



research reveals...

an update on gambling research in ALBERTA

About The Alberta Gaming Research Institute

The Alberta Gaming Research Institute is a consortium of the Universities of Alberta, Calgary, and Lethbridge. Its primary purpose is to support and promote research into gaming and gambling in the province. The Institute's identified research domains include bio-psychological and health care, socio-cultural, economic, and government and industry policy and practice. The Institute aims to achieve international recognition in gaming-related research. It is coordinated by a Board of Directors working in collaboration with the Alberta Gaming Research Council. The Institute is funded by the Alberta government through the Alberta Lottery Fund.

OUR MISSION:

To significantly improve Albertans' knowledge of how gambling affects society

Your comments and queries are welcome either by e-mail abgaming@ualberta.ca or phone 780.492.2856.

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Node Coordinators:

University of Alberta: Dr. Garry Smith
(garry.j.smith@ualberta.ca)
University of Calgary: Dr. David Hodgins
(dhodgins@ucalgary.ca)
University of Lethbridge: Dr. Robert Williams
(robert.williams@uleth.ca)

Executive Director, Vickii Williams
(vickii.williams@ualberta.ca)

3rd Annual Conference

Treatment of problem gambling: A vision for the future

TOGETHER WITH the University of Calgary, the Alberta Gaming Research Institute co-sponsored the 3rd Annual Conference on Gambling Research, 'The Treatment of Problem Gambling: A Vision for the Future' on May 20-22, 2004 at the Banff Centre. The conference attracted a broad cross-section of academics, treatment professionals, government regulators, and members of the general public. Foremost Albertan, Canadian and international gambling researchers presented their research findings relating to various treatment models. For further information, see presentation materials on Institute website (URL: http://www.abgaminginstitute.ualberta.ca/Events/2004_Conference/index.htm).



Opening remarks

Ms. Vickii Williams (Executive Director, Alberta Gaming Research Institute)
Dr. Nady el-Guebaly (Board Chair, Alberta Gaming Research Institute)
Ms. Sheila Murphy (Chair, Alberta Gaming Research Council)

Ms. Vickii Williams welcomed all conference attendees and pointed out that there were delegates from eight of the ten Canadian provinces, several American states, South Africa, New Zealand, Spain, and Australia.

Dr. Nady el-Guebaly introduced the conference and noted its significance as 150,000 Albertans are estimated to be affected by problem gambling. He also mentioned that the Institute has been in existence for four years and has funded a total of 43 research projects made possible by the funding support provided to the Institute by Alberta Gaming. He described the Institute's recently approved Cohort Study, and announced "seed funding" that will allow for a research position to study the economics of gambling.

Ms. Sheila Murphy welcomed conference attendees on behalf of the Alberta Gaming Research Council.

Dr. Jeffrey L. Derevensky (McGill University)

The new rite of passage for today's youth has become gambling according to Dr. Jeffrey Derevensky of the International Centre for Youth Gambling Problems and High-Risk Behaviors at McGill University. His presentation "Youth gambling problems: From research to treatment" indicated that this phenomenon can be attributed to the fact that young people today are growing up in an environment where gambling is increasingly accessible. Youth themselves list their top three reasons for gambling as enjoyment, excitement, and to make money. Coincidentally, adults who gamble cited these same reasons.

Derevensky explained that the majority of prevalence studies are consistent in their estimations that between three and six per cent of youth experience significant problems as a result of their gambling activities. It is, however, frustratingly difficult to detect gambling troubles in young people as adolescents don't often fit the perceived pattern of a gambling problem. Of the youth who do develop problems, his research suggests that their mean age of onset is only 11.5 years of age.

Gambling is commonly used by youth as an escape from their problems. This means that effective treatment needs to address gambling on a more "global" level. Derevensky



Dr. Jeffrey L. Derevensky
(McGill University)

suggested that if only the gambling problem is treated and others remain then relapse is very high. He advised that

treatment and prevention strategies need to be integrated with one another to more effectively reach this population. Though the research community is far from establishing best practices in treatment for adolescents, research efforts are starting to accumulate some useful data. Ultimately, Derevensky believes that we have a collective responsibility to raise awareness of gambling problems among youth.

