

The National Center for Responsible Gaming
Preface to Recommendations submitted February 9, 1999
to the National Gambling Impact Study Commission

Madam Chairman, members of the commission, on behalf of the National Center for Responsible Gaming (NCRG), I want to thank you for inviting us to make recommendations to the National Gambling Impact Study Commission.

The National Center for Responsible Gaming is a division of the Gaming Entertainment Research and Education Foundation (GEREF), an independent nonprofit organization founded in 1996. Affiliated with the University of Missouri-Kansas City, the NCRG is the first national organization devoted exclusively to funding scientific, peer-reviewed research on disordered and underage gambling.

Our mission is to build the base of knowledge about this disorder in order to improve prevention, intervention and treatment strategies. Pathological and underage gamblers engage in a variety of gambling activities, and, consequently, our investigators do not confine themselves to particular forms of gaming when looking at why some people develop this disorder. In short, our scope extends far beyond the individuals who have a problem with casino gambling.

To date, our financial base includes 26 donors whose pledges total \$5 million. Five are gaming manufacturers or suppliers and one is a major foundation.¹ The other 20 contributors are casino companies. However, our goal is to broaden our donor base beyond casino companies and even beyond the gaming industry. The Gaming Entertainment Research and Education Foundation's classification as a 501-(c) (3) nonprofit organization by the IRS allows us to accept tax-deductible contributions from foundations and individuals as well as businesses and corporations.

The NCRG is the single largest grant-maker of peer-reviewed scientific research on disordered gambling in the United States. Last week, the Advisory Board of the NCRG, approved eight new research grants thereby increasing our total commitment to research to \$2.6 million. Our grants program, which is highly competitive, offers support in all of the critical disciplines: behavioral and social sciences, neuroscience, and epidemiology. All aspects of the NCRG program—peer review procedures, evaluation criteria, and funding priorities—are closely modeled on those of the National Institutes of Health (NIH).

Our recommendations to this panel cover three main areas of concern to both the NCRG and the Commission: **Research Issues**, **Financial Resources**, and **Bridging Research and Practice**. The following recommendations reflect the wisdom and experience of NCRG Advisory Board members, Foundation members, and the distinguished scientists conducting NCRG-funded projects.

Recommendations to the National Gambling Impact Study Commission

Submitted by National Center for Responsible Gaming (NCRG)

Research Issues

- **Recognize the importance of understanding disordered gambling behavior as a multidimensional problem, comprised of biological, psychological, and sociological factors.**

Today, scientists understand psychiatric disorders as complex phenomena that transcend the old "nature versus nurture" debate. They now attempt to understand the "dance of nature and nurture" in exploring mental health and addictive disorders. In recognition of this complexity, the National Center for Responsible Gaming supports research equally in all of the critical domains: behavioral and social sciences, epidemiology, and neuroscience.

However, neuroscience is the least understood discipline. Its role in mental health research has been met with suspicion despite the best efforts of the federal government's "Decade of the Brain" initiative, proclaimed nine years ago by President George Bush, to foster appreciation of the advances in genetics, pharmacology and brain imaging. Neuroscience research, much of it funded by the NIH, has started to yield effective treatment programs for psychiatric and addictive disorders. The NCRG believes that disordered gamblers deserve to benefit from the same scientific and technological advances that are helping people who suffer from depression, alcoholism and other disorders. The NCRG encourages the Commission to resist the uninformed and out-dated notion that brain research has no contribution to make in understanding disordered gambling.

- **Recognize the benefits of the meta-analytic approach to gauging national prevalence estimates.**

The NCRG funded the 1997 meta-analysis of prevalence studies by Harvard Medical School because of the insurmountable problems that would have been posed by a national prevalence study including the time, exorbitant expense, and the lack of consensus about which scale to use (The Harvard study observed the use of 25 different survey instruments in the 120 studies analyzed.) Meta-analysis, a research technique used to review and synthesize a body of research, offers a valuable alternative. In the case of prevalence studies, this approach makes it feasible to look at a number of special populations. "The Harvard Project on Gambling and Health," an NCRG-funded continuation of the original meta-analysis, continues to incorporate new prevalence studies into the database and is, therefore, the most comprehensive and up-to-date database of prevalence studies available. It has been used by the National Academy of Sciences/National Research Council in its current study of the social and economic impact of pathological gambling.

