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"Video Lottery" and Treatment for Pathological Gambling

A Natural Experiment in South Dakota

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ABSTRACT

Four agencies which offer specialized treatment for pathological gambling provided data on the number of inquiries about gambling treatment and the actual number of gamblers treated before, during, and after the shutdown of video lottery in the state of South Dakota. A marked decrease in the number of inquiries and number of gamblers treated was seen during the time the machines were turned off as compared to the time periods when video lottery gambling was available. The results suggest that the accessibility and availability of video lottery machines is an important factor in the number of people being adversely impacted by gambling.

INTRODUCTION

Since the 1970s, there has been significant expansion of legalized gambling in the United States (Stoil, 1994).1 State legislatures around the country have begun to legalize various forms of gambling to increase revenue without having to rely upon more traditional forms of taxation. In the state of South Dakota, a Constitutional Amendment passed in 1986 made it "lawful for the legislature to authorize by law a state lottery which is regulated, controlled, owned and operated by the state of South Dakota, either separately by the state or jointly in cooperation with one or more other states." With this amendment, scratch tickets and various forms of state and regional lotteries were instituted.

In 1989, the South Dakota legislature approved legalized casino gambling at historic Deadwood in the Black Hills. Also in 1989, the South Dakota legislature voted to permit "video lottery" in the state. Four general games are available on the video lottery machines including poker, blackjack, keno and bingo. About the same time, the Indian Gaming Regulatory Act allowed Native American tribes to set up casino gambling establishments on their reservations. As a result, casinos began to open on South Dakota reservations in the late 1980s and early 1990s.

With increased availability of many forms of gambling, substance abuse treatment centers throughout South Dakota began to receive inquiries into the availability of treatment for problematic gambling behavior. In response, private and public agencies in South Dakota developed gambling treatment programs to treat problem gamblers. The state allocated some treatment moneys which were earmarked to mental health centers throughout South Dakota for treatment of problem gamblers.

On June 22, 1994, the South Dakota Supreme Court ruled 4 to 1 that video lottery was an unconstitutional game of chance. After requests for rehearing this case were denied, the video lottery machines were turned off on August 13, 1994. When the machines stopped, there were 1,449 licensed video lottery establishments in the state of South Dakota with a total of 7,859 video lottery terminals in these establishments. The weekly net revenue was $3,293,950 with a net per machine averaging $419.13 (South Dakota Lottery, 1995). In November of 1994, state referendum to reinstitute video lottery won by a small margin, and the machines were turned back on November 17, 1994. During the 14 weeks the video lottery machines were turned off, other forms of legally sanctioned gambling remained available. These included regional lotteries (i.e., Lotto America), scratch tickets, and Indian casino gambling.
This situation provided a unique opportunity to study the impact of the institution, the discontinuance, and then the reinstitution of video lottery on the population of South Dakota.

METHOD
Four South Dakota substance abuse treatment centers that provide specialized treatment for pathological gamblers were included in this study. Two of these agencies are private for profit and two are non-profit treatment centers. All kept a log of the number of inquiries into treatment for problem gambling and the number of patients who received specific treatment for their gambling addiction. Each center also documented the primary form of gambling for which each gambler sought treatment.

Each of the four centers provided data on inquiries about and treatment for problem gambling for the 11 months prior to shutdown of the video lottery machines (October, 1993 through August, 1994), the three months the video lottery machines were turned off (September, 1994 to November, 1994), and for the first three months following resumption of video lottery (December, 1994 to February, 1995). They also reported the type of gambling involvement for all patients entering treatment.

RESULTS
The information from the four treatment centers was summed and tabulated. For the 11 months prior to the shut-off of video lottery machines, there was a mean of 68.1 inquiries per month (s.d. 23.9) and 10.8 gamblers treated per month (s.d. 2.3) at the four facilities. For the three months when the video lottery machines were turned off, there were only two inquiries about gambling (mean 0.7 per month; s.d. .58) and two individuals (mean 0.7 per month; s.d. .58) treated at these facilities. After video lottery resumed, the number of inquiries and the number of individuals being treated for gambling problems increased rapidly. For the first three months after video lottery resumed, there was a mean of 24 inquiries (s.d. 6.1) and 8.3 gamblers (s.d. 2.9) treated per month at the four facilities. The data are presented graphically in Figure 1.

