JOURNAL OF GAMBLING ISSUES

session

Proceedings of the 19th annual conference on prevention, research, and treatment of problem gambling. June 23–25, 2005, in New Orleans, Louisiana. National Council on Problem Gambling, Washington, DC.

Session II: Critical issues in problem gambling prevention, public health, and policy

Harm reduction, secondary prevention and approaches, and trying to make a machine a safer product

Presenter: Alex Blaszczynski

(Introduction.) **Loreen Rugle**: Let me start by introducing Dr. Blaszczynski. He's the Head of the Department of Medical Psychology at Westmead Hospital, Co-Director of the Gambling Research Unit at the University of Sydney and, certainly, among the very top respected researchers in this field.

You've heard him present on other topics, and his depth and breadth of interest and involvement in clinical policy prevention research efforts and thinking are just so exceptional.

We're so fortunate to have him, and he'll be talking about gambling machine characteristics and that part of prevention and harm reduction.

Alex Blaszczynski: Thanks very much, Lori. I spent last night reviewing the machines on Bourbon Street. What I'm going to talk about this morning is harm reduction and secondary prevention and approaches, and the concept of trying to make a machine a safe product.

I'm going to make a number of provocative statements that, again, will hopefully confuse you. Because out of confusion, I think, comes clarity if you keep asking yourselves specific questions.

And I guess the first question to ask about the concept of modifying the machines to make them safe is a fundamental premise: Do electronic gaming machines, in themselves, cause impaired control?

We can understand drugs. The ingestion of certain external substances can affect neurotransmitter activity, cause disregulation, and we have an intuitive understanding of how they operate.

But can a machine cause impaired control? If we have a high-speed V8 motor vehicle, and a 17-year-old kid gets into that and drives at high speed, did the V8 machine cause the individual to drive at high speed?

So I would put forward the concept of the human/machine interaction. That it provides an opportunity for impaired control to occur: that is, you require both components.

And I guess the question is, where does imbalance occur? Is it the individual's responsibility? Or is it the machine's? Or do you look at an interaction, a sort of synergistic effect, between characteristics of the machine, to protect the player? Or do you look at what it is about the machine that actually causes impaired control? Or what it is about the individual? Or what it is about the interaction between the two? That, I think, is the important question to address.

Again, we come back to the question of etiology. What is the process by which impaired control is established by a human/machine interaction?

Is it the opportunity for excitement? The cognitions of potential wins? Occasionally I've won and got really excited, and then lost it again, got depressed, got excited again—did this cause neurotransmitter disregulation, and the machine was merely a passive object?

What are the structural characteristics of promoting impaired control? Clearly, one element is the rate and continuity of play. Reel spin speed would have minimal harmful ill impact if we had one spin for three days. *(Laughter.)* It might increase substance abuse. *(Laughter.)* But, clearly, we have to look at the rates. Again, assume that we have a product which involves a spinning reel. What is the duration of play for each particular trial that is optimal, that will allow recreational players to enjoy the game and, yet, protect individuals from excessive losses?

Let's look at maximum bets. Clearly, a machine that has a minimum bet of $1,000.00 is going to create more harm than one

with one cent. But then you put on multiple reels and multiple coins, and you gain the false impression that you're playing minor amounts on a two-cent machine but in reality you're spending an average of $4.50 per game. It's entirely different from playing a $1.00 game and thinking, "Well, I'll limit it to one single reel, one coin, $1.00."

The note accepters—the little vacuum devices that they attach to the side of machines—is there a difference between coin-only machines as compared to a machine that allows $5.00, $10.00, $15.00, $20.00, and $100.00 denomination notes to be inserted?

Will a compulsive gambler merely insert ten $10.00 notes, and will he lose that at the same rate of play as if he inserted one $100.00 bill? Given that the rate of loss is governed by the wheel spin and the speed of play?

Cashless smart cards, ticket in/ticket out, and credit now are joined with the concept of smart card/dumb idea. *(Laughter.)* If you look at the process conceptually, smart cards are magnetic stripe, computer chip cards, or a related form, which you insert and the idea is precommitment. You can establish how long you wish to play for, how much money you want to spend.

But consider exactly where a person purchases the cards. What happens to the recreational gambler who has forgotten their cards? What happens to the compulsive gambler when they've already emptied the amount of money on the card? Do they purchase another card? Do they borrow cards? Will there be black marketing in smart cards? All those issues I don't think have been properly considered.

What will happen is the revenue will decrease, and the impact will be on social gamblers who couldn't be bothered purchasing smart cards, or who leave their smart cards at home. The compulsive gambler will make sure that they have their cards. They will top off their limits and make sure that they have access to additional cards.

