Rein in The Pokies' Submission to the Joint Select Committee inquiry into Future Gaming Markets

Glenorchy oriented anti-pokies group Rein in The Pokies use social media to raise public awareness about Poker Machines. We support Mission Australia and the Community Voice on Pokies Reform's goal of harm reduction post 2023.

Rein in The Pokies recommendation to the committee would allow Poker Machines to operate as legal gaming products post 2023. It would be grudgingly accepted by industry who would continue operating Poker Machines as a lower profit part of their hospitality operations. It would relieve 15 percent of regular players of their addiction and still allow the 85 percent "enjoy a flutter' players to continue unabated.

David Walsh has an acuity for numbers. His knowledge and skill on gaming odds is unparalleled. David's illustration of the inevitable results of Poker Machine's poor odds, in combination with their speed, is clear and unassailable.

Charles Livingstone is Senior Lecturer and Senior Research Fellow at the School of Public Health and Preventive Medicine at Monash University. He has a PhD in social theory (Melb) and an MEc in economic history (UNE).

Charles has published widely in critical gambling research, and in health economics and health services research. He was a member of the Australian Government's Ministerial Expert Advisory Group on Gambling between 2010-11.

Patrick Caplice grew up in Glenorchy. He has been interested in the social and governance effects of poker machines since their 1997 introduction there. Patrick convenes` anti-Pokies group: Rein in The Pokies.

An analysis of Poker Machines in Tasmania.

as they are currently programmed and referencing the

Hodgman Liberal Government post-2023 Gaming Structural Framework

Guiding Principles

A. *1. Gambling is a lawful form of entertainment for many Tasmanians, and a wide range of gaming products should be available that are fair, and provide an acceptable average return to players.*

The Liberal party's first Guiding Principle is the correct basic premise for legalised gaming. Rein in The Pokies recommends its endorsement by the committee.

Are Poker Machines fair and do they give an acceptable average return?

Do they meet the criteria for a gaming product in Tasmania?

Poker Machine players face a 13 percent disadvantage on constant turnover. Players lose quickly and efficiently. David believes that Poker Machines provide a poor average return to players.

Poker machines, when used as intended, addict players. Charles believes there is no fairness in a gaming product that addicts 15 percent of regular users.

The nexus of poor odds and addiction means that Poker Machines are ***not*** fair and ***don't*** provide an acceptable average return for at least 15 percent of regular players. Therefore, Patrick believes Poker Machines fail the first Guiding Principle.

Poker Machines should not be a lawful gaming product in Tasmania.

(David Walsh)

POKIES ODDS

Do Pokies provide an acceptable return to player?

Patrick asked me to contribute to his submission concerning the pokies. I said yes immediately- I have seen the harm that those appalling pokies can do, and year after year I see the astonishing and dispiriting losses that accrue in Glenorchy (my community) and throughout Tasmania. But I wondered- why me? There are many who could facilitate his admirable excursion into public policy by illustrating how pokies immiserate with metronomic precision (in the ten minutes that it took me to peck this paragraph into my iPad Tasmanians lost, on average, $3700).

I assumed I was chosen because I have a mathematical background, and because I'm something of a public figure in the very community that is hardest hit by poker machines. But the maths is relatively simple. It just the problems that result that are complex.

Just now I realised why he picked me- that's what precipitated my typing. He picked me not because I made a living at gambling, but because of the ***way*** I made that living: I ground out a profit by having the odds in my favour. For many years I played casino blackjack. In those long ago days, with sufficient diligence, it was possible to get an advantage. The advantage I had was around one per cent. By that I mean that for every dollar I wagered I made, on average, one cent. For every hundred dollars I wagered I made around one dollar. And I made a great deal of money.

What is the miracle that makes it possible to get rich with one percent?

You turn over the same money each time you have a one percent advantage. You do it many, many times. You might lose a little in the short term, but in the long term, maths holds sway. Turning over your money, over and over, with that little edge, that one percent advantage on turnover, that, for me, was the road to riches. So, what would have happened if I had a one percent disadvantage? Well, if I had still gambled, I would have wiped my money out, slowly but surely. It works like this- if you keep on turning over the same money- bet with a one percent advantage: become rich. Bet with a one per cent disadvantage: become poor.

Now, consider poker machines. They are designed by experts to be fun to play (and I do mean experts- often young mathematically gifted people straight out of university turn down our job offers to go instead to work for the big poker machine manufacturers. That's where the money is). And those experts can set those machines to win whatever percentage on turnover they choose as long as they stay under the legislated maximum. In Tasmania the maximum that they can choose is 15% on turnover. Superficially, that's not much. But punters turn over their money many, many times. The machines are designed to be great fun (and actually, they are designed to be addictive, as is documented in the superbly researched book *Addiction By Design*, by Natasha Schüll,) so punters don't stop playing after they've turned over their money just once. It's possible to do that, but they would have to be extremely careful.

