month to allow insertion of up to five notes, after which no observable change to revenue could be

attributed to BNAs. Even this latter adjustment was reported to reduce gambling expenditure, session lengths and frequencies, with increased effects among problem gamblers (Brodie *et al.*, 2003). Thus, evidence suggests harm reducing effects from BNA modifications, with no evidence of reduced enjoyment.

Current EGM parameters are a product of particular histories and can be changed, as has recently occurred in both Norway¹ and Japan.² Alteration of the schedule of reinforcements provided by EGMs, including re-calibration of prize schedules and pay-tables, would certainly reconfigure the relationship between gamblers and the technology, quite feasibly reducing harm. Gamblers are not powerless to resist the enticements of EGMs, but EGM games have been scientifically developed to attract gamblers, reconfigure their agency, and maximize their expenditure. Excessive levels of harm production are in our view a concomitant of this. Current configurations of EGM technology provide an unsafe mode of rapid and expensive consumption (see Dickerson *et al.*, 1992; Griffiths, 1999; Ladouceur and Sévigny, 2005, 2006).

Existing policy instruments could be readily adapted to address harmful characteristics of EGMs. In Australia and New Zealand the National Standard (2004) prescribes technical standards for EGMs. Its aims are to ensure that the use of gaming machines is '(a) fair; (b) secure; and (c) auditable, and that gaming machines are reliable in terms of these issues' (National Standard, 2004, s. 1.3.1). The National Standard is constructed so as not to 'unreasonably limit' technology application, creativity or marketability (National Standard, 2004, ss. 1.3.2, 1.3.3).

Within a networked, 'technicized' consumption system (such as the EGM system), consumer safety standards are fundamental to calibrating the level of harm produced. The National Standard, however, does not refer to 'responsible gambling', let alone harm minimization or product safety, creating an artificial discontinuity between technical matters and their consequences.

The consequences of such discontinuity are, perhaps ironically, illustrated by the Independent Gambling Authority's, South Australia (IGA) attempts to address harm production through restraint of EGM innovation. The IGA's *Game Approval (Gaming Machines) (No. 1) Guidelines 2003* prescribe a number of structural characteristics thought to exacerbate problem gambling. The regulator must consider these guidelines in approving new games. To gain such approval, manufacturers must disingenuously argue that their new product is likely to be no more lucrative than any other, utilizing evidence to 'prove' that licensing a particular game will not exacerbate problem gambling. Existing levels of harm production form the benchmark for such evidence and are thus entrenched. The problem is that the guidelines seek to limit the impact of innovation well after the fact.

Reconfiguration of the 'responsible gambling' pillar to incorporate harm minimization goals realized via technological innovation is very feasible. In Australia, it could be achieved via amendment of the National Standards (2004). Such an approach is essential, if product and consumer safety principles are to be taken seriously and the level of harm minimized.

Orthodoxy Three: Current EGM Arrangements should Not be Altered as This will Reduce the Enjoyment of Those Who are Not Troubled

Within the discourse of business as usual, justifications for inaction on EGM harm production abound: clubs, investors and businesses would be ruined, EGM

revenues support social and sporting infrastructure and benevolence, etc. The most 'noble' and political of such arguments is that minimizing EGM produced harm would impinge on the 'rights' of recreational gamblers, who are posited as enjoying an optimized level of benefit. As Tabcorp put it, 'imposing onerous restrictions on customers' use of the product is an affront to the vast majority of Victorians and risks diminishing their enjoyment of the gaming entertainment product' (Tabcorp, 2000, p. 4).

The discursive opposition between 'problem' and 'recreational' gamblers justifies regulatory inaction, but it also involves an excursion into problematic ethical territory. Inaction, in full knowledge of the proportional losses incurred by problem gamblers, equates to maintaining harm production at current or heightened levels.

In one official view, 'responsible gambling is about minimising harm caused by problem gambling while accommodating those who gamble without harming themselves or others' (Victoria Department of Justice, 2007). The discourse of business as usual seizes on the 'rights' of one group to 'enjoy' gambling (and the always unspoken 'rights' of the non-EGM using majority to enjoy slightly lower tax rates) to oppose, and overwhelm, the rights of another group to be protected from harm.

In a society ruled by law, the rights of all citizens should be uniform. Fundamental among these is the right to be protected from harm, particularly harm deriving from government-sponsored consumption. Gamblers have never been asked whether they would trade off some proportion of gambling derived enjoyment to reduce harm. Some, perhaps, may 'enjoy' a high-risk system, just as some road users 'enjoy' speeding. However, prudent EGM consumers who gamble modestly in highly social modes, e.g. groups of retirees, would be completely unaffected by harm minimization measures, according to available evidence.