Throughout the 17-month period covered by this study, 146 gamblers were treated at the four facilities. Of these gamblers, 143 were identified as being primarily addicted to video lottery. The remaining three were thought to be primarily addicted to casino gambling. The three gamblers treated for casino gambling all received treatment in the period prior to video lottery machines being turned off.

DISCUSSION
These results suggest the impact availability of video lottery machines has on the number of individuals receiving treatment for problem gambling in South Dakota. When video lottery machines were turned off, the inquiries about gambling and the number of individuals receiving treatment for problem gambling diminished abruptly. When the machines were turned back on, there was a prompt increase in both of these categories.

These changes occurred despite the fact that alternative forms of legal gambling were available (i.e., scratch tickets, Indian Reservation casino gambling, and multistate lotteries). This suggests that video lottery machine gambling presents a unique risk for the development of problems severe enough to prompt treatment. These data suggest little substitution of other forms of gambling occurred when video lottery gambling was not available. If substitution to other forms of gambling did take place during the period when video lottery machines were turned off, the problems associated with this substitute gambling did not reach a point where individuals sought or inquired about treatment for gambling-related problems.

The availability and accessibility of video lottery machines appears to be an important component in the onset and maintenance of many individuals' problem gambling patterns. When this form of gambling is not available, gamblers addicted to video lottery do not appear, at least within this three-month time frame, to substitute other gambling types. The study findings are consistent with the investigators' clinical experience in working with individuals addicted to video lottery. Following are case studies of three such individuals.

Case Study #1
Mr H is a 51 year old, married (x3), Caucasian male who had gambled at other (than video lottery) forms over his lifetime but not to a problematic level. Upon legalization of video lottery machines in South Dakota
(1989), the patient quickly developed a strong obsession and compulsion for video lottery. Following outpatient treatment in February 1992, the patient maintained five months of abstinence and then relapsed. When the machines were turned off in 1994 for three months, the patient felt relieved of his compulsion to gamble.

When the machines were turned back on in November, 1994, his video lottery playing not only resumed but accelerated. At the time of admission for treatment, the patient had up to $7,000 in bad checks out and was aware that his gambling was having a negative impact on his mood, his functioning at work and his marriage. He experienced depression, panic-like attacks, insomnia, increased nicotine and alcohol usage, and suicidal thoughts.

Case Study #2
Mr Z is a 32 year old Native American male with chronic schizophrenia and alcohol dependence who presented December 13, 1994, for treatment of pathological gambling. He had been gambling compulsively since 1989 when video lottery became available. He quickly got to the point that his entire month's monetary resources were gone by the 10th of each month. He tried Gamblers' Anonymous and eventually sought treatment in 1992. He remained abstinent for about one year and then relapsed when he received a big disability "back pay" check (May, 1994). He gambled for a few months but then did fairly well monetarily when the machines were turned off in the late summer of 1994.

Upon resumption of the availability of video lottery in November, 1994, the patient began gambling heavily and within the month was again seeking treatment. He seemed particularly vulnerable to the availability of video lottery machines.

Case Study #3
Mr B is a 36 year old, employed, divorced, Caucasian male who successfully completed treatment for alcoholism in 1992. He had one significant post-treatment relapse which resulted in legal consequences but was not jailed and has since been sober for two years. During alcohol treatment, pathological gambling with a gambling pattern restricted to "video lottery" machines was diagnosed and treated. Comorbid depression was also diagnosed and treated with antidepressant medication.

Despite achieving consistent sobriety, stable mood, and working steadily, he relapsed to "video lottery" gambling. He eventually borrowed money from and moved in with a parent. His gambling addiction was unresponsive to outpatient treatment, and he felt he was unable to benefit from Gamblers' Anonymous involvement.

During the three-month period when the video lottery machines were shut down, the patient did not gamble and experienced relief and remoralization. He did not seek out any substitute gambling forms and did not relapse to alcohol use. Within a week of the re-establishment of video lottery gambling, however, his gambling behavior returned.

CONCLUSIONS
These findings suggest that video lottery gambling may present a unique risk for the development of pathological gambling in many individuals. Clinicians judged that 143 of 146 patients receiving treatment for pathological gambling during this study period were principally involved in video lottery gambling, and there is little evidence of substitution of other problematic gambling behaviors during the three-month video lottery hiatus. Whether substitution would have occurred or developed over a longer period is unknown. It would appear that further study of video lottery gambling is warranted, as our data suggest this form of gambling may cause significant problems for many individuals who, without exposure to video lottery, do not appear to have been prone to develop or maintain problematic gambling behaviors.

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REFERENCES