Say a punter, Patrick calls him Paul, turns up at one of the many attractive venues around Tasmania with $100. He bets one dollar a spin. To lose the 13% (the average that I believe most machines in Tasmania are set to win / steal?), he would have to leave after 100 spins. Let's say he is a slow punter and only spins once every six seconds (more committed gamblers can spin once every three seconds): He would have to leave after 10 minutes to turn over only $100 and lose only (only?) thirteen dollars. But he won't leave after ten minutes. He will turn over his money, at the rate of one dollar a spin, over and over again, and thus magnify his loses, often until his $100 is $0. It doesn't take long.

Remember the formula: by virtue of the 'miracle' (for the operators of the machines) that the same money will be turned over many times, a one percent advantage on turnover makes you rich. And a one percent disadvantage- well, that makes you poor.

So what does turning over money with a 13% disadvantage do? It makes Paul lose quickly and efficiently. And it makes his community, and other communities that are seeking social and economic progress, run the Red Queens Race. Each positive move the community makes is handicapped by an undertow of a capital flow out of the community caused by poker machines, and an intensification of social problems within the community.

(Charles Livingstone)
ADDICTIVE POKIES
Is addicting 15 percent of regular players fair?

Poker machines, as David Walsh has observed, make their money by encouraging people to keep turning over their money.

The key goals of pokie designers are to keep people on the machine for as long as possible, and to extract as much money as they can. Their goal is for people to "play to extinction", as Natasha Schüll observes in her book, *Addiction by Design*. In other words, to keep using the machine until all the money is gone.

Unfortunately, that is what happens to many people who use EGMs (electronic gaming machines) regularly. Among people who use EGMs weekly, we know (thanks to the Productivity Commission) that 15% can be classified as problem gamblers (i.e., they score 8 or more on the problem gambling severity index, or PGSI) and another 15% are in the moderate risk category (PGSI score between 3 and 7). Between them, these two groups contribute over 60% of the revenue that goes into EGMs, and makes its way to government coffers, corporate profits, and so on.

How do EGMs exert this influence on people?

There are two basic processes that are intrinsic to the design of every poker machine. These are (i) classical conditioning and (ii) operant conditioning.

Classical conditioning has been observed since the 19th Century, when Russian Ivan Pavlov conducted his famous experiments on dogs. He found that if a dog was fed at the same time as a bell was rung, the dog came to associate the reward (food) with the bell. Eventually, the dog would salivate if the bell was rung, regardless of the absence of food. Poker machine games use this principle to associate particular sounds and images, lights and music with rewards – the prizes that the game delivers from time to time. The bells and music and lights all work to habituate people to the reward system, and provide a sense of anticipation when the sounds are heard and the lights observed.

Operant conditioning was documented by an American psychologist, B. F. Skinner, in the 1950s. Using animal studies, he demonstrated that pigeons and rats, and other animals, could be 'conditioned' to specific behaviour through the use of intermittent and unpredictable reinforcement – the delivery of rewards. In his animal studies, he learnt that a regular and predictable reward was less effective in conditioning behaviour than an unpredictable reward. Pigeons, for example, who were provided with a food pellet at random intervals associated with their pecking a specific button, would continually peck the button. Those who were regularly rewarded would do so only when they needed to. Rats responded similarly. And, as Skinner observed, humans would do so as well. Poker machine games rely on a random schedule of reinforcement (the prizes the game delivers) derived from the game maths – that is, the interaction between the reel configuration of a game, and the prize table. This is entirely predictable in the long run, but effectively random in the short term. And the long term is really long – more than five years for most games.

These two layers of reinforcement work together to create behaviour that is difficult to extinguish. That is, they are essentially designed to habituate people to the use of the game.

Recent research now indicates that the neurological mechanism for this is the brain's reward system. Human brains are not unique – they bear strong similarities to other animals. They respond to stimuli that provide perceived rewards by the release of dopamine and other brain chemicals that deliver a sense of achievement and pleasure. In many ways, the so-called behavioural addictions are a perfect form of addiction – they harness the brain's own, long evolved mechanisms to habituate, or put bluntly, addict, users to the use of the game. They are very good at this.

All forms of gambling utilise this effect to some extent. Anticipation releases dopamine; a reward releases dopamine; looking forward to payday when there will be funds to gamble releases dopamine; and so on.

However, poker machines do this much more efficiently than all other forms of gambling. This is because of 'event frequency' i.e. the brief time between spins and the user's capacity to determine the length of this; also, the ubiquity of poker machine venues (they are everywhere) and the relatively high intensity of the experience. It is immersive, conducted in company with other users and games, and allows the expenditure of considerable sums in short time periods.

Pokies, in short, present a perfect addictive storm.

Even old style mechanical machines were good at establishing habituated behaviour. Contemporary, fully electronic devices are, however, in another league.

For a start, they permit the game to be programmed to have up to 50,000,000 possible outcomes, compared to the old style games where perhaps 10,000 outcomes were possible. This means the odds of winning a jackpot can be as high as 1:50,000,000 or more – far worse odds than a lottery, and with much diminished prizes.

But making the reels of the game virtual also means that a host of other tricks can be packed into EGM games: Reels can be weighted (i.e., have more prize winning symbols than average) or starved (i.e., have fewer prize symbols on a particular reel). They can also be unbalanced (i.e., have more symbols in total on one or more reels than on others).

