A Survey of Gambling in Delaware

by

Walter Mateja, Robert Wilson, and Betty Ableman
In April 1997, Delaware Health and Social Services/Division of Alcoholism, Drug Abuse and Mental Health (DADAMH) contracted with the Health Services Policy Research Group at the University of Delaware’s School of Urban Affairs and Public Policy to conduct a study of gambling problems among Delaware’s adult population, aged 18 years and older. The goals of the project were to:

- Establish an estimate of the current prevalence of gambling among adults;
- Determine the frequency and types of gambling pattern activity of adults;
- Establish an estimate of current at-risk and pathological gamblers among adults;
- Develop a demographic profile of at-risk and pathological gamblers;
- Determine the prevalence of comorbid substance abuse and other mental health problems with at-risk/pathological gambling; and
- Determine the need and demand for prevention and treatment services for at-risk and pathological gamblers.

In order to meet the stated objectives of the project, a family of studies were undertaken – a statewide household telephone survey, a series of focus groups, an analysis of social indicator data, and face-to-face intensive interviews with probable problem gamblers.

The first chapter reports on a statewide interview survey of Delawareans, aged 18 years of age and over. The purposes was to estimate the prevalence of problem gambling and to analyze the extent of problem gambling within the key demographic segments of the Delaware population.

The second chapter summarizes a study based on clinical interview with individuals who were frequent players of the slot machines in Delaware. These interviews present a profile of individuals who play the slot machines at Delaware’s race tracks.

The third chapter reports on focus groups with problem gamblers, families of problem gamblers, and treatment professionals whose practice includes problem gamblers. These interviews provide additional insights into problem gambling in Delaware from the perspective of those who are greatly affected by problem gambling.

A large number of people contributed substantially to these studies. Paul Solano of the University of Delaware helped to shape the research design. Betty Ableman of the University of Delaware performed much of the statistical analysis of the statewide survey data. Walter Mateja, of the State of Delaware, Division of Alcoholism, Drug Abuse and mental health prepared the report on the Statewide Survey. Robert Breen of the University of Delaware conducted the Clinical Interview Study. Jennifer Collins of the University of Delaware planned and conducted the Focus Group Study with the aid of Patricia Powell. We acknowledge the contributions of all of these people to the overall
project. We also acknowledge the help of over three thousand Delawareans who participated in the interview and focus groups.

Robert A. Wilson, Ph.D.
Principal Investigator
PHASES OF PROBLEM/PATHOLOGICAL GAMBLING. For a majority of people, gambling can be an enjoyable recreational activity. However, for some gambling develops into a mental disorder that affects the individual, family and larger community. Pathological gambling develops over time and often in series of stages in the gamblers career. Custer & Milt (1985) identified these stages as the winning phase, the losing phase and the desperate phase.

During the winning phase, the problem or pathological gambler begins gambling occasionally. During this phase, are common fantasies about winning big or having control over winning are common. These fantasies may be reinforced by a big win early in the gambling career.

Problems caused by gambling first become evident during the losing phase. It is during the losing phase that pathological and problem gamblers begin to "chase" their losses, that is return frequently to try to win back losses. This stage is also characterized by a preoccupation with gambling, deception or lying about gambling, and obtaining bailouts or loans to cover gambling losses.

Eventually, the pathological gambler progresses to the desperate phase. During this phase the gambler may resort to illegal activity to support his/her gambling, further alienates himself/herself from family and friends, may contemplate suicide, frequently experiences co-occurring alcoholism or substance abuse and feels an overbearing sense of hopelessness.

ACTION AND ESCAPE GAMBLING. Pathological gamblers gamble either to seek action or to escape. Action gamblers seek "an aroused, euphoric state comparable to the "high" derived from cocaine or other drugs" while escape gamblers seek "an emotional numbness and oblivion" (Lesieur and Rosenthal, 1994). Action gambling is usually typified by sports betting, horse betting and table games. Escape gambling usually involves betting on slots, video lottery terminals, or video poker machines.

