



GAMBLING RESEARCH REVEALS

Understanding reasons behind risk taking

by Trevor Kenney

Sandeep Mishra is an idealist with a realist's background.

The PhD candidate in the Department of Psychology at the University of Lethbridge has a keen understanding of what has led to his educational success, and a desire to better society as a result. He'll use his science to do so.

"So much of my education is funded by taxpayers, so I felt a really strong obligation to choose a topic of study that benefits taxpayers and makes society a better place," says Mishra, who is set to defend his PhD thesis in December. "I'm particularly interested in gambling, risk taking and crime, but more specifically, the social and environmental factors that increase or decrease these behaviours."

Studying under the guidance of Dr. Martin Lalumière, Mishra has been working on the well-established concept of inequality and its link to criminal activity. While there is a large body of evidence that has linked inequality with any number of society's ills, there has never been a causal analysis of the relationship—until now.

"The empirical research has been done and it has been shown repeatedly that inequality is linked to crime, but this is research at an aggregate level and does not address causal mechanisms," says Mishra. "I decided that a productive line of research would be inducing inequality in a lab setting. Laboratory experiments, involving random assignment to experimental conditions, offer the only conclusive way to determine whether a variable has a causal effect or not. After introducing conditions of inequality in this setting, I then asked what happens to their responses to risky behaviour?"



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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.*

OUR MISSION

To significantly improve Albertans' knowledge of how gambling affects society

2010-11 Scholarship and Research Allowance Award Recipients

The Institute is pleased to announce three 2010-11 Scholarship and Research Allowance Award Recipients:

- **Terri-Lynn MacKay** — Ph.D. (Psychology, University of Calgary)
- **Sandeep Mishra** — Ph.D. (Psychology, University of Lethbridge)
- **Tanya Mudry** — Master's (Applied Psychology, University of Calgary)

Additional details regarding their gambling-related research interests are available from the Institute web site.

His findings could shape public policy for years to come.

"All of the evidence suggests that systemic inequality and competitive disadvantage facilitate risk taking, of which criminal activity is an extreme form," says Mishra. "I've found that reducing risk taking is possible by reducing inequality. All of this has enormous policy implications."

Mishra's study invited students to participate in a series of experiments. One such experiment saw pairs of students tasked to answer a series of questions that tested their risk-taking attitudes. Prior to the test, one student was given \$10 for his effort, the other none, under the guise that funding only allowed for one party to be compensated.

In almost every instance, the student who had suffered a perceived inequality chose risky options at a substantially higher level. Further, when students were tasked again to perform the tests, except on this occasion another \$10 in funding was found midway through the exercise, thus evening out the imbalance, risk taking behaviour significantly declined.

"If something as simple as \$10 can influence risky behaviour in healthy, well-educated, socially higher class undergrads, then you can imagine how this mechanism is just compounded in the real world," says Mishra. "What is remarkable is that as soon as the students realize that their environment isn't actually inequitable, that overall things are pretty fair, presumably, they see no reason to engage in elevated risk taking."

Mishra says his findings are directly related to public policy, and points to the current political climate where government policy in general is built around punitive action to deter criminal behaviour.

"They are not really investing in root social issues that facilitate conditions that produce risk taking and crime," says Mishra. "Even though it is costlier and you don't see direct implications, investing in infrastructure and better education for those who are

underserved is a more prudent approach. Helping people help themselves out of inequitable situations is the best thing we can do to lower crime rates."

Mishra, who is off to the University of Guelph to pursue a post-doctoral fellowship, is a Delhi, Ont. native who began his post-secondary career at Hamilton's McMaster University. Excitable and passionate, he credits the University of Lethbridge and Lalumière for allowing him to grow his research portfolio.

"Martin's one of the most generous human beings you will ever meet," says Mishra. "He consistently puts his graduate students' well-being above his own and he's allowed me to take control and lead my own research program. The facilities I've had to work with go well beyond what most grad students could dream of, and the feedback he gives me is always excellent and very supportive."