For example, a popular game currently the subject of litigation in the Federal Court at present, has 30 symbols on four reels and 44 on the fifth. This not only increases the odds of achieving a specific result. It also allows the game to provide the illusion of a 'near miss' because some reels are weighted with additional winning symbols, so that they appear more frequently. Unfortunately, from the user's perspective, they appear more frequently in non-winning positions, since the game pays from 'left to right' and the weighted reels are further along the progression.

Multi-line operation is also available on electronic games. This means that users can select to operate multiple lines, in addition to the standard middle line of the display (most poker machines have five reels and three lines on display). These lines can be simple – i.e., the middle, top and bottom line, or they can zigzag all over the screen. Games offering 50-line operation are commonplace.

This means that a machine can deliver a reward on one line, while simultaneously delivering a loss on others. Such a 'win' is very often a 'loss disguised as a win', in that the payout may be much less than the amount wagered. For example, the winning line may pay ten credits, but the amount wagered may be 100 credits. Nonetheless, the game provides both classical and operant conditioning reinforcements, despite the user having lost a net 90% of their stake.

Why are these characteristics important? Because research has now demonstrated that near misses, and losses disguised as wins, provide a level of reinforcement that stimulates the brain's reward system. Poker machines already provide a very hyped up reward system, that can often overpower the brains defences and 'hijack' the reward system. Adding the capacity for losses disguised as wins and regular near misses makes this hijacking even more blatant. It means that these games become a more and more perfect addiction machine.

A further piece of this puzzle is that people under stress are often highly susceptible to the type of escape provided by the pleasurable sensations delivered by this addictive system. As Carolyn Hirsh, former government Whip in the Victorian Parliament, described in the documentary film ‘KaChing! Pokie Nation’, it soothed and comforted her following the death of her daughter in tragic circumstances. Ms Hirsh lost everything to poker machines.

People struggling with financial and other difficulties are also susceptible to such sensations. They wouldn’t dream of using illicit drugs, but the sensations provided by poker machines utilise the same reward system in the brain. And, of course, they’re licensed by the government. But anyone can get into trouble with poker machines. We all share the same brain architecture.

The Tasmanian government has a great opportunity to consider the way poker machines should be operated and licensed in Tasmania. Given what is now known about these devices, and the way they hijack the brain’s reward system to induce addiction, I believe any responsible government would get them out of hotel and pub venues. The reality is that they’re dangerous and intentionally designed to bring about addiction. Such products may have a place in venues designed specifically for gambling. They have no place in community social spaces.

(Pat Caplice)
Tasmanian Pokies Post 2023

This expert analysis of addiction and poor odds makes clear that their combination in Poker Machines breach Guiding Principle 1. Poker Machines currently in use in Tasmania can't be lawful post 2023.

David illustrates that playing with a 13 percent disadvantage causes an inevitable and speedy loss. Many regular players, the 85 percent who "enjoy a flutter", have sustainable losses. They have the freedom to stop playing at loss levels that make their Poker Machine use a sustainable recreation. The other 15 percent, those who Charles shows will be addicted, go on to suffer losses beyond recreational.

The "beyond recreational" costs incurred by this nexus of addiction and poor odds will be well described in other submissions. The nexus is the root cause of much of the harm they describe, and why Poker Machines fail as gaming products in Tasmania.

Removal of one or other of those elements, the poor odds or the addictiveness, would allow Poker Machines to fall within the first Guiding Principle.

It's open to the industry to continue by offering "con-free" Poker Machines: those that are programmed without the elements that cause 15 percent of regular players to become addicted -a machine type supported by Rev Tim Costello's Alliance for Gambling Reform.

Removing addictive elements from Poker Machines should reduce industry turnover and profit by at least 40 percent. This coming from the losses of the 15 percent of regular players who are, or would have become, addicted. The other 85 percent, those who can "enjoy a flutter", would continue to provide their losses.

Reduction of the super-profits made from those fifteen percent of addicted players would affect mainly Federal Hotels and the seven successful hospitality companies or groupings that own or operate two thirds of Tasmania's pub Poker Machines. Harm reduction for the most hard hit and vulnerable, the 15 percent of addicted players, would ameliorate reduced Treasury revenue.

On behalf of Rein in The Pokies, I recommend that the committee finds that Poker Machines as they are currently programmed cannot be used in Tasmania post 2023, but "con-free" Poker Machines would be acceptable.

David Walsh AO
Mona
655 Main Road
Berriedale 7011
P: 6277 9900

E: info@mona.net.au

Dr Charles Livingstone
Department of Epidemiology and Preventive Medicine
School of Public Health and Preventive Medicine - Monash University Alfred Campus
Level 6
99 Commercial Road
Melbourne 3004
P: +61 3 9903 1679
M: +61 407 322 949

E: charles.livingstone@monash.edu

Patrick Caplice
GPO Box 2
Hobart 7001
P: 0411 608 028

E: patrickcaplice@gmail.com

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