The other issue of machines is with prize pools that link machines. It doesn't take a genius to work out that if you have a $20 million slot machine payout prize, more people are going to attempt to win it, as compared to a $20.00 or a $20,000.00 prize. When the $20 million luxury occurs, how long is the queue?

We have little information about the color, noise, icons that promote gambling participation. Do people have favorite machines? Talking with some of the manufacturer designers, they cannot predict what physical characteristic of the machine will be attractive. It's like with

motor vehicles—some people like certain types; some cars are popular, some are not.

So what are the particular objectives of machine modification and harm reduction? We can slow the rate of play, slow the rate of expenditure, or to attempt to initiate breaks in play, shutting the machine down after a period of time.

Each of these has particular technical problems, in particular, the last one. In addition, we can have internal control regulators, providing informed choice for education through the provision of signage, or initiate regular review of patterns of play to promote informed choice. In other words, we can give the player information about the duration of their current session, how much they've spent, and whether they're in front or behind.

These are particular potentials. Again, we come back to the idea of how much we allow design modification to interfere with recreational play.

As I mentioned in the presentation yesterday, we put vinegar into beer and that will certainly reduce all but the most hardened alcoholic. There may be leakages into other forms of alcoholic drink, so we put vinegar in all forms of alcohol. But that ultimately destroys the product, so we're looking at an issue of particular balance.

I'll talk about three studies. And I'll talk about one that my honor student did last year, in terms of signage.

We were interested in some of the responsible gaming information that was provided on machines. Your chance of winning the maximum prize in a gaming machine is generally no better than one in a million.

The colors and dimensions and content of signs are mandated by New South Wales Government Legislation, so each machine has to have that.

But is it effective? Are there better ways of providing that information? So, with the cooperation of Aristocrat Leisure Machines, they donated—well, didn't donate—but it was rather quite interesting because in New South Wales the provision or possession of a slot machine is highly regulated, and even to move a machine from one location to another requires approval from the Liquor Administration Board. It becomes quite difficult to actually do that. And so according to the Legislation, we were not allowed to have a poker machine for research purposes.

So we discussed this with them. We put forward the proposal of what we wanted to do.

We were quite effective in shifting the legislation in New South Wales, under Section 8 of the Gaming Act, to allow gaming machines to be used for research and teaching purposes. Except you can't bet on them. So we can use them, but we can't insert coins, which I think is a bit unfortunate. But there are ethical issues in that.

So Aristocrat, the gaming machine manufacturers, supplied us with free machines, provided the technical support, the installation, and the modification of EPROM cards at no cost to us, and said, "Here are the machines; do what you want with them."

So we had the machine with the mandated sign that said your chance of winning is et cetera, and then another sign—and I forget the exact wording of it—but it basically said you had bugger-all chance of winning. *(Laughter.)* We compared that to a dynamic scrolling screen, and this was a screen with the same message, so we had two messages. One was more informative, and one was merely more on the statistics. Static versus just dynamic. I don't have the video of it, but what occurs every three or four minutes is a translucent message that scrolls across the screen while the player continues to play.

So it's quite evident and it doesn't distract from the play, and we found the results actually indicated good recall of information. We asked the subjects, 120 university graduates—slightly confused, but nevertheless of intact intelligence—we asked them basically to write down any information that they could actually recall from the front of these reel gaming machines.

And then we asked them again to recall—actually, we prompted them—did you recall seeing this, did you see that? We found that the dynamic scrolled message was recalled significantly more often than the static machine.

The next step in the research is to look at trialing these particular messages and seeing the actual effect that they have on behavior, because this is only on self-reported recall of information, and we don't know whether that actually affects behavior.

And so we're now looking at collaborating with the gaming industry to insert some of these in actual venues, with the approval of the Liquor Administration Board, to see if we can influence behaviors.

Questions of effectiveness? Are these particular measures effective? And we look at benefits versus unintended effects. And,

again, I'll refer to the University of Sydney's study, because it's quite illuminating.

It's one of the first studies, and it was meant to be a pilot study, but it's taken on a greater momentum than that. This was a study which occurred in response to the Government Legislation and in response to responsible gambling initiatives.

The Liquor Administration Board made some 21 determinations, including the removal of bill accepters, reduction of reel spin speed from 3.5 seconds to 5 seconds, and reduction of maximum bet per machine from $10.00 to $1.00.

The gaming industry became quite concerned about this, arguing that there was no empirical evidence to support its effectiveness and, of course, a secondary issue was that it would cost them a lot of money.

So they approached me to become involved in evaluating their particular studies, and we did this through the University of Sydney.

We went to the Ethics Committee and a research agreement was written in which the gaming industry ensured that the research data were the property of Sydney and that all publications emanating from that research would be published before being sent to the gaming industry. In other words, no censorship was guaranteed.