THE SCOPE OF PROBLEM/PATHOLOGICAL GAMBLING. A recent report by the National Gambling Impact Study Commission recommended that:

"A sufficient portion of such monies [gambling revenues] shall be used to create a dedicated fund for the development and ongoing support of problem gambling-specific research, prevention, education and treatment programs." Among these activities, research should, "estimate the prevalence of problem and pathological gambling among
the adult general population" and "establish a demographic profile for treatment recipients and services provided" (1999).

Nationwide it is estimated that 5.5 million adults are either pathological or problem gamblers and these gamblers cost society approximately $5 billion per year in productivity reductions, social services, and creditor losses (Volberg, Harwood and Tudor, 1999).

A 1988 telephone study in New Jersey and Maryland found that 2.8% of the sample were problem gamblers and 1.4% were pathological gamblers in New Jersey and 2.4% were problem gamblers and 1.5% were pathological gamblers in Maryland (Volberg & Steadman, 1989).

A recent meta-analysis found that among adults nationally, between .90% and 1.38% experienced symptoms above the threshold for pathological gambling in the past year and an additional 1.95% - 3.65% were problem gamblers in the past year (Shaffer et al., 1997).

PROBLEM/PATHOLOGICAL GAMBLING AND ASSOCIATED BEHAVIORAL HEALTH PROBLEMS. Excessive gambling is associated with high rates of depression, alcoholism, and other substance abuse disorders, sleep disorders, eating disorders and suicide. Problem gambling presents a significant public health issue. Yet gambling problems are often not identified when individuals present for treatment and counseling for associated disorders (Lesier & Blume, 1987).

HOW IS PATHOLOGICAL GAMBLING CURRENTLY DEFINED? Pathological gambling behavior is defined in the Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) as:

_Persistent or recurrent maladaptive gambling behavior as indicated by at least five of the following:_

1. Preoccupied with gambling;
2. Need to gamble with increasing amounts of money in order to achieve the desired excitement;
3. Made repeated unsuccessful efforts to control, cut back, or stop gambling;
4. Restlessness or irritability when attempting to cut down or stop gambling;
5. Gambles as a way of escaping from problems or relieving dysphoric mood;
6. After losing money gambling, often returns another day in order to get even;
7. Lies to family members, therapists or others to conceal the extent of involvement with gambling;
8. Committed illegal acts, such as forgery, fraud theft, or embezzlement, in order to finance gambling;
9. Has jeopardized or lost a significant relationship, job, educational, or career opportunity because of gambling;
10. Reliance on others to provide money to relieve a desperate financial situation caused by gambling.
Problem gambling is usually thought of as less severe (fewer symptoms) than pathological gambling, but still causing some problems in the individuals life.
In order to estimate the extent of problem and pathological gambling among the adult population in Delaware, a random statewide telephone survey was undertaken in 1998. The response rate was 61%. The respondents were at least 18 years of age and were household residents in Delaware. The sample was weighted by age, race and gender in order to accurately represent the statewide adult population. Table 1 presents the weighted sample distribution.

**TABLE 1 SURVEY SAMPLE**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>1,647</td>
<td>48.5%</td>
</tr>
<tr>
<td>Females</td>
<td>1,748</td>
<td>51.5%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>2,673</td>
<td>78.7%</td>
</tr>
<tr>
<td>African-American</td>
<td>599</td>
<td>17.6%</td>
</tr>
<tr>
<td>Other</td>
<td>83</td>
<td>2.4%</td>
</tr>
<tr>
<td>Refused/Don't Know</td>
<td>41</td>
<td>1.2%</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-44</td>
<td>1,782</td>
<td>52.5%</td>
</tr>
<tr>
<td>45-64</td>
<td>1,176</td>
<td>34.6%</td>
</tr>
<tr>
<td>65+</td>
<td>425</td>
<td>12.5%</td>
</tr>
<tr>
<td>Refused age question</td>
<td>12</td>
<td>.4%</td>
</tr>
</tbody>
</table>

A modified version of the South Oaks Gambling Screen (SOGs) was administered by telephone to adults, age 18 and above, residing in households throughout the state. The random sample was weighted by age, race and sex. The weighted total number of interviews was 3,395.