- **Encourage an intellectual climate that challenges existing views and assumptions and allows for a resolution of fundamental, unresolved issues in the field.**

The NCRG Advisory Board and peer review panels have observed the "conceptual chaos" of the gambling field and the past failure to confront the construct validity issue. Gambling researchers have paid very little attention to the high rate of comorbidity with other psychiatric disorders. Does disordered gambling reflect a unique primary psychiatric disorder? Or, is it a secondary disorder, a cluster of symptoms associated with another disorder? The implications of this issue are potentially significant for measuring, preventing and treating disordered gambling. Until the field decides to pursue this line of inquiry, related issues of nomenclature and the need for an independent validation of screening and diagnostic instruments, such as the South Oaks Gambling Screen and the DSM-IV, will remain unresolved.

The NCRG Advisory Board has identified the cornerstone research that must be pursued in order for the field to move forward. The following building blocks currently guide the NCRG's funding priorities:

1. Genetic studies that will provide molecular confirmation of the extent to which pure addictive gamblers exist and the extent to which some subset of other disorders, such as drug addiction, risk-seeking, and novelty-seeking behaviors, overlap with a subset of pathological gamblers.
2. The development and validation of behavioral and cognitive tests to simulate the gambling state for use in laboratory settings in neurochemical, functional imaging and other cognitive and behavioral studies.
3. Neuroscience research that will eventually yield a gold standard against which to measure the accuracy of instruments such as the South Oaks Gambling Screen and the DSM-IV. By revealing the biological markers of the disorder, neuroscience will provide *a truly independent standard which diagnosis by clinicians cannot provide.*

In addition, the NCRG is planning a consensus conference, patterned on the NIH model. Such a conference will be an opportunity for scientists to continue mapping out the steps the field should take to resolve these issues.

Financial Resources

- **Encourage support for high quality research on disordered gambling behavior by the federal government and the foundation community.**

The field of disordered gambling has been compared to the under-developed state of alcoholism research in the late 1960s and early 1970s. An infusion of significant support is vital to the development of the gambling field. One incentive for funding agencies concerned with mental health and addictions is the possibility that pathological gambling presents a unique opportunity to learn about the addictive process in general. As the Harvard Medical School researchers have observed,

Disordered gambling, including problem and pathological gambling, may hold considerable potential to help us understand chemical dependency. To date, most studies of chemical dependency confound the biological and psychological effects of drug taking with the emotional influences often associated with drug taking. The study of disordered gambling permits a study of addiction without the confounding influences of exogenous drugs. The study of pathological gambling permits scientists to consider the possibility that addiction results, in part, from a dependency on the shifts in neurochemistry associated with shifting subjective states.ⁱⁱ

- **Encourage all segments of the gaming industry to support the National Center for Responsible Gaming.**

The casino industry has provided the venture capital to launch innovative scientific research on disordered gambling. The NCRG's original donors set the bar when they provided unprecedented support for gambling research. The other segments of the gaming industry can make a powerful statement and set an example for the entire private sector by joining NCRG's donors as responsible corporate citizens.

Along these lines, we encourage the Commission to recognize the important role that the private sector plays in supporting research. Although the federal government will continue to be the main source of funding for health research, foundations and nonprofit organizations serve a unique purpose because of their flexibility, accessibility and ability to respond quickly to a constantly changing environment. Moreover, such non-government organizations often provide seed money for preliminary studies that are eventually funded at the federal level.