Blaszczynski *et al.* (2005) hypothesized that problem gamblers would notice modifications to spin rates, BNAs and maximum bet sizes more frequently than recreational gamblers. However, most participants in that study (75%) did not recognize a single modification (Blaszczynski *et al.*, 2005, p. 195). Results from satisfaction and enjoyment questions relating to structural modification of EGMs are also summarized in Sharpe *et al.* (2005). Whilst reducing maximum bet limits produced a positive harm minimization effect, this did not appear to reduce amenity for gamblers, aside from the small negative effect where the BNA was not coordinated with the modified maximum bet (Blaszczynski *et al.*, 2005, pp. 195–6). This study also found that problem gamblers played more quickly than non-problem gamblers; slower game cycles had a small negative impact on enjoyment, but this did not reduce intentions to continue gambling. While no significant harm minimization benefit derived from spin speed modification, there was also no differential impact on the amenity of gamblers (Blaszczynski *et al.*, 2005, pp. 191–3, 195; Sharpe *et al.*, 2005). However, limiting the rate at which gambling losses occur can reduce the potential for excessive gambling (Griffiths, 1999). A similar conclusion can be drawn in relation to BNAs. Because problem gamblers are more likely to use large denomination banknotes than other gamblers and limiting BNAs reduces expenditure, a reduction in the potential for excessive gambling is apparent, with the added benefit that if BNA parameters and maximum bet sizes are coordinated, no reduction in amenity for non-problem gamblers is expected (Blaszczynski *et al.*, 2005, pp. 195–6).

Non-problem gamblers (and taxpayers generally) are unconsenting silent partners in the discourse of business as usual, promoted as the 'real' object of policy-making, even though the EGM industry's most profitable customers are problem and at-risk gamblers. The core issue of EGM policy is the nexus between problem gamblers, private profits and public revenues, but current arrangements are legitimated by, and hide behind the figure of the 'recreational gambler' and their rights to 'enjoy' unsafe EGM characteristics.

Available evidence indicates that non-problem gamblers would suffer no loss of amenity from harm minimizing structural change. Even if evidence suggested that loss of amenity would occur, does this justify inaction? In our view, the avoidance of foreseeable harm takes priority over minimal reductions in enjoyment. A focus on EGM product safety and harm minimization requires rejection of the politically important orthodoxy that there is a necessary trade-off between non-problem gambler enjoyment and minimization of harm.

Orthodoxy Four: The Worlds of EGM Gamblers are Well Understood and Their Voices are Heard in the Framing of Regulation

Decisions made by government about what should be lawful and how it should be regulated inevitably incorporate morally situated elements. Ideally, these should be transparent in their reasoning, ethically defensible and subject to revision as reality unfolds. At present, we believe that the morally situated element informing the governance of gambling excludes the world of the gambler. Governments, trapped by reliance on gambling revenue, rely on the discourse of business as usual to again insert the discursive opposition of 'problem' and 'recreational' gamblers, this time in lieu of serious consideration of the experience of gamblers.

In recent years we have been fortunate in gaining some access to the worlds of problem EGM gamblers, underpinning our conviction that a safe configuration of EGM consumption has not been instituted. During that period (assisted by government-funded gambling counselling services) we spoke individually or in small groups with 62 recovering problem gamblers in Victoria. We discussed gamblers' experience of EGM technology, and strategies they used in their encounters with it. These people had experienced substantial EGM-related harm (including lost homes, inheritances, or redundancy payouts; divorce; imprisonment; and severe psychological and emotional distress), and possessed insight into why this occurred and how some of the risks might be averted.

Such insights have been described elsewhere (see AIPC, 2006; Livingstone, 2005). However some key findings are worth recounting to highlight the inadequacy of regulatory approaches to EGMs. The gamblers we spoke to were usually reconciled to the loss of their money. Nonetheless, many deployed a 'risk management' strategy to extend their gambling duration. For example, most would bet on the maximum number of lines, because not to do so risked missing a prize on a line not covered by a bet. Thus, the 'default' stakes configuration was mostly minimum bet with maximum lines ('mini-max'). This is consistent with Walker (2004) and industry promotional material which stresses 'player value' in multi-line betting (Aristocrat Technologies Pty Ltd, 2007).

Our participants commonly reported raising the level of the stake (scaling up) when they believed a game feature (a series of apparently 'free' spins initiated by a certain combination of symbols) was 'due'. Scaling up aims to maximize returns from a game feature payout. Following the feature, scaling down was reported,

often returning to 'mini-max'. Scaling up seems to confer a sense of agency, reinforced each time it is followed by a win or activation of the feature.

'Free spin' features (which, being incorporated into the game's theoretical return to player ratio, are certainly not 'free') provide an auxiliary reward structure, complementing small reinforcements in the EGM payout table, and configuring the 'logic' of EGM gambling. The strategy of scaling up increases average bet size, particularly where scaling down is delayed owing to lack of success.

We seek to illustrate how the problem gamblers we have spoken with do not act 'illogically' within the context of the EGM game system. Their strategies are complex, intuitive and adaptive, but are not avaricious and do not rely on 'rational' calculation of odds. The point is that EGM games are constructed to configure the agency of gamblers in particular ways, often leading them to bet increasing amounts and to extend the duration of play—central to a 'successful' gambling session, particularly among problem gamblers almost all of whom concluded sessions only when all available funds were exhausted (AIPC, 2006, p. 134) and serious losses frequently accrued.