In order to be asked the questions on the screen, a respondent must have reported gambling at a frequency of once per month or more in the past 18 months. If a respondent gambled less than once per month or never, that was skipped out of the gambling screen sequence of the survey.
The Household Telephone Survey that was used in this study asked about the following types of gambling activities:

- cards (i.e., poker, blackjack);
- horse racing (including dog racing);
- sports;
- dice (craps, other dice games);
- casino gambling (out-of-state casinos);
- lottery;
- bingo;
- stocks (i.e., selling short, options);
- games of skill (i.e., bowling, golf); and
- Delaware video lottery terminals (slots).

In order to group persons by gambling intensity, the following typology was used for those persons that reported gambling in the past 18 months:

- **Infrequent Gamblers** were defined as gambling *less than once per month*;
- **Frequent Gamblers** were defined as gambling *at least once per month*;
- **Persons at-risk of developing a gambling problem** were defined as *those persons that gambled in the past 18 months regardless of frequency*;
- **Persons at “high-risk” for developing a gambling problem** were defined as those persons that gambled in the past 18 months regardless of frequency *that experienced 1 or 2 gambling related problems*;
- **Problem Gamblers** were defined as those persons who gambled in the past 18 months regardless of frequency *experienced 3 or 4 gambling related problems*; and
- **Pathological Gamblers** were defined as those persons that gambled in the past 18 month regardless of frequency *who experienced 5 or more gambling related problems*.

These categories are not necessarily mutually exclusive. A problem gambler, for instance, can also be counted as an at-risk gambler.

The Delaware adaptation of the South Oaks Gambling Screen included 13 scored items related to gambling. Specifically, the screen asked respondents in the last 18 months:

- Did you ever gamble more than you intended to?
- How often did you go back another day to win back money you lost?
- Have you claimed to be winning money gambling but weren’t really?
- Do you feel you have had a problem with gambling?
- Have people criticized your gambling?
- Have you ever felt guilty about the way you gamble or what happens to you when you gamble?
- Felt like you wanted to stop gambling but didn’t think you could?
- Hidden betting slips, lottery tickets, gambling money, or other signs of gambling from your spouse, children, or other important people in you life?
- Have you argued with people you live with over how you handle your money?
- Have money arguments centered on gambling?
- Did you ever borrow money to gamble with or pay gambling debts?
- Have you borrowed from someone and not paid them back as a result of your gambling?
- Have you lost time from work or school due to gambling?
Respondents were asked about the frequency of their gambling activity. Approximately six out of ten adult residents of Delaware (342,000 people, aged 18 and above) report gambling at least once during the last 18 months. Of those who gamble once per month or more frequently (82,000), 8.3% gamble weekly, 2.7% gamble 2-3 times per month and 3.9% gamble once per month (Figure 1).

Betting on the Delaware Lottery is the most frequent form of gambling reported by Delawareans. The next most popular form of gambling is playing the Delaware video lottery terminals (slots) in Delaware. Over 17,000 adult Delawareans are estimated to play the video lottery terminals at least once per month. (Figure 2).

Most Delawareans who gamble more than once a month are males. Those who gamble less often than once a month, in contrast, are almost evenly divided between males and females (Figure 3).

Young adults (aged 18-44 years) account for over half of those who gambled during the last 18 months. The next oldest age group (45-64 years) accounts for the next largest group of gamblers. The oldest group, those 65 years and over, represents slightly more than 10 percent of those who gambled during the last 18 months. (Figure 4).

Over half of Delaware residents with household incomes of more than $40,000 per year report gambling during the last 18 months. Only 3 percent of those with incomes of $10,000 or less annually report having gambled within the last 18 months (Figure 5).