- **Encourage public policy makers at the local, state and federal level, to support studies that are based on scientific, peer-reviewed research.**

Too often, prevalence and social impact studies are commissioned and selected by government agencies without the benefit of academic peer review. The Harvard study found that only 40 percent of the available prevalence studies were subjected to peer review and conjectured that this absence of rigorous review explains the lack of progress in methodological development in gambling studies.ⁱⁱⁱ The National Gambling Impact Study Commission should encourage government entities to use only the leading scientists, as recognized by their peers and the major funding sources, to consult on the development of requests for proposals and to review proposals according to the rigorous criteria used by the National Institutes of Health and the National Center for Responsible Gaming.

Bridging Research and Practice

- **Encourage the improvement of training and elevation of standards for clinicians.**

As the growing knowledge base about disordered and underage gambling changes treatment strategies, it will also affect the way in which health care providers are educated and tested. Organizations that provide training and certification in the addictive

disorders should be encouraged to find ways to stay in touch with developments in the field of disordered gambling research.

- **Encourage collaboration between researchers, clinicians and institutions to strengthen the national network of helplines currently in existence.**

The national helpline number offers an important form of early intervention; however, the existing system needs to be strengthened and expanded. Furthermore, the potential of helpline data for research should be mined. The data could serve as a warning mechanism by alerting researchers and clinicians to shifting trends in gambling abuse. The Gaming Entertainment Research and Education Foundation has commissioned a proposal from the Massachusetts Council on Compulsive Gambling and the Texas Council on Problem and Compulsive Gambling to develop a standard system for call-in data collection, retrieval and analyses. A standardized system, if adopted by all providers, would enable both the organizations and researchers to organize, examine and interpret call-in data on a national basis.

- **Encourage dialogue between scientists, clinicians, and the public about disordered and underage gambling research.**

The "disconnect" between scientific research and the people in the field is a common problem in all health-related disciplines. We have found that there are ways to bridge the gap without sacrificing quality or accessibility. For example, in 1998, Dr. Howard Shaffer, director of the Harvard Medical School Division on Addictions, led workshops in Biloxi, Mississippi, and Las Vegas, Nevada, on the results of the Harvard meta-analysis of prevalence studies. In both instances, these successful programs attracted unusually diverse audiences of counselors, researchers, gaming industry personnel and members of the public.

This success inspired us to hold the conference, "New Directions in Gambling Addiction Research," cosponsored by The George Washington University last week. Over 150 people from various backgrounds—academia, counseling, state councils on problem gambling, the National Institutes of Health, gaming regulatory agencies, the gaming industry, medicine, and the media—gathered for stimulating dialogue about the cutting-edge research being conducted by NCRG-funded investigators. The enthusiastic response has encouraged us to consider an annual event.

We hope that the Commission will encourage the replication of such efforts by all interested organizations and challenge us to find creative ways to link science and the public through web sites, publications, and public forums.

Thank you again for this opportunity.

ⁱThe NCRG's current donors include founding contributors Boyd Gaming Corporation and Station Casinos, Inc. Contributors of \$100,000/year are as follows: Caesars World, Circus Circus Enterprises, Inc., Grand Casinos, Inc. Hilton Hotels Corporation, International Game Technology, The Lincy Foundation, and Mirage Resorts. Other

donors include Aztar Corporation, Boomtown, Inc., Casino Data Systems, Inc., Coast Resorts, Empress Riverboat Casinos, Inc., Foxwoods Resort Casino, Harrah's Entertainment, Harvey's Resort, Hollywood Casino Corporation, Horseshoe Gaming, Mission Industries, Mohegan Sun, Rio Suite Hotel & Casino, Showboat, Inc., Shuffle Master Gaming, Inc. and Southern Wine & Spirits.

ⁱⁱHarvard Medical School Division on Addictions web site (www.hms.harvard.edu/doa)

ⁱⁱⁱHoward J. Shaffer, Matthew N. Hall, Joni Vander Bilt, "Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis" (1997): 61.