Dr. David Hodgins (University of Calgary)

In his presentation titled “*Brief Treatment Models for Gambling Problems*”, Dr. Hodgins suggested that people can, and often do, recover from gambling problems without treatment. This is supported by evidence that past year gambling prevalence rates are generally lower than the lifetime gambling prevalence rates. Many people, in fact, begin the process of recovery once they reach a stage he termed the “crystallization of discontent”.

Hodgins explained that much of our existing knowledge of brief treatments for problem gambling is as a result of extensive research from the alcohol treatment field. In fact, some of the most effective treatments for alcohol problems are brief treatments—especially for individuals experiencing milder problems. In order to test the effectiveness of such brief treatments for problem gamblers, Hodgins and his research team formulated several treatment trials that incorporated the use of self-help workbooks (e.g. “*Becoming a Winner*” and “*Staying on Track*”) and motivational interviews.

Results from these trials indicated that a reduction of problem gambling behaviour could be maintained over time using brief interventions alone. Individuals who received a motivational interview in addition to the brief intervention were even more successful in their treatment outcomes. Thus, there does appear to be a role for brief interventions for gamblers seeking to initiate behavioural change but Hodgins’ research gives no clear evidence of who could be expected to do well using this treatment. Motivational focus was found to be of immense importance because when the gambler’s motivation for change is addressed, clinicians found that treatment results tended to be more effective.

Dr. Loreen Rugle (Trimeridian, Inc.)

In her presentation, “*Ways of Knowing: A Synergistic Approach to Gambling Treatment and Research*”, Dr. Rugle used the analogy of an elephant being variously described by seven blind men to paint a picture of the numerous approaches being taken with respect to the treatment of problem gambling. Each of these

individual approaches may describe one aspect of a client’s gambling problem, but taken together they don’t address the whole.

Dr. Rugle stated that it is necessary to put gambling treatment in its proper context since there are a host of complex issues that relate to individual gamblers. As such, she recommended that a multi-modal treatment perspective be taken. A multi-modal treatment approach is one that uses several treatments concurrently.

Since evidence is not yet available from the problem gambling research realm to assist with individualized patient care, clinicians find that there is no consensus as to what treatment works best for particular individuals. The client’s spiritual realm (i.e., values, meaning, purpose) is, however, an area that Dr. Rugle believes to be significant for achieving positive treatment results. Similarly, she contends that the treatment process and therapeutic relationship may, in fact, be more important in treatment than actual content.



Dr. Loreen Rugle
(Trimeridian, Inc.)

In conclusion, Rugle articulated the fact that few clinicians to date have significantly changed their treatment practices based on the results of research. She notes the “efficacy of [gambling] treatment is one piece [of the puzzle], but not the only piece.”

Dr. Marc Potenza (Yale University)

Dr. Potenza’s presentation “*Pathological Gambling: Co-Occurring Disorders and Psychopharmacology*” provided an overview of research findings relating to the treatment of pathological gambling (PG) using different medications. He remarked that pharmacotherapy is presently “at the stage where neuro-circuits [in the brain] are being identified for different behaviours, including those implicated in pathological gambling.”

Research in this field is demonstrating that individuals identified as pathological gamblers show markedly different activity in the structures of their brains that control impulses and decision-making than non-problem gamblers. It also indicates a close relationship between PG and substance use disorders. Additionally, some researchers have found that there are considerable familial patterns associated with PG (e.g., genetic factors and impulsiveness in general).

This work has proven beneficial as several drugs are emerging for use in treatment based on the results of research investigations. Examples include Fluvoxamine, Paroxetine, Naltrexone, and Lithium. At the present time, however, none of these pharmacotherapies have been approved by the U.S. Food and Drug Administration for the treatment of pathological gambling.

Current and future challenges identified by Dr. Potenza include how such research can be translated into clinical practice, determining the best role for pharmacotherapies (i.e. as a first line or adjunct treatment), and deciding how to match patients with particular drug treatments. In conclusion, he reminded attendees of the importance of understanding the limitations of current drug treatments and that care must be used when prescribing these medications as they have the potential to produce unwanted negative effects.