The three most common problems associated with gambling are: "I gambled more than I intended," "I argued over money," and "I was criticized for gambling" (Figure 6). Men reported all but one of these gambling problems in greater percentages than did women. Women answered, "I was criticized for gambling," more frequently than men reported this particular gambling problem.

The total number of problems that an individual experiences as a result of gambling is often employed to gauge of the severity of an individual's gambling problem. Persons reporting five or more gambling problems are classified as pathological gamblers. Those reporting a lower number of gambling problems (between three and four problems) are classified as problem gamblers. Those reporting only one or two problems with gambling are classified as high-risk gamblers. Those who experience one or more problems with gambling make up about a fourth of those who gambled one or more times during the last 18 months. The estimated percentage of Delaware adults manifesting each level of severity is shown in Figure 7.
High-risk adult gamblers were compared to the total sample. High-risk gamblers are those gamblers experiencing one or more gambling-related problems in the past 18 months. High-risk gamblers were more likely to be:

- African-American (24% vs 17.3%);
- male (79% vs. 47.4%);
- divorced (24.2% vs. 9.4%) or single (40% vs 21%);
- employed less than full time (43% vs 34%);
- reporting less than good emotional health (fair or poor) (26% vs 19%); and
- from a household with an income of under 40,000 (68% vs 42%).

Slightly less than 20,000 Delaware adults are estimated to have one or more gambling problems during the 18 months prior to being interviewed. The estimated number of Delaware residents experiencing gambling problems includes 16,000 high risk gamblers, two-thousand seven hundred problem gamblers, and one thousand one hundred pathological gamblers (Figure 8).

Social gambling, i.e., gambling with no related problems or consequences, is the behavioral norm irrespective of how often a person gambles (Figure 8). The proportion of pathological gamblers (gamblers with five or more problems) is highest among those who gamble most often. The proportion of high-risk gamblers (gamblers with one or two problems), in contrast, is highest among infrequent gamblers (Figure 7).

Alcohol dependence is more prevalent among pathological gamblers and high risk gamblers than those with less severe gambling problems (Figure 9).

Frequent players of slot machine players are also more likely to be alcohol abusers than are infrequent slot machine players (Figure 10). Those who are dependent on alcohol, in contrast, are more likely to have three or more problems related to gambling (Figure 10).

Females who play the slot machines once a week or more report an average of 2.73 gambling-related problems, in contrast to their male counterparts (who play slot machines once a week or more) who report an of average 1.14 problems each. Among those who play the slots less frequently than once a week, males report a higher average number of gambling-related problems than do females (Figure 11).
Figure 1
Frequency of Gambling during Last 18 Months
Delaware Population Aged 18 Years and Above

47% (259,937) Gamble Less Than Once Per Month
15% (82,406) Gamble at Least Once Per Month
38% (210,162) Don’t Gamble

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 2
Prevalence of Different Types of Gambling
Delaware Population Aged 18 Years and Above

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 3
Estimates of Gambling Prevalence and Population Among Adults In Delaware, by Gender
(Past 18-Months)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once or More Per Month</td>
<td>33.7% (28,233)</td>
<td>66.3% (53,788)</td>
</tr>
<tr>
<td>Less Than Once Per Month</td>
<td>49.3% (129,929)</td>
<td>50.7% (129,568)</td>
</tr>
</tbody>
</table>

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 4
Estimates of Gambling Prevalence and Population Among Adults In Delaware, by Age Group (Past 18-Months)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-44</td>
<td>47.0%</td>
<td>(40,665)</td>
</tr>
<tr>
<td>45-64</td>
<td>40.5%</td>
<td>(26,381)</td>
</tr>
<tr>
<td>65 and Older</td>
<td>12.5%</td>
<td>(14,468)</td>
</tr>
<tr>
<td>Less Than Once Per Month</td>
<td>56.2%</td>
<td>(152,644)</td>
</tr>
<tr>
<td></td>
<td>33.8%</td>
<td>(69,535)</td>
</tr>
<tr>
<td></td>
<td>10.0%</td>
<td>(36,218)</td>
</tr>
</tbody>
</table>