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Representative publications

Mishra, S., Lalumière, M. L., Morgan, M., & Williams, R. J. (in press). An examination of the relationship between gambling and antisocial behavior. *Journal of Gambling Studies*.

Mishra, S., & Lalumière, M. L. (2010). You can't always get what you want: The motivational effect of need on risk-sensitive decision-making. *Journal of Experimental Social Psychology*, 46, 605-611. doi:10.1016/j.jesp.2009.12.009

Mishra, S., Lalumière, M. L., & Williams, R. J. (2010). Gambling as a form of risk-taking: Individual differences in personality, risk-accepting attitudes, and behavioral preferences for risk. *Personality and Individual Differences*, 49, 616-621. doi:10.1016/j.paid.2010.05.032



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Published findings from the Leisure, Lifestyle, Lifecycle Project (LLP)

Since 2005, the Institute-funded Leisure, Lifestyle, Lifecycle Project (LLP) has been actively collecting data from five age cohorts of more than 1800 Albertans. To date, there have been three “waves” of data collection as part of this longitudinal study and preparations for a fourth are being made by research project coordinator Dr. David Casey.

Analyses of data from waves one and two of the study are complete and are being used to develop manuscripts and conference presentations reporting on various aspects of the investigations.

The following peer-reviewed scholarly journal articles provide “early” findings from the LLP:

Smith, G. J., Schopflocher, D. P., el-Guebaly, N., Casey, D. M., Hodgins, D. C., Williams, R. J., & Wood, R. T. (in press). Community attitudes toward legal gambling in Alberta. *International Gambling Studies*.

Hodgins, D. C., Schopflocher, D. P., el-Guebaly, N., Casey, D. M., Smith, G. J., Williams, R. J., & Wood, R. T. (2010). The association between childhood maltreatment and gambling problems in a community sample of adult men and women. *Psychology of Addictive Behaviors*, 24, 548-554. doi:10.1037/a0019946

Lobo, D. S. S., Souza, R. P., Tong, R. P., Casey, D. M., Hodgins, D. C., Smith, G. J., Williams, R. J., Schopflocher, D. P., Wood, R. T., el-Guebaly, N., & Kennedy, J. L. (2010). Association of functional variants in the dopamine D2-like receptors with risk for gambling behaviour in healthy Caucasian subjects. *Biological Psychology*, 85, 33-37. doi:10.1016/j.biopsycho.2010.04.008

el-Guebaly, N., Casey, D. M., Hodgins, D. C., Smith, G. J., Williams, R. J., Schopflocher, D. P., & Wood, R. T. (2008). Designing a longitudinal cohort study of gambling in Alberta: Rationale, methods, and challenges. *Journal of Gambling Studies*, 24, 479-504. doi:10.1007/s10899-008-9108-6

FROM THE LIBRARY...

Belanger, Y. D. (Ed.). (2011). *First Nations gaming in Canada*.
Winnipeg, MB: University of Manitoba Press.

While games of chance have been part of the Aboriginal cultural landscape since before European contact, large-scale commercial gaming facilities within First Nations communities are a relatively new phenomenon in Canada. *First Nations Gaming in Canada* is the first multidisciplinary study of the role of gaming in indigenous communities north of the 49th parallel. Bringing together some of Canada’s leading gambling researchers, the book examines the history of Aboriginal gaming and its role in indigenous political economy, the rise of large-scale casinos and cybergaming, the socio-ecological impact of problem gambling, and the challenges of labour unions and financial management. The authors also call attention to the dearth of socioeconomic impact studies of gambling in First Nations communities while providing models to address this growing issue of concern. **NOTE: To be published in February 2011.**



Yale D. Belanger is an associate professor in the department of Native American Studies at the University of Lethbridge, and author of *Ways of Knowing: An Introduction to Native Studies in Canada* and *Gambling with the Future: The Evolution of Aboriginal Gaming in Canada*.