Dr. Marc Potenza
(Yale University)

Dr. Robert Ladouceur (Laval University)

In the presentation, *“New Directions in the Treatment of Pathological Gamblers”*, Dr. Ladouceur began by providing a description of the cognitive approach used in the treatment of problem gambling. He noted that ninety per cent of erroneous perceptions refer to “past links between independent events.” Such perceptions are often referred to as the “gambler’s fallacy” and if this notion is not dealt with, the relapse rate among treatment-seekers is high. Dr. Ladouceur has found few problem gambling treatment outcome studies that use the cognitive approach—none which have been empirically supported for use in treatment.

Dr. Ladouceur also described findings from his own research on erroneous perceptions. An analysis of data gathered in a gambling experiment using video lottery terminals suggested that actual erroneous perceptions in problem gamblers versus those without problems were roughly equal. Problem gamblers were, however, identified as being more focused on the gambling activity itself. As the games progressed, problem gamblers became more convinced that their machine was “due” (i.e. ready to pay out) while the exact opposite was found for non-problem gamblers.

Findings from Ladouceur’s studies may help provide an explanation for the high dropout rates of gamblers in treatment. As complete gambling abstinence is implicit in treatment, many gamblers drop out because they are still certain that they are “due” for a win. Thus, controlled gambling as a treatment goal is suggested by Ladouceur as it often attracts “ambivalent” problem gamblers. In fact, preliminary results of his work indicate that 30-40 per cent of people who come in for treatment to control their gambling subsequently switch to complete abstinence.

Ladouceur’s work on cognitive therapy for problem gamblers has started to provide empirical support for this type of treatment. He noted that continued work is required to identify the mechanisms at the root of erroneous perceptions and that the distinction between cognitive and behavioural interventions still needs to be clarified.

Dr. Joseph Ciarrocchi (Loyola College in Maryland)

Dr. Ciarrocchi’s presentation *“Family Therapy for Problem Gambling”* examined how clinicians might include other family members in their treatment approaches when working with problem gamblers. He noted that there are no evidence-based “best practices” for the family treatment of gambling but there are “fruitful areas” that have been explored in therapy for families of alcoholics and in couples therapy.

Ciarrocchi noted that it is a natural and common tendency for families to blame themselves for the problems developed by one of their members. The importance of maintaining family rituals was mentioned as a key strategy for helping to overcome such problems. Family treatments have been found to be highly successful and they are often more effective than “standard” individual treatment. Family environment and social support is also an important predictor of treatment success.

One interesting phenomenon identified by Ciarrocchi is what he calls the “developmental time lag” which has to do with the length of recovery. Individual recovery appears to happen faster for individual problem gamblers than for the family itself. Since “only the gambler knows the gambler’s mind”, the gambler is alone in knowing his or her level of commitment to recovery. Family members may still have their own doubts and reservations about this commitment and this uncertainty is what creates the time lag.

Dr. Alex Blaszczynski (University of Sydney)

In his presentation *“Behavioural therapies: Process & outcomes”*, the University of Sydney’s Dr. Alex Blaszczynski described his “three pathways” model which identifies routes commonly taken by individuals in the development of their problem gambling behaviours. The three pathways are labelled “behaviourally conditioned”, “emotionally vulnerable”, and “biologically-based impulsive”. He also presented summaries of past research studies relating to problem gambling treatment for various gambler “sub-groups” and gave attendees a glimpse of several new developments in the field of gambling.

The “three pathways” model suggests that alternate courses of treatment work best for particular types of gamblers. In his description of existing models of problem gambling, Blaszczynski noted that “none of the conceptual models have linked up the



treatment outcomes with the process of change”. As with some of the other presenters, Blaszczynski stated that researchers do not yet conclusively know what triggers the actual mechanism of change.

In his conclusion, Blaszczynski stressed that researchers and clinicians have an ethical obligation to provide informed choice for people seeking treatment for problem gambling and to use evidence-based interventions when working with them. He pointed out the value of developing more manual-based treatments and treatment guidelines. In closing, he suggested the necessity for clinicians to incorporate research-based recommendations into their treatment approaches and vice-versa.

3rd Annual Conference:
Plenary session

Dr. Shawn Currie (University of Calgary)

In his presentation, “*Using National Population Data to Develop Low-risk Gambling Guidelines*”, Dr. Currie discussed the importance of making available clear gambling guidelines to the general public. He explained that low risk alcohol guidelines (called “low-risk drinking guidelines”) have been around for quite some time and emerged from clinical research. Although gambling guidelines also exist, they have not been as widely promoted and have not been empirically validated. Currie noted that, unlike people who abuse alcohol, it is easier for individuals to hide a gambling problem from others and provided the example that “there are no checkstops for gambling.”