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 5
Estimates of Gambling Prevalence
Among Adults In Delaware, by Household Income
(Past 18-Months)

Percentage

Once or More
Per Month

Less Than Once
Per Month

20,000 and Below
20,000 - 40,000
40,000 and Over

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 6
Most Frequently Reported Problems Related to Gambling Activity Among Male and Female Adults Gambling Once Per Month or More

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 7
Types of Gamblers
As A Percent of Assorted Populations

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 8
Prevalence and Population of Types of Gamblers

<table>
<thead>
<tr>
<th>Type of Gambler</th>
<th>Percentage</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Gamblers</td>
<td>76.2%</td>
<td>62,495</td>
</tr>
<tr>
<td>High Risk Gamblers</td>
<td>19.2%</td>
<td>16,039</td>
</tr>
<tr>
<td>Problem Gamblers</td>
<td>3.5%</td>
<td>2,765</td>
</tr>
<tr>
<td>Pathological Gamblers</td>
<td>1.1%</td>
<td>1,106</td>
</tr>
</tbody>
</table>

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 9
Alcohol Dependence by Gambling Problem

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 10
Lifetime Alcohol Abuse and Dependence Among Adult Slot Players

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Figure 11
Mean Number of Gambling-Related Problems
“Frequent” Slot Players Reporting at Least One

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once per Week</td>
<td>2.73</td>
<td>1.14</td>
</tr>
<tr>
<td>2-3 Times per Month</td>
<td>1.54</td>
<td>1.79</td>
</tr>
<tr>
<td>Once per Month</td>
<td>2.46</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Source: Survey by Health Services Policy Research Group, University of Delaware, 1997-1998
Discussion

Needs assessments typically explore the gaps between the number of people who manifest a problem and the number of people who receive treatment for the problem. The difference between the two numbers—of those "needing" services and those receiving services—is called the service "gap," or "unmet need." Specific needs may be expressed in terms of staff, training, programs, funding, other program resources or in terms of policies that affect the problem being treated, or accessibility and costs of services.

• Approximately 20,000 Delawareans (aged 18 years and above) are estimated to have had one or more gambling problems in the past 18 months. This population of gamblers may be divided into three segments. The largest segment is made up of an estimated 16,000 "high risk" gamblers, those experiencing one or two problems. The second segment consists of an estimated 2,700 "problem" gamblers (with 3-4 problems). Finally, an estimated 1,100 people are pathological gamblers with five or more problems. These three levels of problem severity correspond roughly with the different services that are appropriate for persons with different levels of gambling problems.

• The largest segment—16,000 high risk gamblers—should be targeted primarily for preventive services designed to reduce risk. Some members of this target segment may be "transitional gamblers" whose gambling problems are increasing in severity over time. Screening for differences in problem levels over time should be a key component of prevention services for this population segment.

• The next largest segment—2,700 problem gamblers—should be identified through screening for clinically defined gambling problems and for possible early intervention services and/or treatment services by mental health professionals who are certified in the treatment of gamblers.

• The final segment—an estimated 1,100 pathological gamblers—should be identified through screening and assessment with the same protocols employed to assess problem gamblers. However, since pathological gamblers typically manifest more severe co-occurring mental health problems, such as alcohol abuse and dependence, this segment should be targeted for treatment services that address multiple behavioral health problems.

• These findings suggest that frequent slot players are at an increased risk for alcohol abuse. Further study needs to be done to identify possible strategies to prevent and treat gambling related-problems and/or substance abuse within this population.
REFERENCES


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Lesieur, H. R., Rosenthal, R. J. Draft of the Text for the DSM-IV Pathological Gambling Section.