What this research revealed is that the discourse of business as usual is about as distant from the reality of gamblers' carefully conditioned practices as it could be. Government regulates, and is a direct beneficiary of, the powerful commercial system that undertakes this conditioning. In this case at least it seems to have adopted the 'economic amoralism' (Slater, 1997) of neo-liberal market actors and institutions. Governments either lack an understanding of the actually existing nature of the EGM system and its impacts on the freedom of individuals to make safe consumption decisions; or, enthralled by revenue, they lack the will to act; or perhaps both.

Problem gamblers are not, of course, excluded from discourse. The orthodoxy routinely portrays 'success' stories to illuminate the efficacy of treatment, such as the 'case study' portrayed in the Victorian Government's 2006 policy document (Victoria, Department of Justice, 2006, p. 18). Such stories may inspire, but they invariably ignore the harm production system. The reality is that EGM games are carefully designed to configure choices in particular ways that, although logical in the game context, appear conveniently irrational and aberrant to the regulator, politician or non-gambler. As Collins (1996) argues, 'in most market systems there will be casualties and the concept of pathological gambling provides a particular way of regarding such casualties and brings with it the possibility of various actions that attempt to manage those casualties' (Collins, 1996, p. 89). Again, the discourse of business as usual puts centre stage the 'management' of casualties, not the production of harm.

Destabilizing the Orthodoxy

Consumption in our society is an activity redolent of meaning and intrinsic to the formation of social identity. Once EGMs were deployed, their consumption became woven into the lifeworld of those to whom the product was targeted. Like the contents of Pandora's Box, the meaning that EGMs create has been broadly dispersed. It is certainly not compulsory to use EGMs, but their availability is a constant element of popular social spaces. The marketing and distribution of EGMs is neither accidental nor something for which the individual is responsible,

and neither is the safeguarding of oneself from the harm produced by goods licensed by government.

The EGM system provides an excellent example of those systems and technologies controlled by the powerful for the purpose of extracting wealth from consumers, in particular via the exploitation of some of the most vulnerable of citizens. This exploitation is not a matter for any scientific or policy dispute. As long as the discourse of business as usual is able to focus attention on individuals as the authors of their own misfortune, the continuation of the EGM techno-commercial system is assured.

We believe that a consumer-safety focused sustainable future for EGM manufacturers and operators is possible, but acceptably safe consumption of EGM gambling will be realized only when governments act to reduce the production of harm.

This article had its origins in our concern at the level of harm instituted by the EGM system, a system in which the governments that administer gambling in Australia have a clear conflict of interest. It is intended to stimulate discussion of the fundamental arrangements that configure EGM gambling consumption. Like cigarettes, EGMs cause harm, even though the mechanism of harm is not physiological but economic, social and psychological. Problem gamblers and those at risk constitute a substantial proportion of those who actually use EGMs regularly, and contribute very substantial proportions of the revenue. As with cigarettes, vested interests stand to lose significantly if the orthodoxy that sustains this industrialization of social harm is destabilized. It would be a major advance if governments simply admitted that they're in it for the money, because money can be replaced. What cannot readily be replaced is the self-respect, mental health and peace of mind of those who continue to be harmed.

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Notes

1. The Governmental Action Plan to Prevent Problem Gambling can be accessed at <http://www.hjelpelinjen.no/dav/8257d7c996.pdf>. (last accessed 26 February 2007). The Norwegian Government's decision to reduce and reconfigure EGMs and to create a state monopoly has not been without controversy and a panel of international experts including Volberg, Blaszczynski, Abbott and Griffiths was assembled in October 2006 to assist the development of the policy. We also note

that the decision to institute a state monopoly on Norwegian EGMs has been challenged via European economic agreements. In the event that Norway's moves to monopolize the industry are disallowed, the Norwegian Government has undertaken to prohibit gaming machines from 2007. See <http://www.geminiresearch.com/Symposium>, http://www.geminiresearch.com/files/Volberg_&_Abbott_2005.pdf http://www.world-lotteries.org/documents/magazine/wla14/wall4_legal.pdf <http://www.dinesider.no/customer/770660/archive/files/Pending%20Cases/01-06%20application%20j%20text%20eng.pdf> (all last accessed 26 February 2007).

2. These changes have had recent impacts on the profitability of Aristocrat Technologies, who hope to 'turn around' recent losses in the Japanese market by designing EGMs that meet new regulations. See <http://www.smh.com.au/news/xchange/punters-like-iags-foray-into-uk/2006/12/06/1165081019211.html>, <http://www.theaustralian.news.com.au/story/0,20867,20865055-643,00.html>, <http://www.ntnews.news.com.au/printpage/0,5942,20865392,00.html> (all last accessed 26 February 2007).

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