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Gambling and environmental issues

Rachel Volberg

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Session I: Critical issues in the etiology of problem gambling

For correspondence: rvolberg@geminiresearch.com

(Introduction.) **Alex Blaszczynski:** Rachel and I have known each other for quite some time. She's the president of Gemini Research and is one of the leading figures, the exemplary figures, in terms of studies on prevalence. Her research work is always of high quality. Her interpretation of data is insightful. And it gives me great pleasure to introduce Rachel.

Rachel Volberg: I just want to express my appreciation for the work that Keith Whyte and Linda Abonyo and the program committee have done in putting this conference together. This is very different from the usual conference that we have had over the years. But I think that there's a tremendous value to putting all of you in the same room together, hearing the same stuff, and having the time in the social periods to trade impressions of what you thought was good, and what you thought was bad.

I introduced myself at the beginning of the conference yesterday, by letting people know that I had crossed 54 time zones in the last five weeks. And I apologize again for any fuzzy thinking that I might exhibit.

We're going to turn away from the genetics, and the inside of the body, and we're going to look at some different things having much more to do with environmental issues. I'm a sociologist, not a psychologist, and not a clinical person at all, so you can tell that my prejudices are showing.

This is an early slide that I put together back when you could use Excel to make maps, showing the extent of gambling availability in the United States in 1973. Basically, there were nine states that had lotteries. And there was one state that

had casinos. The slide doesn't show the availability of charitable gambling, which was pretty much available across the board. And it also doesn't show you the availability of horse racing, which was also fairly widespread, but quite limited in terms of its impact on the environment.

Well, here's 1999. Obviously a much more colorful picture. And it's not even up-to-date at this point. Quite a number of changes have occurred since 1999. The major changes since 1999 have been the legalization of lotteries in quite a number of the southern states that are still grey on this map, but at this point in 2005 would be yellow, and the introduction of what are called *racinos* [racetrack and casino combined] in a number of states. I don't even have a code on this map for racinos. I think it would be interesting to see how those have spread through the United States, certainly in the last five years. It's been quite remarkable.

The other major kind of gambling that has expanded recently has been tribal gaming, particularly in California, where over the last five years, we've seen the establishment of over 50 casinos in a state of just over 25 million people. It's also worth noting the introduction of racino gambling in Pennsylvania, Oklahoma, and a number of other states. So that is to give you a flavor of how the environment has changed. I mean it's really quite remarkable over a period of 25 years, the kinds of expansion that we've seen.

Here's another not very surprising slide. But I always feel that it's important to understand how rapidly legalized gambling has introduced itself into not just American society, but internationally. This chart shows the growth rate in annual gross revenues for all types of legal gambling in the U.S. between 1992 and 2003. In 2003, total gross revenues from all types of gambling rose to nearly \$73 billion. And compared to the \$3 billion that were legal gambling gross gaming revenues in 1975, that represents a 2,400 percent increase. I mean this is just absolutely phenomenal growth.

This pie chart gives you some information about the major sectors of the market. This is from the 2003 gross gaming revenues. Basically, casinos represent 40 percent of gross gaming of the gambling industry in the United States. Casinos in the United States include the major markets of Nevada, New Jersey, and Mississippi, as well as the riverboats.

What's interesting to me is that although casinos represent 40 percent of gross gaming revenues in 2003, their market share has actually declined since 2000, from 42 percent to 40 percent.

Lotteries are the second-largest sector of the market, with just over one quarter percent of revenues. But again, market share has declined since 2000 from 29 percent to 27 percent.

The third big player in the picture is tribal gaming, with 23 percent of gross gaming revenues in 2003, interestingly, up from 17 percent in the year 2000.

The typical and longstanding assumption that we've all had, and I don't exclude myself, is that when you see this kind of growth, of course you're going to see a tremendous increase in rates of problem gambling in the population. Certainly some early work that Howard Shaffer and colleagues did with their meta-analysis in 1997, suggested that there had been a significant increase in rates of problem gambling over time. There's other evidence suggesting that prevalence rates have risen rapidly in jurisdictions where machines became widespread, in Australia, for example, and in some jurisdictions in the U.S.