We commenced the project, and I had two phone calls before data collection started, before we had initiated the design. One came from a church group and another from some other researchers who criticized the findings as being biased before we collected the data, or before we came up with the design. *(Laughter.)* I said, "Why is it biased?" Because it's funded by the industry. Well, I tried to point out that the agreement was that we would publish the results in a report form and give it to the government and the Liquor Administration Board and publish the results, before we gave it to the industry.

In contrast, we've had research funding from the New South Wales State Government to the Casino Community Benefit Fund. Their requirement included the need to submit any publication to the government for approval for publication seven days before we distributed it.

So, again, the point that I'm making is that there are elements within the gaming industry that are genuinely interested in working out what is and isn't effective in harm-reduction measures.

The results were interesting, indicating, basically, that two of the

three measures were not effective in influencing problem gambling behaviors and one measure affected a small percentage of problem gamblers, but was most likely to be effective, and we argued that there needed to be more research on that.

The Nova Scotia study, Focal Research, looked at some design modifications, as well, and that is research under process. I won't go into the research design, but they looked at the potential to ensure that the player had the option to establish their own time limits of play. You could set out how long you wanted to play.

The findings in that regard were a small decline in reported losing track of time, but no change of playing within the intended limits. So it didn't have any impact on limits. Thirteen percent of players used that particular option, and ninety-eight percent reported that it had no impact on budget constraint. In other words, there was minimal effect on expenditure.

There were pop-up messages at 30 minutes, similar to what we had. Again, a small effect for the high-risk players, in terms of having them play within limits, but, overall, no effect on the session length, intended time, or tracking of expenditure.

Again, there was 13 percent usage and 88 percent reported that it was of no particular benefit to them.

As to onscreen clocks, in Nova Scotia, as in Australia, we have a shortage of wristwatches. *(Laughter.)* I think we're unable to tell the time. And so there's the important provision of clocks on the screen. And the rationale for that is beyond me. Presumably, it relates to some elements of disassociation and losing track of time.

But, again, many of the gamblers that I know don't lose track of time; they lose track of time during sessions, but we have the biological clock that, when we have to go back to work, we suddenly realize we need to go back to work, but then decide to spin a little bit longer. *(Laughter.)* It's a decision; it's not loss of time. Very few problem gamblers that I know fail to pick up their children. They may come late, because they decided to extend their time, but very few have forgotten to pick up their children. There may be one or two, but I don't think it's a great problem.

But, impressively, and most surprisingly, the onscreen clocks did not have any effect. What was important was a high level of awareness of these particular initiatives and design modifications, but their usage was limited.

Again, the authors argued that modifying some of these design characteristics was probably less effective and the focus perhaps

should be on assisting people managing their budgets.

I'll just finish because I'm talking too long, clearly. Another recent study, which I referred to yesterday, was in Victoria on the impact on reducing the number of electronic gaming machines within a jurisdiction.

And, just briefly, I have five locations where they reduced machines and compared that to five where they didn't. And the results were that in only a few cases can we find evidence that the original regional caps reduced the level of gaming expenditures. Specific venue results were inconsistent.

Statistical tests did not find significant evidence that caps on machine numbers, that is, setting limits on the number of machines in a venue requiring some venues to remove machines, affected revenue in a consistent direction. In other words, there's no statistical reduction or difference in reduction of revenue between the venues.

They found no evidence that the caps affected or displaced the gaming expenditure in leakage regions. In other words, surrounding regions didn't have an increase in revenue from people that moved from the reduction in the number of machines to surrounding areas.

They found no evidence that the regional caps policy had any positive influence on problem gamblers attending counseling, on problem gambling rates, or on other forms of thrill-seeking behavior.

Reducing access, 24-hour gambling reduced to 18-hour trading, led to gaming expenditure falling by around 3.3 percent. The estimated effect was statistically significant at the 5 percent level of confidence. So closing down machines will reduce revenue but, again, we don't know what the effect is on problem gamblers.

And the smoking ban significantly impacted the reduced gambling expenditure and the decline was quite significant at about 16 percent. So that there are other factors, I think, more important than modifying and mucking around with the design of the machines that are important in terms of protecting problem gamblers. Thank you.

[End of presentation.]

For correspondence: Blaszczynskialexbl@bigpond.net.au

issue 15 — december 2005

Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

contents | intro | keynote address | session I | session II | session III | session IV

letters | archive | submissions | subscribe | links

Please note that these links will always point to the current issue of *JGI*. To navigate previous issues, use the sidebar links near the top of the page.

Editorial Contact: phil_lange@camh.net
Subscribe to our automated announcement list: gamble-on@lists.camh.net
Unsubscribe: gamble-off@lists.camh.net