In order to determine what constitutes low risk gambling, Currie began his research by defining “harm” from gambling. For his purposes, harm meant that a gambler was negatively affected by gambling in two or more ways (e.g., betting more than one can afford to lose, difficulty sleeping because of gambling, etc.). By superimposing these harms on data obtained using Canadian prevalence surveys, Currie noticed the emergence of various scientifically-developed “risk points” for harm predictors. Factors included gambling \$75 or more per month, gambling 2 per cent or more of income per month, gambling more than 2-3 times per month, and gambling for durations of more than 60 minutes per session.

Statistical results suggest that the risk of harm for gamblers who exceeded these “cut-off” points is several times greater than for other gamblers. Currie is planning to use these preliminary findings and the solicitation of expert opinion to further develop a series of recommended low risk gambling guidelines.

Dr. Randy Stinchfield (University of Minnesota)

Dr. Randy Stinchfield of the University of Minnesota described his comprehensive gambling evaluation and treatment tool in the presentation “*Reliability and Validity of the Gambling Treatment Outcome Monitoring System (GAMTOMS)*”. Stinchfield briefly described the introduction of legalized gambling in the State of Minnesota and mentioned the State’s desire to provide effective gambling treatment services.

The GAMTOMS was originally developed in 1992 with the idea that, to properly evaluate the effectiveness of gambling treatment, it was first necessary to have reliable and valid treatment outcome instruments. Rather than being just a single measurement scale like other existing problem gambling instruments, the GAMTOMS was developed as a series of reliable and valid instruments that could assess multiple relevant domains for gambling treatment outcomes. The instruments were also developed for ease of application which meant that administration, scoring, and interpretation were standardized.

Reliability and validity studies that have been performed on both the questionnaire and interview versions of the GAMTOMS and findings indicate that their psychometric properties are satisfactory. In a treatment setting, a post-treatment six month follow-up examination found that 42% of people treated using the GAMTOMS were gambling abstinent. The GAMTOMS has proven itself to be a valuable tool for gambling assessment and treatment outcome monitoring and it continues to be refined so as to be even more useful in the future.

Honourable Ron Stevens, Minister, Alberta Gaming: Luncheon Address

In his luncheon address to conference delegates, Alberta Gaming Minister Ron Stevens began by detailing the substantial economic benefits derived by Albertans from gambling and acknowledged its harmful effects on a small percentage of the population. He outlined the provincial government’s commitment to further understanding the issues and noted the \$7.5 million in funding that has been allocated to the Alberta Gaming Research Institute.

In discussing the Institute’s research, Stevens suggested that such research is the foundation of public health knowledge. He then noted that ‘good, objective research’ demonstrates a commitment to the scientific method, can be distinguished from pseudo-science, and distances itself from advocacy. He challenged the research community to produce a body of high-quality, validated, and peer-reviewed scientific knowledge that could then be used by policy makers.

Stevens concluded his presentation by describing various programs and services that have been developed by Alberta Gaming to help the province’s problem gamblers. He then urged the research community and the Institute to ‘continue to provide leading-edge research on the issues inherent to gambling’.

3rd Annual Conference on Gambling Research: Treatment of Problem Gambling

COMMENTS & FEEDBACK

Both presenters and attendees rated the venue, speakers, and overall conference as being top-notch. Recognition of educational hours was approved by the Canadian Problem Gambling Certification Board; thirteen attendees received certificates. Feedback collected from the one hundred delegates indicated that the conference program was very well received in terms of relevance, clarity, and quality. Interestingly, every presentation was singled out by at least three individuals as being the “most applicable to their need or interest”. Conference workshops also proved to be valuable to delegates involved in the provision of treatment services to problem gamblers. Conference presenters commented that they believed that the focus on application of research to treatment was extremely beneficial. They also appreciated the coordination efforts of the organizing committee for their high level of organization and their attention to detail.

Vickii Williams	Executive Director	
Rhys Stevens & Vickii Williams	Writers	
Catherine Anley & Vickii Williams	Editors	
Epigrafix	Design/Layout	
Garry Smith	Media contact	780.492.2770

e-mail: abgaming@ualberta.ca p: 780.492.2856

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