But here's what we are beginning to understand. There is a growing amount of information to suggest that natural recovery, that is, recovery that people undertake on their own rather than seeking treatment, is actually extremely common.

There's a study that Max Abbott and I did in New Zealand, where we initially assessed people in 1991. And then we reassessed them seven years later in 1998. We found that the majority of people who were classified as problem and pathological gamblers in 1991 no longer reported significant problems in 1998. It was a fairly small sample. We had 147 people in this sample and half of them had been problem and pathological gamblers when we assessed them initially. Considering the fact that pathological gambling is defined as a chronic and progressive disorder, this was quite a surprise.

With our colleague Maynard Williams, Max and I did some additional analysis to look at what factors predicted a continuation of problem and pathological gambling at the second point in time. What we found were three factors that explained the bulk of the variance.

The first one was how severe your problem was at point one in time. If you were a pathological gambler in 1991, you were much more likely to still be a pathological gambler in 1998.

The second factor was comorbid drinking problems. If you engaged in hazardous drinking behaviors in 1991, you were far more likely to have a gambling problem in 1998.

And in spite of the fact that New Zealand saw a tremendous expansion in the availability of gaming machines in the period between 1991 and 1998, the third factor that predicted continued severe problem gambling at time two was a preference for racetrack betting.

Separately, David Hodgins and his colleague, Nady el-Guebaly, did an interesting study of resolved and unresolved problem gamblers who were volunteers from the

community. They were recruited by advertisement. And David and Nady found that recovered problem gamblers had less severe difficulties than the unresolved problem gamblers, and that they were more likely to report negative emotions and financial concerns related to their gambling. So there may have been something about the harms, the types of harms, or the level of harm, that the problem gamblers in this sample were experiencing, that led them to change their behavior, and to resolve their problems over a period of time.

Howard Shaffer and Matt Hall were able to assess a group of casino employees three times over a period of two years. And they found, interestingly, high overall rates of pathological gambling among casino employees, in the same way that you find high rates of alcohol problems among people who tend bar.

However, it was interesting and they commented on the fact that there were much lower rates of less severe problem gambling in this group of casino employees. The results of the third assessment were particularly interesting in this study, because Howard and Matt found that nearly a quarter of these casino employees had improved their problem gambling status over the two-year period of the study, but 12 percent developed more severe problems. So this suggests that there are different ways that people move in and out of problem gambling status over time.

The fact of the matter is that this is the extent of the literature at this point, with one more set of studies that I'm going to refer to in just a moment. But, the evidence base on which we operate in the gambling studies field is horrendously small. So this is the last study. This was a study that my colleague, Wendy Slutske, did with Kristina Jackson and Ken Sher. They looked at 192 young adults, aged between 18 and 29, who were assessed at four points in time.

The interesting thing that this study showed was that the overall prevalence rate didn't change in this population. It stayed the same, which was a bit odd, because you would expect some kind of change, either a decline, or perhaps an increase. And what Wendy and her colleagues did was to look not just at the aggregate prevalence rate, they looked at changes in the individuals over time. And they were able to show that there was considerable individual variation. Some people went up, and then went down. Some people went down, and then went up. Some people went down and stayed down. They were able to break out, even within this small sample, quite a number of different pathways through problem gambling over time.

They argued that the stable aggregate rates mask considerable individual variation, as well as substantial rates of negative incidence, where individuals classified as problem or pathological gamblers at one point in time no longer met criteria at a later point in time.

Max Abbott and I meet in various countries around the world and we like to spend our time together thinking up good questions that will keep us busy for the next few years. And we've actually been asking this question for about five years: "What is it that makes some groups in the population particularly vulnerable?" And we've been looking internationally, at New Zealand data, at U.S. and Canadian data, and at data from a small number of studies that are being conducted in the Nordic countries, including Sweden and Norway.

Essentially we have found groups in the population in each of these jurisdictions who appear to be particularly vulnerable because they have a bimodal pattern of gambling participation, where there's a relatively large proportion of the group that does little or no gambling and a significant minority that gambles very regularly or heavily. These groups in the population include young males and older women. However, ethnic minorities and recent immigrants also score significantly higher on all of the problem gambling screens that we've used.

We think that this bimodal pattern of gambling participation, with relatively low rates of gambling participation across the group, but high rates of problem gambling, is characteristic of groups just entering the gambling market. And here's the hypothesis that we're hoping to test: that as these groups gain experience with gambling, their problem gambling rates may initially increase, and then level out, and perhaps even decline. Now this is a hypothesis. We haven't got enough data yet to test it out. But, it's the typical researcher's plaintive lament: "We just need to do a little more research to figure it out."

Getting from research to practice is always a big challenge for me because I don't really do the practice, so I have to listen to a lot of practitioners who tell me what is important to them. But here are some of the implications that I think these data that I've just presented have for those of you who treat problem gamblers.

I think that we are going to see continued increases in availability and expenditures on gambling. The poker craze is just the latest thing that we've had to deal with. Just before that, it was racinos, which are still going on. Tribal casinos are still expanding in numbers and in proximity to large, urban areas. Those of us in the United States tend not to think very often about Internet and wireless gambling. But believe me, in the U.K. and in Europe and in Australia, and in other parts of the world, this is an enormous issue.

The notion here is that there may be a topping-out point; that is, the prevalence rate goes up to a certain extent and then levels off, or it might even decline. The question is, where is that topping-out point? And can you move it back, so you don't have to wait until you get all the way up there, before you're able to have an effect, and reduce the harms in the population?

I think the other question that this raises is, how much gambling is enough? Because regulators and even the public tend not to ask that question. I think it's an important policy issue. If you're going to have gambling increases, and if you're going to have some increase in problem and pathological gambling, then when do communities get to decide that that's enough?

You had an interesting experience here in Louisiana, where you had video poker all over and then the parishes—which is what they call counties here—were able to vote in a referendum on whether they wanted video poker in their parish. And half the parishes said, “Yeah. We want these machines to be here.” The other half said, “No. We really don't want these machines here any more.” This was actually the voice of the community making itself heard, working to determine its own destiny, if you will.

I think the issue of natural recovery is a really important one. And despite our surprise when we realized how common it was, and the dismay that some of the treatment folks expressed when they realized that people were recovering on their own, and might not actually need help, this is important.

Natural recovery is much more frequent among folks who are not at the most severe end of the spectrum. By the time they are all the way out at the end of the continuum, it's going to be hard for them to recover on their own. There really are people out there who need help. But natural recovery offers hope for effectively preventing gambling disorders in the community.

This hope lies in targeting prevention messages to specific groups at risk in the population—recent immigrants, for example. Leaders in those immigrant communities should be made aware that this is a specific set of issues that they might want to address with organizations in their communities.

I think there's also work that needs to be done to identify the specific behaviors that are associated with progression towards more problematic gambling, so that those behaviors can be targeted in prevention messages.

I think that the clear link we see across a large number of studies, between problem gambling and hazardous drinking, is particularly important for the treatment community to consider. I think the first thing it tells us is that alcohol and substance abuse treatment programs really need to do regular screening for gambling problems with everybody that comes through their doors. And I think that it also points to the importance of either making referrals of those individuals to specialty gambling treatment or training treatment providers to treat substance abusers with gambling problems.

It's clear that we need to focus our scarce resources on where the problem

gamblers are already in the system. While it's certainly in the alcohol and drug programs, it's probably also in incarcerated populations, in jails and prisons. And we need to start looking there as well.

Just briefly, where do we go from here? I think that there is work to be done to improve the ability of communities to participate in decisions about the availability of gambling. I think we need to expand our services to address the needs of at-risk and low-severity problem gamblers. As we've been saying all along, this morning and this afternoon, I think we need to do some work to identify which services are most effective with which types of problem gamblers. I think we're at the beginning of an interesting era in problem gambling service development.

Alex Blaszczynski: Thanks very much, Rachel, for that in-depth overview. I think it was really informative.

[End of session.]
